

Open the door to innovation

www.2n.cz

2N is Member of the Axis group

Introduction



"For 28 years 2N has been on the forefront of access control and telecommunications. We take care to stay on the leading edge with our products, the R&D behind them, and the way we service our customers. We are proud of our growth on global markets and are now number one in IP Intercoms."





"AXIS group including 2N have a common goal to contribute to a smarter and safer world. There is an increased customer demand for integrated solutions with open standards that deliver enhanced security. Together with 2N we can meet that demand."



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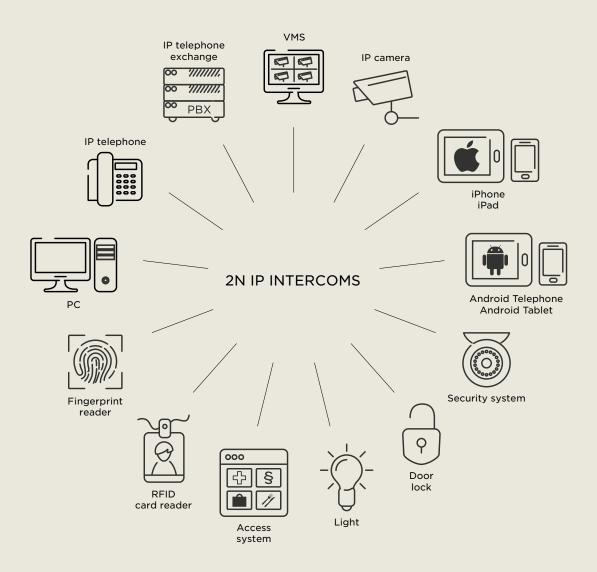
OVERVIEW OF INTERCOMS

Detailed overview of intercoms functions and parameters for your better decision making.

| Intercoms | 2N® IP Verso | 2N® IP Solo | 2N® IP Force | 2N® IP Safety | 2N® IP Base | 2N® IP Uni | 2N® LTE Verso |
|---------------------------------------|----------------------------------|------------------|------------------|------------------|------------------|------------------|----------------------------------|
| Integrated camera available | yes | yes | yes | no | yes | no | yes |
| Integrated electric switch | yes | yes | yes | yes | yes | yes | yes |
| Numerical keypad available | yes | no | yes | no | no | no | yes |
| Internal RFID card reader available | yes | no | yes | no | yes | no | yes |
| Biometrics available | yes | no | no | no | no | no | yes |
| Bluetooth available | yes | no | no | no | no | no | yes |
| Buttons | up to 146 | 1 | 1, 2 or 4 | 1 or 2 | 1 or 2 | 1 or 2 | up to 146 |
| Audio amplifier output | no | no | no | no | no | no | no |
| Audio line-in/line-out | line-out | line-out | line-out | line-out | no | line-out | line-out |
| Display - optional | yes | no | no | no | no | no | yes |
| Tamper alarm output | yes | yes | yes | yes | yes | yes | yes |
| Tamper alarm event in automation API | yes | yes | yes | yes | no | no | yes |
| Suitable for outdoor use | yes | yes | yes | yes | yes | yes | yes |
| IP/IK coverage | IP54/IK8 (touchscreen IK7) | IP54/IK8 | IP69K/IK10 | IP69K/IK10 | IP65/IK7 | IP54/IK10 | IP54/IK8 (touchscreen IK7) |
| Number of users | 10000 | 10000 | 10000 | 10000 | 10000 | 2 | 10000 |
| Security Relay support | yes | yes | yes | yes | yes | yes | yes |
| Dimensions WxHxD (including frame) | 107x234x28 mm (2 modules) | 107x130x28 mm | 109x217x83 mm | 109x217x83 mm | 109×229x31 mm | 115x193x57 mm | 107x234x28 mm (2 modules) |
| Power supply POE 802.3af | yes | yes | yes | yes | yes | yes | no |
| Power supply 12V DC | yes | yes | yes | yes | yes | yes | yes |
| LTE connectivity | no | no | no | no | no | no | yes |

CONNECTIVITY IN IP ENVIRONMENT

IP intercoms from 2N can be connected with a wide range of external devices thanks to open standards:



For information about Licencing Policy visit please our website.







IP ENVIRONMENT

2N® IP Verso

















KEY FEATURES

- More than 14 different modules
- Discrete HD camera
- Voice communication in HD
- Integration with security systems



reddot design award winner 2017

RECOMMENDED USE

Main entrance of residential complex

A residential complex with tens of apartments might present a nightmare for a visitor. Make it easy for them. An outdoor intercom 2N*IP Verso can be fitted by an intuitive and clearly arranged phonebook to reach the right tenants or a receptionist. A second module combining Bluetooth and RFID technology then makes the access simpler for the residents.

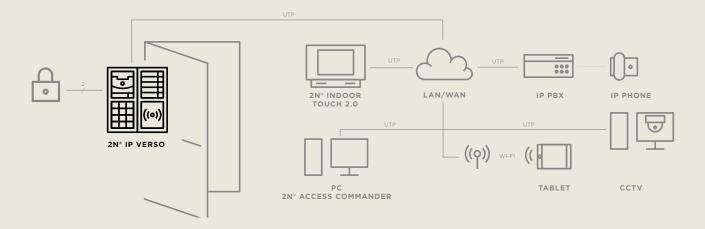
Secured office building

The 2N® IP Verso with Touch Keypad & RFID module is a smart addition to your security system. While a receptionist can vet visitors, employees can use a key fob or a PIN to enter the building. Besides, the intercom's camera can stream into a VMS system. An integration with 3rd party systems such as Milestone or Genetec is a matter of course.

Single villa with home automation

If you have a single villa with an implemented home automation system, a luxury $2N^{\circ}$ IP Verso with fingerprint reader will be a great solution. Secure its entrance and accomplish a seamless integration with your system. Moreover, the IP intercom allows calling to smartphones and open door to visitors remotely.

EXAMPLE OF CONNECTION OF THE 2N® IP VERSO IN AN OFFICE ENVIRONMENT



SIP (UDP, TCP, TLS)

Technical parameters

Signalling protocol

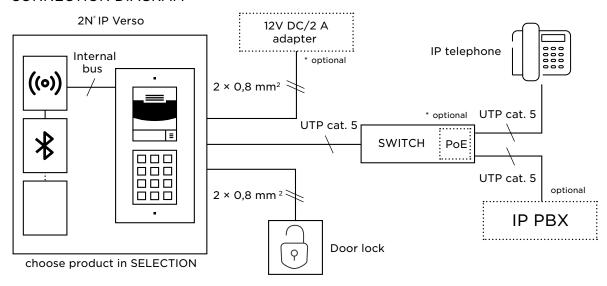
2N® IP Verso

| | SIP (UDP, TCP, TLS) | |
|--|---|--|
| | | |
| Buttons | | |
| Button design | White-backlit transparent buttons with replaceable nametags | |
| Button count | 1 and increments of 5 (max 146) | |
| Button extenders | Up to 30 modules, limited by power supply | |
| Numeric keypad | optional | |
| | | |
| Audio | | |
| Microphone | 1 integrated microphone | |
| Amplifier | 2 W (class D) amplifier | |
| Speaker | 2 W/8 Ω | |
| Output LINE OUT | 1 VRMS/600 Ω | |
| Volume control | Adjustable with automatic adaptive mode | |
| Full duplex | Yes (AEC) | |
| | | |
| Audio stream | | |
| Protocols | RTP/RTSP | |
| Codecs | G.711, G.722, G.729, L16/16kHz | |
| | | |
| Camera | 1.6-11 | |
| Sensor | 1/3" colour CMOS | |
| JPEG resolution | Up to 1280 (H) × 960 (V) | |
| Video resolution | 640 (H) × 480 (V) | |
| Frame rate | Up to 30 snapshots/s | |
| Sensitivity | 5.6 V/lux-sec (550 nm) | |
| View angle | 120° (H), 90° (V), 145° (D) | |
| Infrared light | Yes | |
| VC 4 | | |
| Video stream | DTD (DTCD (LITTE | |
| Protocols | RTP/RTSP/HTTP | |
| Codecs | H.263, H.263+, H.264, MPEG-4, M-JPEG | |
| IP camera function | Yes, ONVIF v2.4 profile S compatible | |
| Intonfooo | | |
| Interface | 12V + 15 0/ / 2 A DC or DoF | |
| Power supply PoE | 12V ± 15 % / 2 A DC or PoE | |
| | PoE 802.3af (Class 0-12.95 W) | |
| LAN De servere en els els | 10/100BASE-TX s Auto-MDIX, RJ-45 | |
| Recommended cabling | Cat-5e or higher | |
| Supported protocols | SIP2.0, DHCP opt. 66, SMTP, 802.1x, RTSP, RTP, TFTP, HTTP, HTTPS, Syslog, ONVIF | |
| Passive switch | NO/NC contact, up to 30 V/1 A AC/DC | |
| 8 up to 12 V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max 400 mA | | |



| RFID card reader | | | |
|--|---|--|--|
| Supported frequencies | 125kHz and 13.56MHz | | |
| Supported cards | 125 kHz: | EM4100, EM4102, HID Proximity | |
| | | ISO14443A, ISO14443B, ISO15693, NFC support | |
| | 13.56 MHz: | reads UID (CSN) | |
| | | reads PACs ID (iCLASS SIO-enabled cards) - only secured cards | |
| ISO14443A | Mifare Classic 1k & 4k, DESFire EV1, Mini, Plus S&X, SmartMX, Ultralight | | |
| | Ultralight C, PayPass, Le | , SLE44R35, my-d move (SLE66Rxx), gic Advant | |
| ISO14443B | 1 2 7 | Calypso, CEPAS, Moneo, SRI512, SRT512, SRI4K, SRIX4K, PicoPass, HID iCLASS | |
| Mechanical properties | | | |
| Cover | Robust zinc | casting with surface finish | |
| Operating temperature | -40 °C - 60 °C | | |
| Operating relative humidity | 10% - 95% (non-condensing) | | |
| Storing temperature | -40 °C -70 °C | | |
| Resistance level | IK08, Touch Display module IK07 | | |
| Dimensions | | | |
| Surface mounting frame | 1 module: 10 | 07 (W) × 130 (H) × 28 (D) mm | |
| | 2 modules: 1 | 107 (W) × 234 (H) × 28 (D) mm | |
| | 3 modules: 1 | 107 (W) × 339 (H) × 28 (D) mm | |
| Flush mounting frame | e 1 module: 130 (W) × 153 (H) × 5 (D) mm | | |
| | 2 modules: 1 | 130 (W) × 257 (H) × 5 (D) mm | |
| | 3 modules: 1 | 130 (W) × 361 (H) × 5 (D) mm | |
| Flush mounting box (minimum hole dimensions) | 1 module: 10 | 08 (W) × 131 (H) × 45 (D) mm | |
| | 2 modules: 1 | 108 (W) × 238 (H) × 45 (D) mm | |
| | 3 modules: 1 | 108 (W) × 343 (H) × 45 (D) mm | |
| Weight | From 2kg, based on configuration | | |
| Covering level | IP54 | | |

CONNECTION DIAGRAM



Order numbers

Main unit and modules



| Order No. | 9155101C/ 9155101CB |
|-----------|--------------------------------------|
| Name | Main unit with camera nickel / black |
| Desc. | main unit, 1 button, HD camera |



| Order | No. 91 | 55101/ 9155101B |
|-------|---------------|--------------------------------------|
| Name | | in unit without camera kel/ black |
| Desc. | ma | in unit, 1 button |



| Order No. | 9155036 |
|-----------|---|
| Name | Touch Display module |
| Desc. | module for 2N° IP Verso, tree-structured phone book, touch keypad |



| Order No. | 9155046 |
|-----------|---|
| Name | Bluetooth Reader module |
| Desc. | module for 2N® IP Verso, Bluetooth 4.0 |



| Order No. | 9155045 |
|-----------|--|
| Name | Fingerprint Reader module |
| Desc. | module for 2N° IP Verso, spoof fingerprint detection, optical technology |



| Order No. | 9155047 |
|-----------|---|
| Name | Touch Keypad module |
| Desc. | module for 2N® IP Verso, capacitive touchscreen regular automatic calibration |



| Order No. | 9155031/ 9155031B |
|-----------|---|
| Name | Keypad module nickel/black |
| Desc. | module for 2N® IP Verso, mechanical keypad, backlit symbols |



| Order No. | 9155035 |
|-----------|--|
| Name | 5 Buttons module |
| Desc. | module for 2N® IP Verso, quick dial buttons |



| Order No. | 9155032 |
|-----------|---|
| Name | RFID Card Reader module 125kHz |
| Desc. | module for 2N® IP Verso |
| | |
| Order No. | 9155040/ 9155042 |
| Order No. | 9155040/ 9155042 RFID Card Reader with NFC 13,56MHz (xx40) / 13,56MHz secured (xx42) |



| Order No. | 9155082 |
|-----------|---|
| Name | Bluetooth & RFID module |
| Desc. | 125kHz, 13.56MHz, NFC ready, Bluetooth 4.0 |
| Order No. | 9155084 |
| Name | Bluetooth & RFID module |
| Desc. | 125kHz, secured 13.56MHz, NFC ready, Bluetooth 4.0 |



| Order No. | 9155081 |
|-----------|---------------------------------------|
| Name | Touch Keypad & RFID module |
| Desc. | 125kHz, 13.56MHz, NFC ready |
| | |
| Order No. | 9155083 |
| Order No. | 9155083 Touch Keypad & RFID module |



| Order No. | 9155041 |
|-----------|---|
| Name | Induction Loop module |
| Desc. | module for 2N° IP Verso, audio signal directly into a hearing aid |



| Order No. | 9155039 |
|-----------|---|
| Name | Blind Panel module |
| Desc. | module for 2N° IP Verso, 1 blind module supplied with the main unit |



| Order No. | 9155030 |
|-----------|-------------------------------------|
| Name | Infopanel module |
| Desc. | module for 2N° IP Verso, backlit |



| Or | der No. | 9155034 |
|----|---------|--|
| Na | me | I/O module |
| De | sc. | module for 2N* IP Verso, installed under another module, 2 inputs and 2 relay outputs |



| Order No. | 9155037 |
|-----------|--|
| Name | Wiegand module |
| Desc. | module for 2N* IP Verso, installed under another module, for interconnection of systems |



| Order No. | 9155038 |
|-----------|-------------------------|
| Name | Tamper Switch module |
| Desc. | module for 2N° IP Verso |

Frames



| Order No. | 9155011/ 9155011B |
|-----------|--|
| Name | 1 module flush frame nickel / black |
| Desc. | frame for installation in the wall, 1 module |



| Orde | r No. | 9155021/ 9155021B |
|------|-------|---|
| Nam | е | 1 module surface frame nickel / black |
| Desc | | frame for installation on the surface. 1 module |



| Order No. | 9155012/ 9155012B |
|-----------|--|
| Name | 2 module flush frame nickel / black |
| Desc. | frame for installation in the wall, 2 modules |



| Order No. | 9155022/ 9155022B |
|-----------|--|
| Name | 2 module surface frame nickel / black |
| Desc. | frame for installation on the surface, 2 modules |



| Order No. | 9155013/ 9155013B |
|-----------|---|
| Name | 3 module flush frame nickel / black |
| Desc. | frame for installation in the wall, 3 modules |



| Order No. | 9155023/ 9155023B |
|-----------|--|
| Name | 3 module surface frame nickel / black |
| Desc. | frame for installation on the surface, 3 modules |

Backplates and boxes



| Order No. | 9155061 |
|-----------|---|
| Name | 1 module backplate |
| Desc. | backplate for installation on glass or uneven surface, 1 module |



| Order No. | 9155062 |
|-----------|--|
| Name | 2 modules backplate |
| Desc. | backplate for installation on glass or uneven surface, 2 modules |



| Order No. | 9155063 |
|-----------|--|
| Name | 3 modules backplate |
| Desc. | backplate for installation on glass or uneven surface, 3 modules |



| Order No. | 9155064 |
|-----------|--|
| Name | 2 (w) x2 (h) modules backplate |
| Desc. | backplate for installation on glass or uneven surface, 2x2 modules |



| Order No. | 9155067 |
|-----------|--|
| Name | 3 (w) x3 (h) modules backplate |
| Desc. | backplate for installation on glass or uneven surface, 3x3 modules |

ACCESS CONTROL



| Order No. | 9155066 |
|-----------|--|
| Name | 2 (w) x3 (h) modules backplate |
| Desc. | backplate for installation on glass or uneven surface, 2x3 modules |



| Order No. | 9155065 |
|-----------|--|
| Name | 3 (w) x2 (h) modules backplate |
| Desc. | backplate for installation on glass or uneven surface, 3x2 modules |



| Order No. | 9155014 |
|-----------|--|
| Name | 1 module flush box |
| Desc. | box for installation in the wall, 1 module |



| Order No. | 9155015 |
|-----------|---|
| Name | 2 modules flush box |
| Desc. | box for installation in the wall, 2 modules |



| Order No. | 9155016 |
|-----------|---|
| Name | 3 modules flush box |
| Desc. | box for installation in the wall, 3 modules |

Other



| Order No. | 9155050 |
|-----------|--|
| Name | Extension cable- 1m long |
| Desc. | connection of modules in greater distance from the main unit |



| Order No. | 9155054 |
|-----------|--|
| Name | Extension cable- 3m long |
| Desc. | connection of modules in greater distance from the main unit |

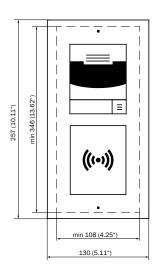


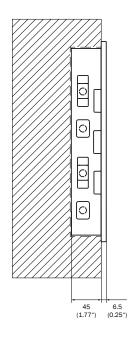
| Order No. | 9155055 |
|-----------|--|
| Name | Extension cable- 5m long |
| Desc. | connection of modules in greater distance from the main unit |

Dimensions and fitting

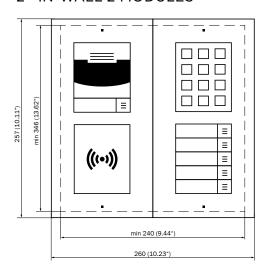
2N® IP Verso

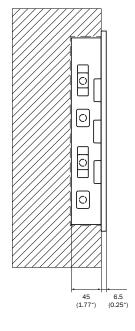
IN-WALL 2 MODULES



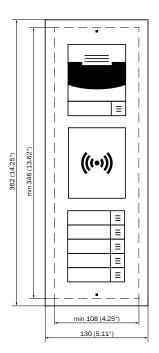


2× IN-WALL 2 MODULES

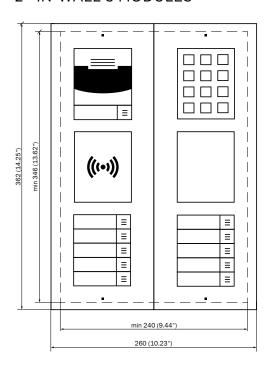


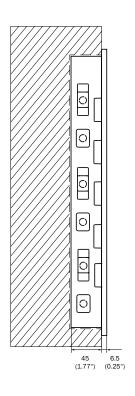


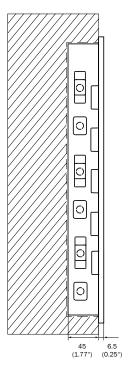
IN-WALL 3 MODULES

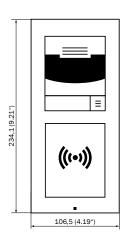


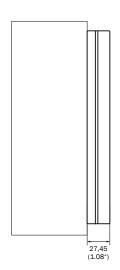
2× IN-WALL 3 MODULES



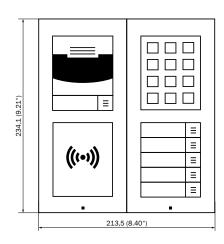


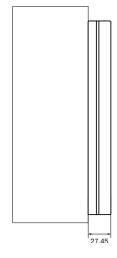




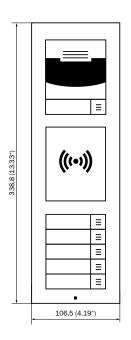


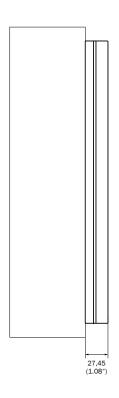
2× WALL-MOUNTED 2 MODULES



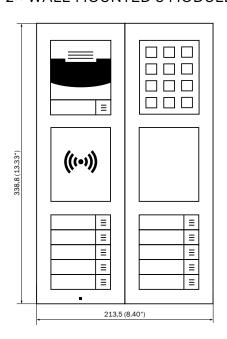


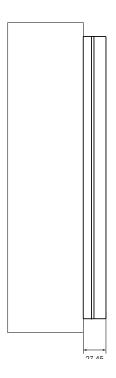
WALL-MOUNTED 3 MODULES

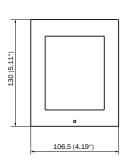


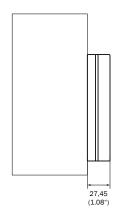


2× WALL-MOUNTED 3 MODULES

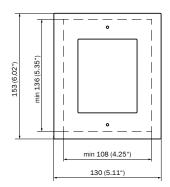


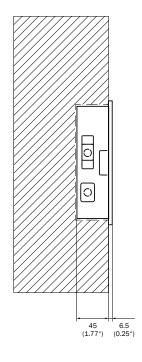






IN-WALL 1 MODULE





2N® IP Force

A door guard for extreme conditions

2N® IP Force is an extremely durable IP intercom that can withstand even the most demanding conditions. It provides an ability for visitor communication monitoring and access control. Take advantage of its superior features for maximum site security.



IP ENVIRONMENT

2N® IP Force



















KEY FEATURES

- · Built for extreme conditions
- Professional night vision
- Clear sound in noisy environments
- Durable access control solution

RECOMMENDED USE

School door communication

Schools are not only there to impart knowledge to our children but also to keep the children safe. With this in mind, 2N offers a door intercom that not only secures the school entrance, but allows communication with visitors.

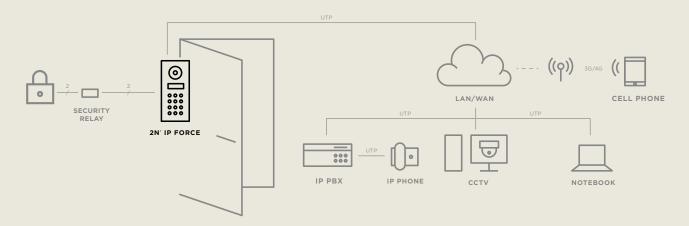
Security in detention centres

All communication and surveillance systems in detention centres must be both highly reliable, durable and guarantee a maximum protection and security for wardens as well as prisoners. 2N° IP Force as the toughest intercom meets all these requirements.

Parking communication

Do you want to avoid queues when people cannot enter or leave the parking place? 2N parking communication solution allows you to communicate easily from the parking lot or payment machine to the assistance center. You will gain a competitive advantage and provide your customers with the option to ask for advice at the touch of a button.

EXAMPLE OF CONNECTION OF THE 2N® IP FORCE IN AN OFFICE ENVIRONMENT



Technical parameters

Signalling protocol

2N® IP Force

30

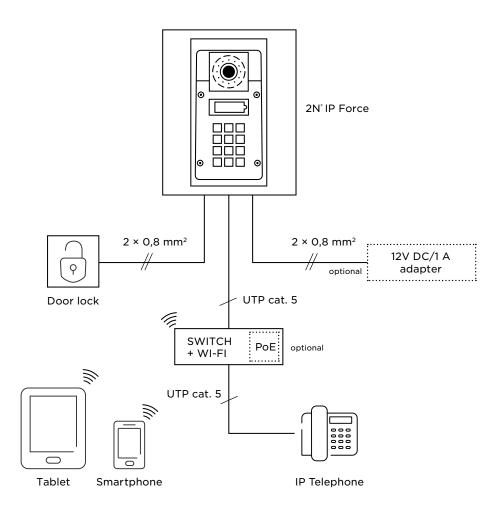
| Buttons | |
|-----------------------|--|
| Button design | Transparent buttons with white backlighting and nameplate which can be easily replaced |
| Button count | 1, 2 or 4 |
| Numerical keypad | Optional |
| | |
| Audio | |
| Microphone | 2 integrated microphones |
| Amplifier | 10 W (class D) |
| Speaker | 1 W (10 W optional) |
| Volume control | Adjustable with automatic adaptive mode |
| Full duplex | Yes (AEC) |
| | |
| Audio stream | |
| Protocols | RTP/RTSP |
| Codecs | G.711, G.722, G.729, L 16/16kHz |
| | |
| Camera HD / SD | 1/7" |
| Sensor | 1/3" colour CMOS / 1/4" colour CMOS |
| JPEG resolution | 1280 (H) x 960 (V) / 640 (H) × 480 (V) |
| Video resolution | 640 (H) × 480 (V) |
| Frame rate | Up to 30 snapshots/s |
| Sensor sensitivity | 5.6 V/lux-sec (550 nm) / 1.9 V/lux-sec (550 nm) |
| View angle | 135° (H), 109° (V) |
| Infrared light | Yes |
| Video stream | |
| Protocols | RTP/RTSP/HTTP |
| Codecs | H.263, H.263+, H.264, MPEG-4, M-JPEG |
| IP camera function | Yes, ONVIF v2.4 profile S compatible |
| | |
| Interface | |
| Power supply | 12 V ± 15 %/2A DC or PoE |
| PoE | PoE 802.3af (Class 0 - 12,95 W) |
| LAN | 10/100BASE-TX with Auto-MDIX, RJ-45 |
| Recommended cabling | Cat-5e or higher |
| Passive switch | NO and NC contacts, max. 30 V/1A AC/DC |
| Active switch output | 9 up to 13 V DC depending on power supply, max. 700 mA |
| | |
| RFID card reader | |
| Supported frequencies | 125kHz and 13.56MHz |
| | 125 kHz: EM4100, EM4102, HID Proximity |
| | 13.56 MHz: ISO14443A, ISO14443B, ISO15693, NFC support |
| | : reads UID (CSN) |
| | reads PACs ID (iCLASS SIO-enabled cards) |

SIP (UDP, TCP, TLS)



| Mechanical properties | |
|-----------------------------|-----------------------------------|
| Cover | Robust aluminium casting |
| Operating temperature | -40 °C - 55 °C |
| Operating relative humidity | 10 % - 95 % (non-condensing) |
| Storage temperature | -40 °C - 70 °C |
| Dimensions | 217 × 109 × 83 mm |
| | 242 × 136 × 83 mm with frame |
| Weight | net max. 2 kg / gross max. 2,5 kg |
| Covering level | IP69K |
| Resistance level | IK10 |

CONNECTION DIAGRAM



Order numbers

2N® IP Force



| Order No. | 9151101CW/ 9151101CHW |
|-----------|--|
| Name | 2N® IP Force, 1 button + SD camera/ HD camera |
| Desc. | 1 button, HD camera |



| Order No. | 9151101CKW/ 9151101CHKW |
|-----------|---|
| Name | 2N® IP Force, 1 button + keypad + SD camera/ HD camera |
| Desc. | 1 button, keypad, HD camera |



| Order No. | 9151104CW/ 9151104CHW |
|-----------|---|
| Name | 2N® IP Force, 4 buttons + SD camera/ HD camera |
| Desc. | 4 buttons, HD camera |



| Order No. | 9151102CRW/ 9151102CHRW |
|-----------|--|
| Name | 2N* IP Force, 2 buttons + card reader ready + SD camera/ HD camera |
| Desc. | 2 buttons, card reader ready, HD camera |



| Order No. | 9151101CRPW/ 9151101CHRPW |
|-----------|--|
| Name | 2N* IP Force, 1 button + pictograms + card reader ready + SD camera/ HD camera |
| Desc. | 1 button, pictograms, card reader ready, HD camera |



| Order No. | 9151101W |
|-----------|--|
| Name | 2N® IP Force, 1 button, without camera |
| Desc. | 1 button |



| Order No. | 9151101KW |
|-----------|--|
| Name | 2N® IP Force, 1 button + keypad, without camera |
| Desc. | 1 button, keypad |



| Order No. | 9151104W |
|-----------|---|
| Name | 2N® IP Force, 4 buttons, without camera |
| Desc. | 4 buttons |



| Order No. | 9151102RW |
|-----------|---|
| Name | 2N* IP Force, 2 buttons + card reader ready, without camera |
| Desc. | 2 buttons, card reader ready |



| Order No. | 9151101RPW |
|-----------|---|
| Name | 2N* IP Force, 1 button + pictograms + card reader ready, without camera |
| Desc. | 1 button, pictgrams, card reader ready |

Card readers



| Order No. | 9151011 |
|-----------|--|
| Name | 2N® IP Force, 125kHz RFID |
| Desc. | Wiegand interface, 2 logical inputs and 2 output relays, tamper switch |



| Order No. | 9151017 |
|-----------|------------------------------|
| Name | 2N° IP Force, 13.56MHz RFID |
| Desc. | NFC ready, Wiegand interface |



| Order No. | 9151019 |
|-----------|--|
| Name | 2N® IP Force, 13.56MHz secured RFID |
| Desc. | NFC ready, Wiegand interface |



| Order No. | 9151010 |
|-----------|---|
| Name | 2N® IP Force/Safety, Additional Switch |
| Desc. | additional input and output relays, tamper switch |

Mounting



| Order No. | 9151001 |
|-----------|--------------------------|
| Name | 2N® IP Force, flush box |
| Desc. | brick flush mounting box |
| | |



| Order No. | 9151002 |
|-----------|------------------------------------|
| Name | 2N® IP Force, plaster box |
| Desc. | plasterboard flush mounting box |



| Order No. | 9151005 |
|-----------|---------------------------------------|
| Name | 2N® IP Force/Safety - Gooseneck |
| Desc. | Gooseneck stand, height 120cm/47in |

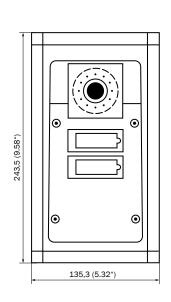


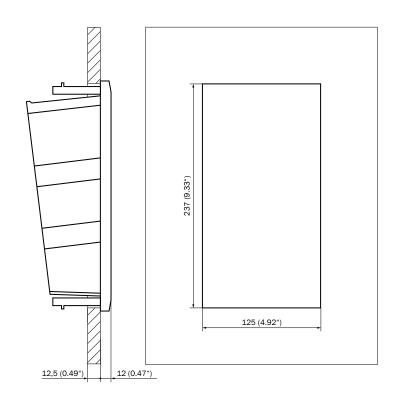
| Order No. | 9151007 |
|-----------|--|
| Name | 2N® IP Force/Safety - Gooseneck stand double |
| Desc. | Gooseneck stand double, height 115cm/45in and 203cm/80in |

Dimensions and fitting

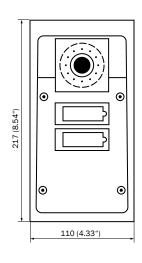
2N® IP Force

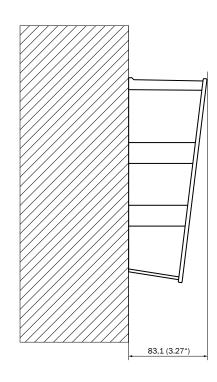
MOUNTING IN PLASTERBOARD



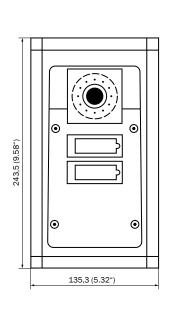


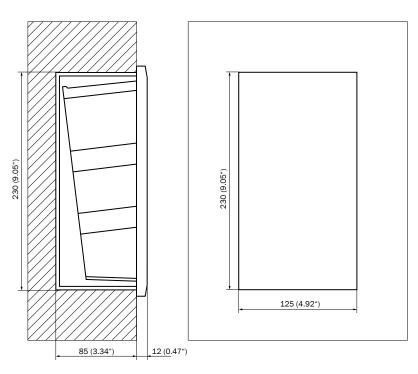
WALL-MOUNTED





FLUSH-MOUNTED WITH BOX





of any Smart Home

A compact IP intercom that would be a great addition to your smart home entrance. Despite that it has only one fitted button, it can astonish by hidden HD camera, multiple functionalities including calls to your smartphone, and easy integration into the existing home automation system.



IP ENVIRONMENT

2N® IP Solo





















KEY FEATURES

- Entrance to your Smart Home
- Sharp video day and night
- Integration with Home Automation
- Tailored for residential market

RECOMMENDED USE

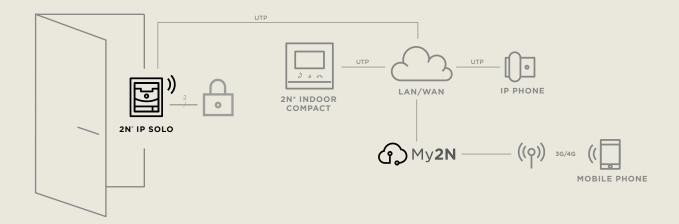
Doorbell for Smart Homes

2N* IP Solo is a solution for a single family with higher demands on access control system. Not only is this intercom stylish, but apart from video calls on your smartphone it also offers advanced functionalities such as interconnection with smart home devices, motion detection for trespassers or integration with CCTV systems.

Accessory for the villa entrance

2N* IP Solo arrives in a single small package with all necessary accessories. Pick from wall-mounted or surface installation and colour of your preference. Ibutton is just enough for a single family. All components and materials are industrial high-grade so as to ensure excellent performance under any conditions.

EXAMPLE OF CONNECTION OF THE 2N® IP SOLO IN RESIDENTIAL ENVIRONMENT



Technical parameters

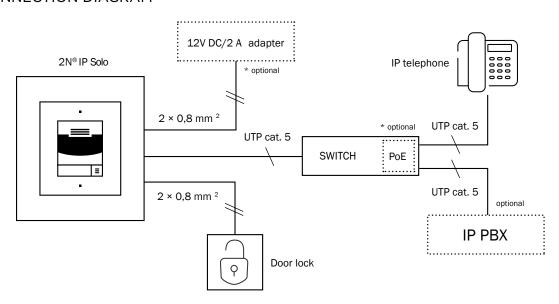
2N® IP Solo

| Signalling protocol | |
|----------------------|--|
| | SIP (UDP, TCP, TLS) |
| Buttons | |
| Button design | White-backlit transparent button with replaceable nametag |
| Button count | 1 |
| | |
| Audio | |
| Microphone | 1 integrated microphone |
| Amplifier | 2 W (class D) |
| Speaker | 2 W/8 Ω |
| Output LINE OUT | 1 VRMS/600 Ω |
| Volume control | Adjustable with automatic adaptive mode |
| Full duplex | Yes (AEC) |
| Audio stream | |
| Protocols | RTP/RTSP |
| Codecs | G.711, G.729, G.722, L16/16kHz |
| Camera | |
| Sensor | 1/3" colour CMOS |
| JPEG resolution | 1280 (H) × 960 (V) |
| Video resolution | 640 (H) × 480 (V) |
| Frame rate | Up to 30 snapshots/s |
| Sensitivity | 5.6 V/lux-sec (550 nm) |
| View angle | 128° (H), 95° (V), 134° (D) |
| Infrared light | Yes |
| - | |
| Video stream | |
| Protocols | RTP/RTSP/HTTP |
| Codecs | H.263, H.263+, H.264, MPEG-4, M-JPEG |
| IP camera function | Yes, ONVIF v2.4 profile S compatible |
| Interface | |
| Power supply | 12V ± 15 % / 2 A DC or PoE |
| PoE | PoE 802.3af (Class 0-12.95 W) |
| LAN | 10/100BASE-TX s Auto-MDIX, RJ-45 |
| Recommended cabling | Cat-5e or higher |
| Supported protocols | SIP2.0, DHCP opt. 66, SMTP, 802.1x, RTSP, RTP, TFTP HTTP, HTTPS, Syslog, ONVIF |
| Passive switch | NO/NC contact, up to 30 V/1 A AC/DC |
| Active switch output | 8 up to 12 V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max 400 mA |



| Mechanical properties | |
|--|---|
| Cover | Robust zinc casting with surface finish |
| Operating temperature | -40 °C - 60 °C |
| Operating relative humidity | 10% - 95% (non-condensing) |
| Storing temperature | -40 °C -70 °C |
| Covering level | IP54 |
| Resistance level | IK08 |
| | |
| Dimensions | |
| Surface mounting frame | 1 module: 107 (W) × 130 (H) × 28 (D) mm |
| Flush mounting frame | 1 module: 130 (W) × 153 (H) × 5 (D) mm |
| Flush mounting box (minimum hole dimensions) | 1 module: 108 (W) × 131 (H) × 45 (D) mm |

CONNECTION DIAGRAM



Order numbers

2N® IP Solo



| Order No. | 9155301CF/ 9155301CBF |
|-----------|--|
| Name | 2N® IP Solo, flush mount, nickel/ black |
| Desc. | unit for flush installation, in nickel and black colour |



| Order No. | 9155301CS/ 9155301CBS |
|-----------|--|
| Name | 2N® IP Solo, surface mount, nickel/ black |
| Desc. | unit for surface installation, in nickel and black colour |



| Order No. | 9155017 |
|-----------|--------------------------------|
| Name | 2N® IP Solo, |
| | flush mounting box |
| Desc. | backbox for flush installation |

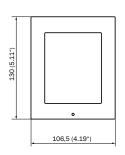


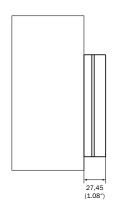
| Order No. | 9155068 |
|-----------|---|
| Name | 2N® IP Solo, backplate |
| Desc. | backplate for easier surface installation |

Dimensions and fitting

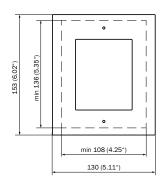
2N® IP Solo

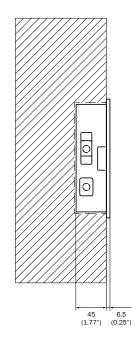
WALL-MOUNTED

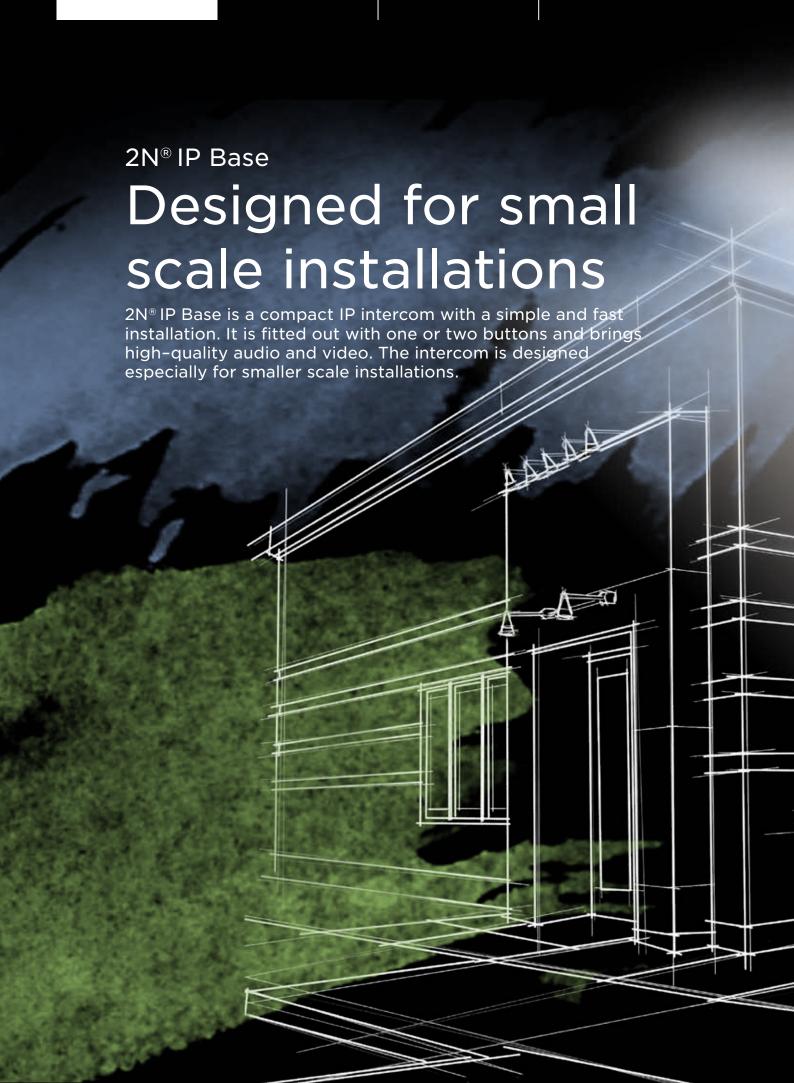




FLUSH-MOUNTED









IP ENVIRONMENT

2N® IP Base

















KEY FEATURES

- Ready for outdoor challenges
- Wide-angle HD camera
- 10min installation
- RFID access control

RECOMMENDED USE

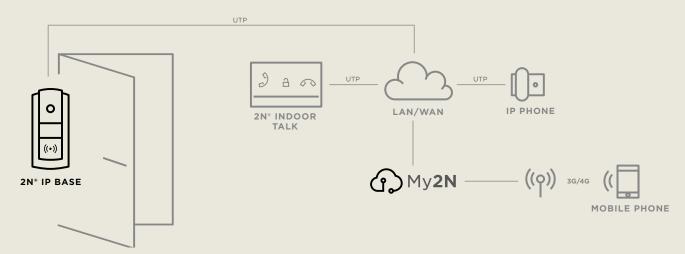
Door communication for small offices

The intercom will secure the entrance for any small office. Its HD camera with wide viewing angle let employees vet visitors or check the company's surrounding in no time. A combination with an RFID card reader allows only the authorized people to get in. Despite its simplicity and easy mounting, it presents an efficient access control solution.

Entry level intercom for residential market

Easy installation using the quick mounting frame, high durability in outdoor and basic functionalities are key benefits of 2N* IP Base. 1 or 2 button are included in the basic package solving a problem of shared entrance for 2 families. Video calls with their visitors is a pleasant benefit.

EXAMPLE OF CONNECTION OF 2N® IP BASE IN RESIDENTIAL ENVIRONMENT



Technical parameters

Signalling protocol

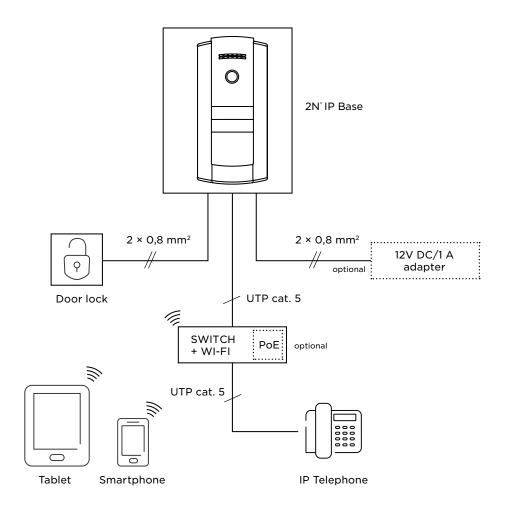
2N® IP Base

| Signalling protocol | |
|----------------------|--|
| | SIP (UDP, TCP, TLS) |
| | |
| Buttons | |
| Button design | White-backlit transparent buttons with replaceable nametags |
| Button count | 1 or 2 (both options included in the package) |
| Audio | |
| Microphone | 1 integrated microphone |
| Amplifier | 2 W (class D) |
| Speaker | 2 W / 8 Ω |
| Volume control | Adjustable with automatic adaptive mode |
| Full duplex | Yes (AEC) |
| T dir duplex | |
| Audio stream | |
| Protocols | RTP |
| Codecs | G.711, G.729, G.722, L16/16 kHz |
| | |
| Camera | 170 |
| Sensor | 1/3" colour CMOS |
| JPEG resolution | Up to 1280 (H) x 960 (V) |
| Video resolution | 640 (H) x 480 (V) |
| Frame rate | Up to 30 snapshots/s |
| Sensor sensitivity | 5.6 V/lux-sec (550 nm) |
| Viewing angle | 135 ° (H), 109 ° (V), 141 °(D) |
| Infrared light | No |
| Video stream | |
| Protocols | RTP/RTSP/HTTP |
| Codecs | H.263, H.263+, H.264, MPEG-4, M-JPEG |
| IP camera function | yes, ONVIF v2.4 profile S compatible |
| Interface | |
| Power supply | 12 V ±15 % / 2 A DC or PoE |
| PoE | PoE 802.3af (Class 0-12.95 W) |
| LAN | 10/100BASE-TX with Auto-MDIX, RJ-45 |
| Recommended cabling | Cat-5e or higher |
| Supported protocols | SIP2.0, RTP, HTTP, HTTPS, Syslog |
| Passive switch | NO/NC contact, up to 30 V / 1 A AC/DC |
| Active switch output | 8 up to 12 V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max 600 mA |
| RFID card reader | |
| Supported | 1051d 17 50M b |
| frequencies | 125kHz and 13.56MHz |
| | 125 kHz: EM4100, EM4102, HID Proximity |
| | 13.56 MHz: ISO14443A, ISO14443B, ISO18092 |
| | : reads UID (CSN) |



| Mechanical properties | |
|------------------------------|--|
| Cover | Robust aluminium casting with surface finish |
| Operating temperature | -40 °C - 55 °C |
| Operating relative humidity | 10 % - 95 % (non-condensing) |
| Storing temperature | -40 °C - 70 °C |
| Weight | Max net weight: 1 kg |
| Covering level | IP65 |
| Resistance level | IK 7 |
| Dimensions | 229 (W) x 109 (H) x 31 (H) mm |

CONNECTION DIAGRAM



Order numbers

2N® IP Base



| Order No. | 9156111CB |
|-----------|------------------------------------|
| Name | 2N® IP Base |
| Desc. | main unit with frame, HD camera |



| Order No. | 9156020 |
|-----------|--|
| Name | 2N® IP Base, backplate |
| Desc. | backplate for easier surface installation |



| Order No. | 9156030 |
|-----------|------------------------------------|
| Name | 2N® IP Base, 125kHz card reader |
| Desc. | 125kHz RFID card reader |

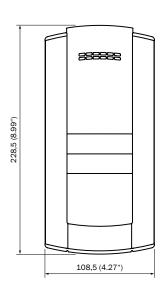


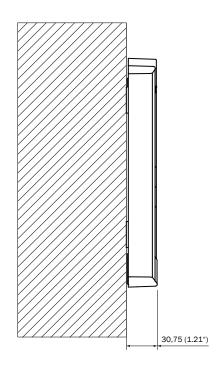
| Order No. | 9156031 |
|-----------|--------------------------------------|
| Name | 2N® IP Base, 13.56MHz card reader |
| Desc. | 13.56MHz RFID card reader, reads UID |

Dimensions and fitting

2N® IP Base

WALL-MOUNTED









2N® IP Safety



















KEY FEATURES

- Robust metal body
- Fast help in case of emergency
- High intelligibility
- Automatic audio loop test

RECOMMENDED USE

Safe city

2N* IP Safety with its bright colour is a reliable emergency communicator that can be installed on custom posts within a city to provide safety to its inhabitants and tourists. Integrate it also with VMS and public address system. The external camera zooms the area and a speaker horn can immediately play a safety warning.

Transportation

Accidents can easily happen on highways and therefore an emergency communicator must be in place. This is where 2N® IP Safety comes into its own. Due to its IP nature, remote control and a regular audio loop test, attendants in a dispatching centre always know that drivers on highways can reach out for help anytime.

Industrial environment

In critical situations, 100% reliability and simple operation is a must. In case of an industrial incident, this IP intercom can halt the entire production line and simultaneously send an alert to a control centre. Using the stream from external cameras, it would be possible to manage the situation in no time.

EXAMPLE OF CONNECTION OF 2N® IP SAFETY ON MOTORWAY



Technical parameters

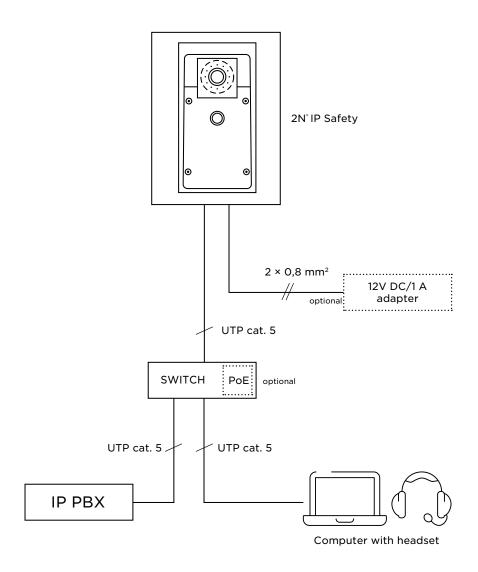
Signalling protocol

2N® IP Safety

| Signaming protocor | |
|-----------------------------|---|
| | SIP (UDP, TCP, TLS) |
| | |
| Buttons | |
| Button design | Industrial waterproof, stainless steel, vandal resistant pushbutton, blue backlit |
| Button count | 1 (2 on request) |
| | |
| Audio | |
| Microphone | 2 integrated microphones |
| Amplifier | 10 W (class D) |
| Loudspeaker | 10 W |
| Volume control | Adjustable with automatic adaptive mode |
| Full duplex | Yes (AEC) |
| | |
| Audio stream | |
| Protocols | RTP/RTSP |
| Codecs | G.711, G.729, G.722, L16/16 kHz |
| | |
| Video stream | |
| Protocols | RTP/RTSP |
| Codecs | G.711, G.729, G.722, L16/16 kHz |
| IP camera function | Yes, ONVIF v2.4 profile S compatible |
| | |
| Interface | |
| Power supply | 12 V ±15 % / 2 A DC or PoE |
| PoE | PoE 802.3af (Class 0-12.95 W) |
| LAN | 10/100BASE-TX s Auto-MDIX, RJ-45 |
| Recommended cabling | Cat-5e or higher |
| Supported protocols | SIP2.0, DHCP opt. 66, SMTP, 802.1x, RTSP, RTP, TFTP, HTTP, HTTPS, Syslog, ONVIF |
| Passive switch | NO and NC contacts, up to 30 V / 1 A AC/DC |
| Active switch output | 9 up to 13 V DC depending on power supply (PoE: 9 V; adaptor: power supply voltage minus 1 V), max 600 mA |
| | |
| Mechanical propertie | S |
| Cover | Robust aluminium cast product |
| Operating temperature | -40 °C to 55 °C |
| Operating relative humidity | 10 % - 95 % (non-condensing) |
| Storing temperature | -40 °C to 70 °C |
| Weight | netto max. 2 kg / brutto max. 2,5 kg |
| Covering level | IP69K |
| | |
| Resistance level | IK10 |



CONNECTION DIAGRAM



^{*} Power from external 12V adapter or POE

Order numbers

2N® IP Safety



| Order No. | 9152101W |
|-----------|-------------------------|
| Name | 2N® IP Safety, 1 button |
| Desc. | 1 button, 10W speaker |



| Order No. | 9152102W |
|-----------|---|
| Name | 2N® IP Safety, 2 button |
| Desc. | INFO button and SOS button, blue backlight |



| Order No. | 9152101MW |
|-----------|---------------------------|
| Name | 2N® IP Safety, red button |
| Desc. | red emergency button |
| | |
| | |



| Order No. | 9152000 |
|-----------|--|
| Name | 2N® IP Safety, frame |
| Desc. | 2N° IP Safety - metal frame (orange colour) |



| Order No. | 9151010 |
|-----------|---|
| Name | 2N® IP Force/Safety, Additional Switch |
| Desc. | additional input and output relays, tamper switch |

Mounting



| Order No. | 9151001 |
|-----------|--------------------------|
| Name | 2N® IP Safety, flush box |
| Desc. | brick flush mounting box |



| | Order No. | 9151002 |
|---|-----------|------------------------------------|
| | Name | 2N® IP Safety, plaster box |
| _ | Desc. | plasterboard flush mounting box |



| Order No. | 9151005 |
|-----------|---------------------------------------|
| Name | 2N® IP Force/Safety - Gooseneck |
| Desc. | Gooseneck stand, height 120cm/47in |



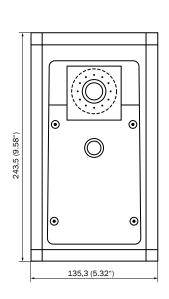
| Order No. | 9151007 |
|-----------|--|
| Name | 2N® IP Force/Safety - Gooseneck stand double |
| Desc. | Gooseneck stand double, height 115cm/45in and 203cm/80in |

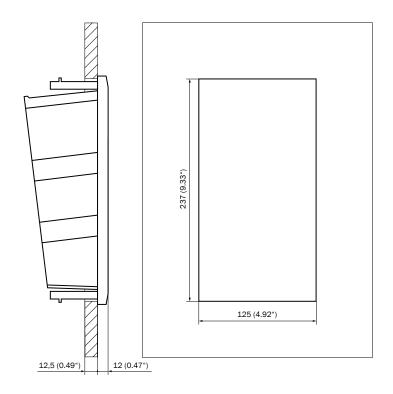
Dimensions and fitting

2N® IP Safety

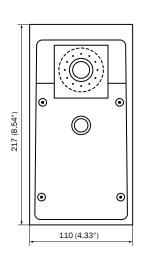
62

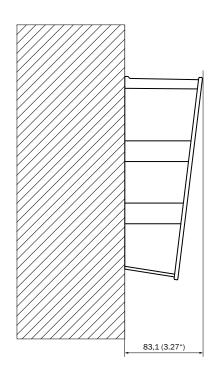
MOUNTING IN PLASTERBOARD



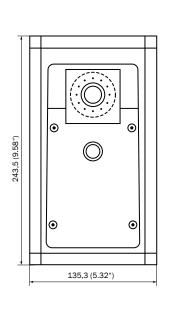


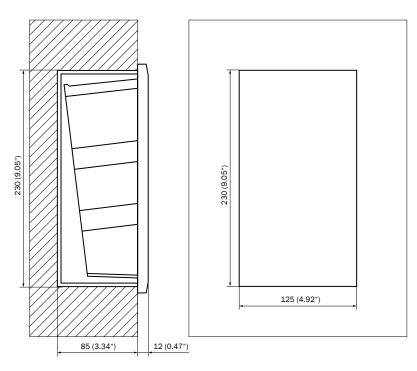
WALL-MOUNTED





FLUSH-MOUNTED WITH BOX





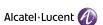


2N® IP Uni is an intercom, which is very easy to install and is suitable for communication in general. A simple operation and connection with the IP world ensures that you won't get lost on the premises. It can promptly connect you with a receptionist or a security guard and provide you a professional assistance.



2N® IP Uni















KEY FEATURES

- Stainless steel front plate
- Visual status signalling
- Built-in tamper switch
- Easy installation

RECOMMENDED USE

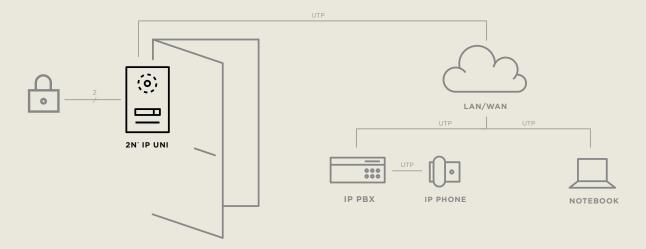
Public info point

Have you ever got lost in a large building like hospital, office building or in a foreign city, been looking for a landmark or need any other information? The 2N° IP Uni will help you. At the press of one button you connect with the information centre and the problem is soon resolved.

Info point for retail

It often happens that a customer needs help or advice about a particular product while shopping, or just wants some guidance around the department store they're in. Thanks to the info point button, they are no longer kept waiting for a specific employee, but are immediately put through to the assistance desk.

EXAMPLE OF CONNECTION OF 2N® IP UNI IN SHOPPING CENTER



SIP (UDP, TCP)

Technical parameters

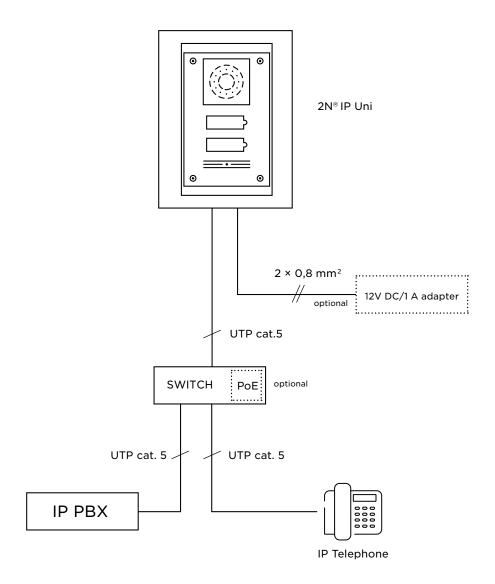
Signalling protocol

2N® IP Uni

| | , , , |
|-----------------------------|--|
| | |
| Buttons | |
| Button design | Transparent buttons with white backlighting and nameplate which can be easily replaced |
| Button count | 1 or 2 |
| | |
| Audio | |
| Microphone | 1 integrated microphone |
| Amplifier | 1 W (class D) |
| Speaker | 1 W |
| Volume control | Adjustable with automatic adaptive mode |
| Full duplex | Yes (AEC) |
| | |
| Audio stream | |
| Protocols | RTP/RTSP |
| Codecs | G.711 |
| | |
| Interface | |
| Power supply | 12 V ± 15 %/2A DC or PoE |
| PoE | PoE 802.3af (Class 0 - 12,95 W) |
| LAN | 10/100BASE-TX with Auto-MDIX, RJ-45 |
| Recommended cabling | Cat-5e or better |
| Passive switch | NO and NC contacts, max. 30 V/1A AC/DC |
| Active switch output | 8-12 V DC/max. 600 mA |
| | |
| Mechanical propertie | s |
| Cover | ABS plastic, high-quality stainless steel |
| Operating temperature | -40 °C - 55 °C |
| Operating relative humidity | 10 % - 95 % (non-condensing) |
| Storage temperature | -40 °C - 70 °C |
| Dimensions | 193 × 115 × 39 mm |
| | 197 × 119 × 47 mm flush fitting box |
| | 193 × 115 × 57 mm when fitted on surface |
| Weight | product net: 500 g |
| | total including container: 800g |
| Covering level | IP54 |
| Resistance level | IK10 |



CONNECTION DIAGRAM



Order numbers

ACCESS CONTROL

2N® IP Uni



| Order No. | 9153101 |
|-----------|----------------------|
| Name | 2N® IP Uni, 1 button |
| Desc. | 1 quick dial button |



| Order No. | 9153102 |
|-----------|----------------------|
| Name | 2N® IP Uni, 2 button |
| Desc. | 2 quick dial buttons |



| Order No. | 9153101P |
|-----------|---|
| Name | 2N [®] IP Uni, 1 button, pictograms |
| Desc. | 1 button, visual status signalling |

Mounting



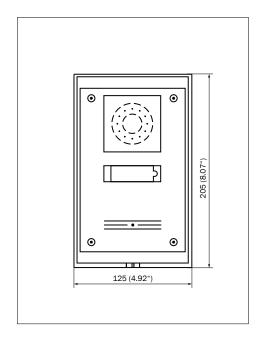
| Order No. | 9153003 |
|-----------|----------------------------------|
| Name | 2N® IP Uni, surface mount box |
| | Surface mount box |
| Desc. | box for wall mounting |

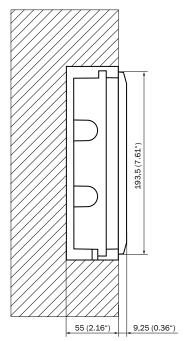
Dimensions and fitting

2N® IP Uni

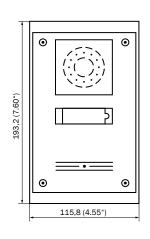
72

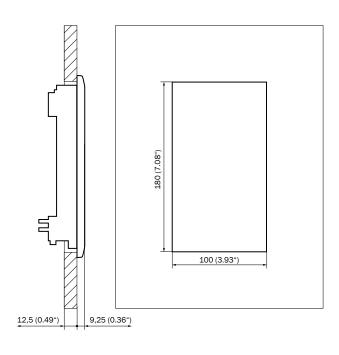
FLUSH-MOUNTED



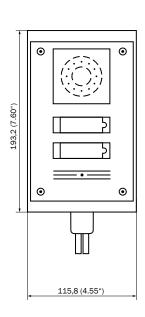


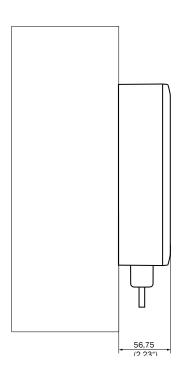
MOUNTING IN PLASTERBOARD

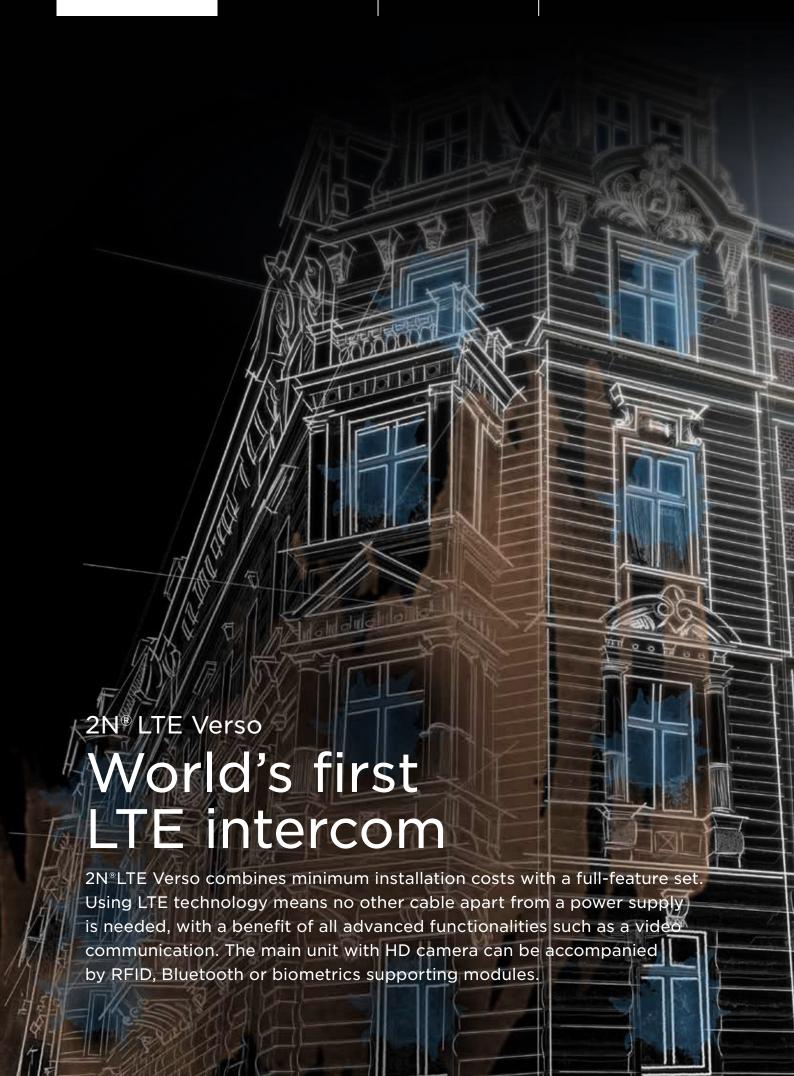




WALL-MOUNTED









2N® LTE Verso

















KEY FEATURES

- Ideal retrofit solution
- · Secure configuration via cloud
- Pick any of the 14 modules available
- Effective upgrade to video intercom

RECOMMENDED USE

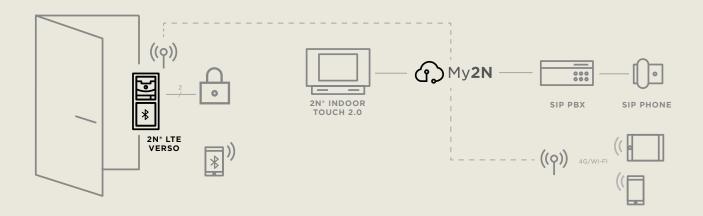
Upgrade to video intercom effectively

State protected historical buildings, older terraced houses, all these places might face a problem of installing a PoE cable to the entrance, especially if they already have a basic door station in place. Using LTE technology means no other cable apart from a power supply is needed, with a benefit of all advanced functionalities such as a video communication.

Communication for remote sites

Imagine a farm with a gate 3km far away. The only thing one has to do is to install 2N® LTE Verso, ensure its power supply and register it into My2N. The 2N® Mobile Video service then establishes a video communication with visitors via your smartphone leaving the installation costs at their minimum.

EXAMPLE OF CONNECTION OF THE 2N® LTE VERSO



SIP (UDP, TCP, TLS)

Technical parameters

Signalling protocol

Buttons

ACCESS CONTROL

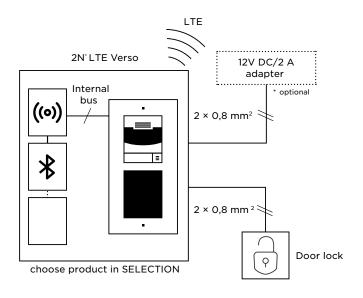
2N® LTE Verso

| Buttons | |
|---|--|
| Button design | White-backlit transparent buttons with replaceable nametags |
| Button count | 1 and increments of 5 (max 146) |
| Button extenders | Up to 30 modules, limited by power supply |
| Numeric keypad | Optional |
| <u> </u> | <u> </u> |
| Audio | |
| Microphone | 1 integrated microphone |
| Amplifier | 2 W (class D) |
| Speaker | 2 W / 8 Ω |
| Output LINE OUT | 1 VRMS / 600 Ω |
| Volume control | Adjustable with automatic adaptive mode |
| Full duplex | Yes (AEC) |
| A It A | |
| Audio stream | DTD / DTCD |
| Protocols | RTP / RTSP |
| Codecs | G.711, G.729, G.722, L16/16 kHz |
| Camera | |
| Sensor | 1/3" colour CMOS |
| JPEG resolution | Up to 1280 (H) x 960 (V) |
| Video resolution | 640 (H) x 480 (V) |
| Frame rate | Up to 30 snapshots/s |
| Sensor sensitivity | 5.6 V/lux-sec (550 nm) |
| View angle | 128 ° (H), 95 ° (V), 134 ° (D) |
| Infrared light | Yes |
| initaled light | 163 |
| Video stream | |
| Protocols | RTP/RTSP/HTTP |
| Codecs | H.263, H.263+, H.264, MPEG-4, M-JPEG |
| IP camera function | Yes, ONVIF v2.4 profile S compatible |
| | |
| Interface | |
| Power supply | 12 V ±15 % / 2 A DC |
| LTE FDD | Cat.1, 3GPP release 9 compliant |
| LTE bands (9155401C-E and 9155401CB-E) | B1(2100) B3(1800) B7(2600) B8(900) B20(800) |
| Supported protocols | SIP2.0, DHCP opt. 66, SMTP, 802.1x, RTSP, RTP, TFTP, HTTP, HTTPS, Syslog, ONVIF |
| Passive switch | NO/NC contact, up to 30 V / 1 A AC/DC |
| Active switch output | 8 up to 12 V DC depending on power supply (power supply voltage minus 2 V), up to 400 mA |
| | |
| External LTE Antenna | 41 15 |
| Gain | 4.1 dB |
| Power handling | 25 W |
| Operating temperature | -40 °C to +85°C |
| Dimensions | 14 (W) x 6 (H) x 122 (L) mm |
| Mounting | Adhesive Mount |
| Cable length | 2 m |



| RFID card reader | | |
|-----------------------------|-----------------|--|
| Supported frequencies | 125kHz and | 13.56MHz |
| | 125 kHz: | EM4100, EM4102, HID Proximity |
| | 13.56 MHz: | ISO14443A, ISO14443B, ISO15693, NFC support |
| | : | reads UID (CSN) |
| | : | reads PACs ID (iCLASS SIO-enabled cards) - only secured cards |
| Mechanical propertie | es | |
| Cover | robust zinc | casting with surface finish |
| Operating temperature | -40 °C - 60 | °C |
| Operating relative humidity | 10 % - 95 % | (non-condensing) |
| Storing temperature | -40 °C - 70 | °C |
| Weight | max net we | ight: From 2kg, based on configuration |
| Covering level | IP54 | |
| Resistance level | IK08 | |
| Dimensions | | |
| Surface mounting fra | me | |
| 1 module | 107 (W) x 13 | 30 (H) x 28 (D) mm |
| 2 modules | 107 (W) x 2 | 34 (H) x 28 (D) mm |
| 3 modules | 107 (W) x 3 | 39 (H) x 28 (D) mm |
| Flush mounting fram | e | |
| 1 module | 130 (W) x 15 | 53 (H) x 5 (D) mm |
| 2 modules | 130 (W) x 2 | 57 (H) x 5 (D) mm |
| 3 modules | 130 (W) x 3 | 61 (H) x 5 (D) mm |
| Flush mounting box | (minimum hol | e dimensions) |
| 1 module | 108 (W) x 13 | 31 (H) x 45 (D) mm |
| 2 modules | 108 (W) x 2 | 38 (H) x 45 (D) mm |
| 3 modules | 108 (W) x 3 | 43 (H) x 45 (D) mm |
| Module internal cuto | ut | |
| 72 (W) x 89.3 (H) mm | 1 / 2 83 (W/) v | 3 51 (H) inches |

CONNECTION DIAGRAM



Order numbers

Main unit and modules



| Order No. | 9155401C-E/ 9155401CB-E |
|-----------|--|
| Name | Main unit with camera nickel/ black |
| Desc. | internal LTE antenna, 1 button, HD camera |



| Order No. | 9155036 |
|-----------|--|
| Name | Touch Display module |
| Desc. | module for 2N° LTE Verso, tree-structured phone book, touch keypad |



| Order No. | 9155046 |
|-----------|--|
| Name | Bluetooth Reader module |
| Desc. | module for 2N° LTE Verso, Bluetooth 4.0 |



| Order No. | 9155045 |
|-----------|---|
| Name | Fingerprint Reader module |
| Desc. | module for 2N° LTE Verso, spoof fingerprint detection, optical technology |



| Order No. | 9155047 |
|-----------|---|
| Name | Touch Keypad module |
| Desc. | module for 2N° LTE Verso, capacitive touchscreen, regular automatic calibration |



| Order No. | 9155031/ 9155031B |
|-----------|--|
| Name | Keypad module nickel/black |
| Desc. | module for 2N® LTE Verso, mechanical keypad, backlit symbols |



| Order No. | 9155035 |
|-----------|---|
| Name | 5 Buttons module |
| Desc. | module for 2N [®] LTE Verso, quick dial buttons |



| Order No. | 9155032 |
|-----------|---|
| Name | RFID Card Reader module 125kHz |
| Desc. | module for 2N® IP Verso |
| | |
| Order No. | 9155040/ 9155042 |
| Order No. | 9155040/ 9155042 RFID Card Reader with NFC 13,56MHz (xx40) / 13,56MHz secured (xx42) |



| Order No. | 9155082 |
|-----------|---|
| Name | Bluetooth & RFID module |
| Desc. | 125kHz, 13.56MHz, NFC ready, Bluetooth 4.0 |
| Order No. | 9155084 |
| | |
| Name | Bluetooth & RFID module |



| Order No. | 9155081 |
|-----------|-----------------------------|
| Name | Touch Keypad & RFID module |
| Desc. | 125kHz, 13.56MHz, NFC ready |
| Order No. | 9155083 |
| Name | Touch Keypad & RFID module |
| | 31 |



| Order No. | 9155041 |
|-----------|---|
| Name | Induction Loop module |
| Desc. | module for 2N° IP Verso, audio signal directly into a hearing aid |



| Order No. | 9155039 |
|-----------|---|
| Name | Blind Panel module |
| Desc. | module for 2N° IP Verso, 1 blind module supplied with the main unit |



| Order No. | 9155030 |
|-----------|-------------------------------------|
| Name | Infopanel module |
| Desc. | module for 2N® IP Verso, backlit |



| Order No. | 9155034 |
|-----------|--|
| Name | I/O module |
| Desc. | module for 2N° IP Verso, installed under another module, 2 inputs and 2 relay outputs |



| Order No. | 9155037 |
|-----------|--|
| Name | Wiegand module |
| Desc. | module for 2N® IP Verso, installed under another module, for interconnection of systems |



| Order No. | 9155038 |
|-----------|-------------------------|
| Name | Tamper Switch module |
| Desc. | module for 2N° IP Verso |

Frames



| Order No. | 9155011/ 9155011B |
|-----------|--|
| Name | 1 module flush frame nickel / black |
| Desc. | frame for installation in the wall, 1 module |



| Order No. | 9155021/ 9155021B |
|-----------|---|
| Name | 1 module surface frame nickel / black |
| Desc. | frame for installation on the surface, 1 module |



| Order No. | 9155012/ 9155012B |
|-----------|---|
| Name | 2 module flush frame nickel / black |
| Desc. | frame for installation in the wall, 2 modules |



| Order No. | 9155022/ 9155022B |
|-----------|---|
| Name | 2 module surface frame nickel / black |
| Desc. | frame for installation on the surface, 2 modules |



| Order No. | 9155013/ 9155013B |
|-----------|---|
| Name | 3 module flush frame nickel / black |
| Desc. | frame for installation in the wall, 3 modules |



| Order No. | 9155023/ 9155023B |
|-----------|--|
| Name | 3 module surface frame nickel / black |
| Desc. | frame for installation on the surface, 3 modules |

Backplates and boxes



| Order No. | 9155061 |
|-----------|--|
| Name | 1 module backplate |
| Desc. | backplate for surface installation, 1 module |



| Order No. | 9155062 |
|-----------|--|
| Name | 2 modules backplate |
| Desc. | backplate for surface installation, 2 modules |



| Order No. | 9155063 |
|-----------|---|
| Name | 3 modules backplate |
| Desc. | backplate for surface installation, 3 modules |



| Order No. | 9155064 |
|-----------|---|
| Name | 2 (w) x2 (h) modules backplate |
| Desc. | backplate for surface installation, 2x2 modules |



| Order No. | 9155067 |
|-----------|---|
| Name | 3 (w) x3 (h) modules backplate |
| Desc. | backplate for surface installation, 3x3 modules |

| Order No. | 9155066 |
|-----------|---|
| Name | 2 (w) x3 (h) modules backplate |
| Desc. | backplate for surface installation, 2x3 modules |



| Order No. | 9155065 |
|-----------|-----------------------------------|
| Name | 3 (w) x2 (h) modules backplate |
| Desc. | backplate for surface |



| Order No. | 9155014 |
|-----------|--|
| Name | 1 module flush box |
| Desc. | box for installation in the wall, 1 module |



| Order No. | 9155015 |
|-----------|---|
| Name | 2 modules flush box |
| Desc. | box for installation in the wall, 2 modules |



| Order No. | 9155016 |
|-----------|---|
| Name | 3 modules flush box |
| Desc. | box for installation in the wall, 3 modules |

Other



| Order No. | 9155050 |
|-----------|--|
| Name | Extension cable- 1m long |
| Desc. | connection of modules in greater distance from the main unit |



| Order No. | 9155054 |
|-----------|--|
| Name | Extension cable- 3m long |
| Desc. | connection of modules in greater distance from the main unit |



| Order No. | 9155055 |
|-----------|--|
| Name | Extension cable- 5m long |
| Desc. | connection of modules in greater distance from the main unit |



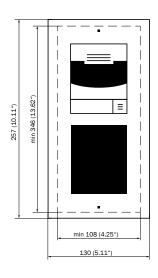
| Order No. | 9155048 |
|-----------|----------------------|
| Name | External LTE antenna |
| Desc. | 2m long cable |

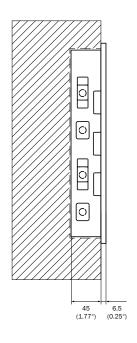
Dimensions and fitting

2N® LTE Verso

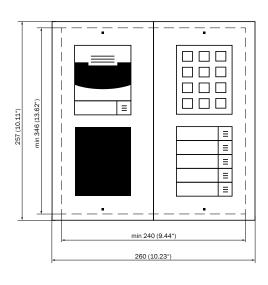
IN-WALL 2 MODULES

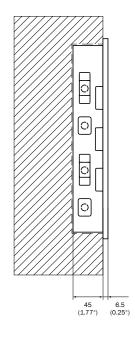
86



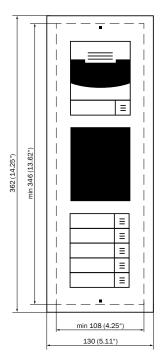


2× IN-WALL 2 MODULES

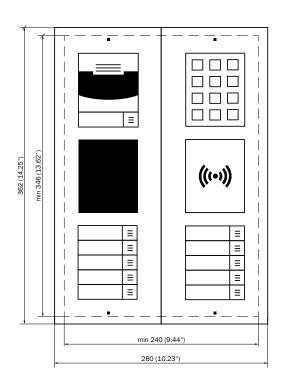


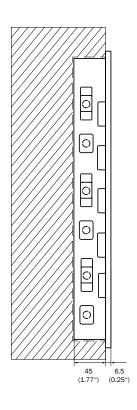


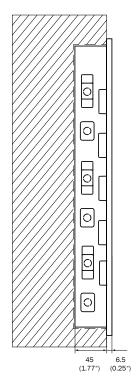
IN-WALL 3 MODULES



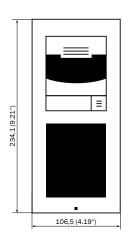
2× IN-WALL 3 MODULES

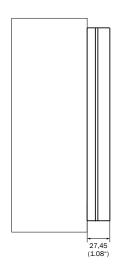




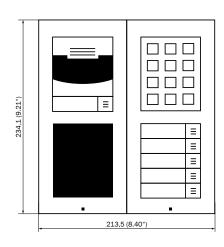


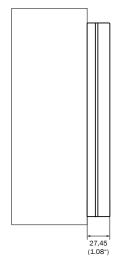
WALL-MOUNTED 2 MODULES



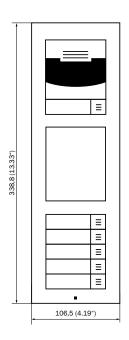


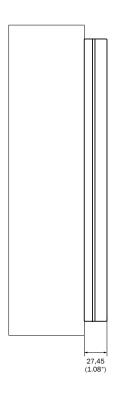
2× WALL-MOUNTED 2 MODULES



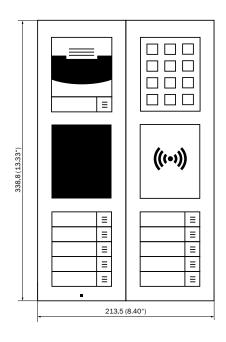


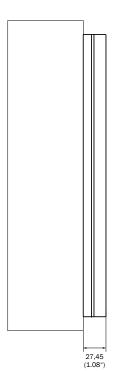
WALL-MOUNTED 3 MODULES



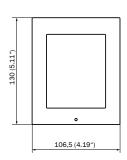


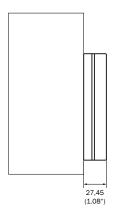
2× WALL-MOUNTED 3 MODULES



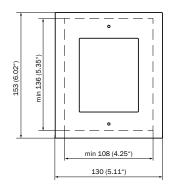


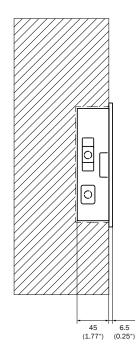
WALL-MOUNTED 1 MODULE





IN-WALL 1 MODULE







2N® IP Audio Kit 2N® IP Video Kit

Create your own IP intercom

These OEM IP intercoms are intended for incorporation into a variety of devices. They are designed to add value of remote control, monitoring and either audio communication or video surveillance. Take an advantage of live support at a push of a button.



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2N[®] IP Audio Kit 2N[®] IP Video Kit

KEY FEATURES

VoIP solution you don't have to develop

These OEM IP intercoms are easily incorporated into your existing device. Thanks to IP technology you simply extend them to include IP audio, respectively IP audio and video functionality.

Wide range of connectors

Choose from a wide range of interfaces. Hook up a microphone, speakers, headphones or keypad buttons. Besides, 2N° IP Video Kit can be connected to two either PAL or NTSC composite video surveillance cameras.

· SIP support, with no server needed

With it's SIP protocol support the intercom easily links with IP phones and PBX from other producers, without having to connect to the server.

• Remote administration and control

The HTTP API allows these OEM intercom systems to be easily integrated into the master system for remote administration. Alternatively, save time and money for onsite support thanks to our free service 2N* Remote Configuration. Access all your devices remotely via secured cloud connection.

Adaptive volume

Both the 2N° IP Audio Kit and 2N° Video Kit automatically adjusts speaker volume based on ambient noise level.

TECHNICAL PARAMETERS

| SIP 2.0 (UDP, TCP, TLS) Buttons //Keypad Interface Up to 16 separate buttons in 4x4 matrix Audio Microphone electret microphone, Max. Vpp = 100mW, Rin = 4.4kΩ, Vbias = 1.5V Line input Max. 755mV RMS, Rin = 47kΩ Amplifier 110W (class D), MONO output, TTHO < 1%, min. loudspeaker impedance: 4Ω Line output Max. 755mV RMS, Rout = 600Ω Full duplex Yes (AEC) Protocols RTP/RTSP Codecs G.71I, G.722*, G.729*, L16/16kHz* Video Input count 2 (INI, IN2) Input format PAL or NTSC composite signal Camera power supply 12V, max. 500mA (+12V, VGND) Protocols RTP, RTSP, HTTP Codecs H.263, H.263+, H.264, MPEG-4, M-JPEG IP camera function ONVIF v2.4 profile S compatible Interface Power Supply 9 to 36 V ± 10 % / 2 A DC or PoE, typically 12 V DC PoE 802.3af (Class O - up to 12.95W) Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher Active switch outputs 10/10/10/16 (Class O) (PoE: 10 y; adaptor; power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (INI, IN2); Uin < 1,1V (L), Uin > 3 V (H), max. Uin = 32V LED control outputs 3 programmable terminals (LEDI, LED2, LED3); up to 12V / 20mA Supported protocols 142 x 99 x 34 mm - Part No. 9154100(C) Weight 120 A 20 x 120 x 12 | Signalling protocol | |
|---|---------------------------|---|
| Audio electret microphone, Max. Vpp = 100mW, Rin = 4.4kΩ, Vbias = 1.5V Line input Max. 755mV RMS, Rin = 47kΩ Jow (class D), MONO output, THO < 1%, min. loudspeaker impedance: 4Ω | | SIP 2.0 (UDP, TCP, TLS) |
| Audio electret microphone. Microphone electret microphone. Max. Vpp = 100mW, Rin = 4.4kΩ, Vbias = 1.5V Line input Max. 755mV RMS, Rin = 47kΩ JoW (class D), MONO output, THO < 1%, min. loudspeaker impedance: 4Ω | | |
| Up to 16 separate buttons in 4x4 matrix | Buttons | |
| Audio electret microphone, Max. Vpp = 100mV, Rin = 4.4kΩ, Vbias = 1.5V Line input Max. 755mV RMS, Rin = 47kΩ Amplifier 10W (class D), MONO output, THD < 1%, min. loudspeaker impedance: 4Ω | /Keypad Interface | |
| Ambirophone Max. Vpp = 100mV, Rin = 4.4kΩ, Vbias = 1.5V | | Up to 16 separate buttons in 4x4 matrix |
| Ambirophone Max. Vpp = 100mV, Rin = 4.4kΩ, Vbias = 1.5V | | |
| Max. Vpp = 100mV, Rin = 4.4kΩ, Vbias = 1.5V | Audio | |
| Amplifier 10W (class D), MONO output, THD < 1%, min. loudspeaker impedance: 4Ω | Microphone | |
| THD < 1%, min. loudspeaker impedance: 4Ω | Line input | · · · · · · · · · · · · · · · · · · · |
| Full duplex | Amplifier | |
| Protocols RTP/RTSP Codecs G.711, G.722*, G.729*, L16/16kHz* Video Input count Input format PAL or NTSC composite signal Camera power supply 12V, max. 500mA (+12V, VGND) Protocols RTP, RTSP, HTTP Codecs H.263, H.263+, H.264, MPEG-4, M-JPEG IP camera function ONVIF v2.4 profile S compatible Interface Power Supply 9 to 36 V ± 10 % / 2 A DC or PoE, typically 12 V DC PoE 802.3af (Class 0 - up to 12.95W) Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUTI, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (INI, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V LED control outputs 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, OHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working tempera | Line output | Max. 755mV RMS, Rout = 600Ω |
| Codecs G.711, G.722*, G.729*, L16/16kHz* Video PAL or NTSC composite signal Camera power supply 12V, max. 500mA (+12V, VGND) Protocols RTP, RTSP, HTTP Codecs H.263, H.263+, H.264, MPEG-4, M-JPEG IP camera function ONVIF v2.4 profile S compatible Interface Power Supply 9 to 36 V ± 10 % / 2 A DC or PoE, typically 12 V DC PoE 802.3af (Class 0 - up to 12.95W) Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher NO/NC relay contact; up to 30V /1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,IV (L), Uin > 3V (H), max. Uin = 32V LED control outputs 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working temperature -40°C - 70°C Dimensions | Full duplex | Yes (AEC) |
| Video 2 (INI, IN2) Input format PAL or NTSC composite signal Camera power supply 12V, max. 500mA (+12V, VGND) Protocols RTP, RTSP, HTTP Codecs H.263, H.263+, H.264, MPEG-4, M-JPEG IP camera function ONVIF v2.4 profile S compatible Interface Power Supply 9 to 36 V ± 10 % / 2 A DC or PoE, typically 12 V DC PoE 802.3af (Class 0 - up to 12.95W) Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher Passive switch NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (INI, IN2); Uin < 1,IV (L), Uin > 3V (H), max. Uin = 32V LED control outputs 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working temperature -40°C - 55°C Working temperature <t< td=""><td>Protocols</td><td>RTP/RTSP</td></t<> | Protocols | RTP/RTSP |
| Input count | Codecs | G.711, G.722*, G.729*, L16/16kHz* |
| Input count | | |
| Input format Camera power supply 12V, max. 500mA (+12V, VGND) Protocols RTP, RTSP, HTTP Codecs H.263, H.263+, H.264, MPEG-4, M-JPEG IP camera function ONVIF v2.4 profile S compatible Interface Power Supply 9 to 36 V ± 10 % / 2 A DC or PoE, typically 12 V DC PoE 802.3af (Class 0 - up to 12.95W) Power consumption LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs Logical inputs LED control outputs Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) Up to 150g - Part No. 9154101(C) Up to 150g - Part No. 9154101(C) IP20 - Part No. 9154101(C) | Video | |
| Camera power supply 12V, max. 500mA (+12V, VGND) | Input count | 2 (IN1, IN2) |
| Protocols RTP, RTSP, HTTP Codecs H.263, H.263+, H.264, MPEG-4, M-JPEG IP camera function ONVIF v2.4 profile S compatible Interface Power Supply 9 to 36 V ± 10 % / 2 A DC or PoE, typically 12 V DC PoE 802.3af (Class 0 - up to 12.95W) Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher Passive switch NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V LED control outputs 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working relative humidity 10% - 95% (non-condensing) Storing temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) Up to 280g - Part No. 9154100(C) | Input format | PAL or NTSC composite signal |
| Codecs | Camera power supply | 12V, max. 500mA (+12V, VGND) |
| Interface Power Supply PoE 802.3af (Class 0 - up to 12.95W) Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Passive switch NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) Up to 280g - Part No. 9154100(C) UP to 150g - Part No. 9154100(C) UP to 150g - Part No. 9154100(C) UP to 150g - Part No. 9154100(C) | Protocols | RTP, RTSP, HTTP |
| Interface Power Supply PoE 802.3af (Class 0 - up to 12.95W) Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working relative humidity Storing temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) Up to 280g - Part No. 9154101(C) UP to 150g - Part No. 9154101(C) | Codecs | H.263, H.263+, H.264, MPEG-4, M-JPEG |
| Power Supply 9 to 36 V ± 10 % / 2 A DC or PoE, typically 12 V DC PoE 802.3af (Class 0 - up to 12.95W) Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher Passive switch NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V LED control outputs 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working relative humidity 10% - 95% (non-condensing) Storing temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) 138 x 90 x 26 mm - Part No. 9154101(C) Weight Up to 150g - Part No. 9154101(C) | IP camera function | ONVIF v2.4 profile S compatible |
| Power Supply 9 to 36 V ± 10 % / 2 A DC or PoE, typically 12 V DC PoE 802.3af (Class 0 - up to 12.95W) Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher Passive switch NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V LED control outputs 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working relative humidity 10% - 95% (non-condensing) Storing temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) 138 x 90 x 26 mm - Part No. 9154101(C) Weight Up to 150g - Part No. 9154101(C) | | |
| PoE 802.3af (Class 0 - up to 12.95W) Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher Passive switch NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V LED control outputs 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working relative humidity 10% - 95% (non-condensing) Storing temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) Weight Up to 150g - Part No. 9154100(C) IP20 - Part No. 9154100(C) | Interface | |
| Power consumption 2W in idle state LAN 10/100BASE-TX with Auto-MDIX, RJ-45 Recommended cabling Cat-5e or higher NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V LED control outputs 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) Weight Up to 280g - Part No. 9154100(C) Up to 150g - Part No. 9154100(C) | Power Supply | 9 to 36 V \pm 10 % / 2 A DC or PoE, typically 12 V DC |
| LAN Recommended cabling Cat-5e or higher Passive switch NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) Up to 280g - Part No. 9154100(C) Up to 150g - Part No. 9154100(C) Up to 150g - Part No. 9154100(C) | PoE | 802.3af (Class 0 - up to 12.95W) |
| Recommended cabling Cat-5e or higher No/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs Logical inputs Led control outputs Led control outputs Supported protocols Mechanical Properties Working temperature -40°C - 55°C Working temperature -40°C - 70°C Dimensions Meight Cat-5e or higher NO/NC relay contact; up to 32V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) Up to 280g - Part No. 9154101(C) Up to 150g - Part No. 9154101(C) | Power consumption | 2W in idle state |
| Passive switch NO/NC relay contact; up to 30V / 1A DC or 125V / 0.3A AC 2 terminals (OUT1, OUT2); 7 to 11V DC depending on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V LED control outputs 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working relative humidity 10% - 95% (non-condensing) Storing temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) Weight Up to 280g - Part No. 9154101(C) IP20 - Part No. 9154101(C) | LAN | 10/100BASE-TX with Auto-MDIX, RJ-45 |
| Active switch outputs Active switch outputs Active switch outputs Logical inputs Logical inputs Logical inputs LED control outputs Supported protocols Mechanical Properties Working temperature Working relative humidity Storing temperature Dimensions Logical inputs Logical inputs Logical inputs Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) Weight Up to 280g - Part No. 9154101(C) Up to 150g - Part No. 9154101(C) | Recommended cabling | Cat-5e or higher |
| Active switch outputs on power supply (PoE: 10 V; adaptor: power supply voltage minus 2 V), max. 600mA Logical inputs 2 galvanically isolated (IN1, IN2); Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working relative humidity 10% - 95% (non-condensing) Storing temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) 138 x 90 x 26 mm - Part No. 9154101(C) Weight Up to 280g - Part No. 9154101(C) | Passive switch | |
| Led control outputs Uin < 1,1V (L), Uin > 3V (H), max. Uin = 32V 3 programmable terminals (LED1, LED2, LED3); up to 12V / 20mA Supported protocols SIP 2.0, DHCP opt. 66, SMTP, 802.1x, RTP, RTSP, TFTP, HTTP, HTTPS, Syslog Mechanical Properties Working temperature -40°C - 55°C Working relative humidity 10% - 95% (non-condensing) Storing temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) 138 x 90 x 26 mm - Part No. 9154101(C) Weight Up to 280g - Part No. 9154101(C) [P20 - Part No. 9154101(C)] | Active switch outputs | on power supply (PoE: 10 V; adaptor: power supply |
| Up to 12V / 20mA | Logical inputs | , , , , |
| Mechanical Properties August 100 mm | LED control outputs | |
| Working temperature | Supported protocols | |
| Working relative humidity 10% - 95% (non-condensing) Storing temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) 138 x 90 x 26 mm - Part No. 9154101(C) Weight Up to 280g - Part No. 9154100(C); Up to 150g - Part No. 9154101(C) | Mechanical Properties | |
| Storing temperature -40°C - 70°C Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) 138 x 90 x 26 mm - Part No. 9154101(C) Weight Up to 280g - Part No. 9154100(C); Up to 150g - Part No. 9154101(C) | Working temperature | -40°C - 55°C |
| Dimensions 142 x 98 x 34 mm - Part No. 9154100(C) 138 x 90 x 26 mm - Part No. 9154101(C) Weight Up to 280g - Part No. 9154100(C); Up to 150g - Part No. 9154101(C) | Working relative humidity | |
| 138 x 90 x 26 mm - Part No. 9154101(C) Up to 280g - Part No. 9154100(C); Up to 150g - Part No. 9154101(C) Up to 150g - Part No. 9154100(C) | Storing temperature | -40°C - 70°C |
| Weight Up to 280g - Part No. 9154100(C); Up to 150g - Part No. 9154101(C) | Dimensions | 142 x 98 x 34 mm - Part No. 9154100(C) |
| Up to 150g - Part No. 9154101(C) | | |
| IP20 - Part No. 9154100(C). | Weight | |
| Protection class IPO0 - Part No. 9154101(C) | Protection class | IP20 - Part No. 9154100(C), IP00 - Part No. 9154101(C) |

^{*} Related only to 2N® Video Kit (Part No. 9154100C and 9154101C)

Order numbers

2N® Audio Kit, 2N® Video Kit



| Order No. | 9154100C |
|-----------|------------------|
| Name | 2N® IP Video Kit |
| Desc. | OEM IP Intercom, |



| Order No. | 9154101C |
|-----------|--|
| Name | 2N® IP Video Kit |
| Desc. | OEM IP Intercom, without plastic cover, audio and video addition |



| Order No | 9154100 |
|----------|------------------|
| Name | 2N® IP Audio Kit |
| Desc. | OEM IP Intercom, |



| Order No. | 9154101 |
|-----------|--|
| Name | 2N® IP Audio Kit |
| Desc. | OEM IP Intercom, without plastic cover, audio addition |



| Order No. | 9154102 |
|-----------|-----------------------|
| Name | 2N® IP Audio Kit Lite |
| Desc. | OEM IP Intercom, |



IP ENVIRONMENT

100

2N Access Unit



KEY FEATURES

- · Controller and reader in one
- Single cable installation
- · Weather-resistant units
- Luxury design unified with IP intercoms

RECOMMENDED USE

Villa secured by a fingerprint reader

The 2N* Access Unit Fingerprint Reader offers a perfect solution for a family house. Keep what's the dearest to you under a maximum protection. The residents can rest assured they will never forget their identifier- a finger, because the weather-resistant access unit cannot be tricked, even by spoof fingerprints.

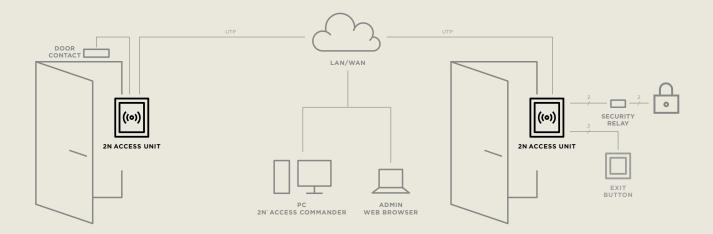
Enter your garage using Bluetooth

Install our app into your smartphone, leave the phone in your pocket and touch the 2N* Access Unit Bluetooth to have an access guaranteed. Due to programmable reading modes, you don't even have to get out of your car when it's raining to open your garage.

Communal spaces in apartment buildings

PIN codes are a reliable and convenient way of securing the premises. Protect belongings stored in communal parts of the apartment building by the 2N* Access Unit Touch Keypad and allow the access only to authorized persons with their own PIN code.

EXAMPLE OF CONNECTION OF THE 2N ACCESS UNIT



Technical parameters

ACCESS CONTROL

Audio

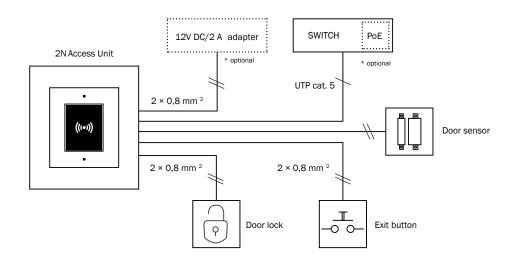
2N Access Unit

| Audio | |
|-------------------------|--|
| Speaker | 0.8 W / 8 Ω |
| | |
| Interfaces | |
| Power supply | 12 V ±15 % / 2 A DC or PoE |
| PoE | PoE 802.3af (Class 0-12.95 W) |
| LAN | 10/100BASE-TX with Auto-MDIX, terminal block or RJ-45 pigtail |
| Recommended wiring | Cat-5e or higher |
| Supported protocols | DHCP opt. 66, SMTP, 802.1x, TFTP, HTTP, HTTPS, Syslog |
| Passive switch | NO/NC contact, up to 30 V / 1 A AC/DC |
| Active switch output | 8 to 12 V DC according to power supply (PoE: 10 V; adapter: power voltage minus 2 V), up to 500 mA |
| Inputs | 3; can be used in passive or active mode (-30V to +30V DC) |
| Tamper switch is part o | f the 2N Access Unit |
| | |
| RFID card reader | |
| Supported frequencies | 125kHz or 13.56MHz |
| 125 kHz | EM4100, EM4102, HID Proximity |
| 13.56 MHz | ISO14443A, ISO14443B, ISO15693, NFC support |
| | reads UID (CSN) |
| | reads PACs ID (iCLASS SIO-enabled cards) |
| | |
| Bluetooth | |
| Version | Compatible with Bluetooth 4.0 or higher (BLE) |
| RX sensitivity | Up to -93 dBm |
| Range | Adjustable (short ~ 0.5m, middle ~ 2m, long ~ up to 10 m) |
| Security | RSA-1024 and AES-128 encryption |
| Mobile applications | 2N® Mobile Key (Android 5.0 and higher, iOS 11.0 and higher) |
| | |
| Fingerprint reader | |
| Sensor | Optical, with resistant glass |
| Signalization | Acoustic and multi-coloured LED |
| Sensing area | 15.24 x 20.32 mm |
| Touch Keypad | |
| Technology | Capacitive (0.1pF sensitivity) |
| Calibration | SmartSence (regular automatic calibration) |
| Signalization | Acoustic and multi-coloured LED |
| | 7. ISSUED AND MICH. CONCURS LED |



| Mechanical properties | |
|--|--------------------------------------|
| Frame | Robust zinc cast with surface finish |
| Operating temperature | -40 °C to 60 °C |
| Operating relative humidity | 10 % - 95 % (non-condensing) |
| Storage temperature | -40 °C to 70 °C |
| Weight | max: 0.5 kg (based on configuration) |
| Cover rating | IP54 |
| Resistance level | IK08 |
| | |
| Dimensions | |
| Wall (surface) mounting frame | |
| 1 module | 107 (W) x 130 (H) x 28 (D) mm |
| | |
| Flush mounting frame | |
| 1 module | 130 (W) x 153 (H) x 5 (D) mm |
| | |
| Flush mounting box (minimum hole dimensions) | |
| 1 module | 108 (W) x 131 (H) x 45 (D) mm |

CONNECTION DIAGRAM



Order numbers

2N Access Unit



| Order No. | 916009 |
|-----------|---|
| Name | 2N® Access Unit RFID |
| Desc. | 125kHz, door controller and RFID reader, outdoor and indoor use |



| Order No. | 916010 |
|-----------|---|
| Name | 2N® Access Unit RFID |
| Desc. | 13.56MHz, door controller and RFID reader, NFC technology support |



| Order No. | 916013 |
|-----------|---|
| Name | 2N® Access Unit Bluetooth |
| Desc. | adjustable communication distance, two-factor authentication, simple pairing process |



| Order No. | 916019 |
|-----------|--|
| Name | 2N® Access Unit Fingerprint Reader |
| Desc. | optical technology, acoustic and visual signalling, weatherproof |



| ı | Order No. | 916016 |
|---|-----------|---|
| | Name | 2N® Access Unit Touch Keypad |
| | Desc. | capacitive touch technology, regular automatic calibration, backlit symbols |

Accessories



| Order No. | 9155011/ 9155011B |
|-----------|---|
| Name | 1 module flush frame nickel/ black |
| Desc. | frame for installation in the wall, in nickel or black colour |



| | Order No. | 9155021/ 9155021B |
|---|-----------|--|
| | Name | 1 module surface frame nickel/ black |
| • | Desc. | frame for installation on the surface, in nickel or black colour |



| Order No. | 9155014 |
|-----------|----------------------------------|
| Name | 1 module flush box |
| Desc. | box for installation in the wall |



| Order No. | 916020 |
|-----------|--|
| Name | RJ45 connector cable |
| Desc. | cable for interconnecting the Access Units |
| | |



| Order No. | 916012 |
|-----------|--------------------------------------|
| Name | NFC license |
| Desc. | NFC license for 13.56MHz card reader |



| Order No. | 9155061 |
|-----------|--|
| Name | 1 module backplate |
| Desc. | backplate for surface installation, 1 module |



| 2N® Mobile Key |
|---|
| a free application that turns your mobile phone into an access card |
| |



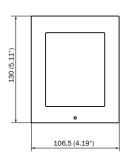


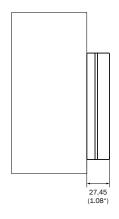
Dimensions and fitting

2N Access Unit

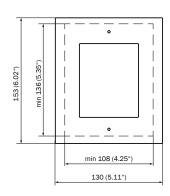
106

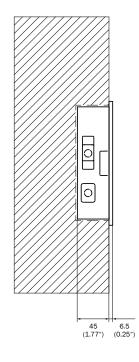
WALL-MOUNTED 1 MODULE

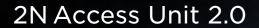




IN-WALL 1 MODULE

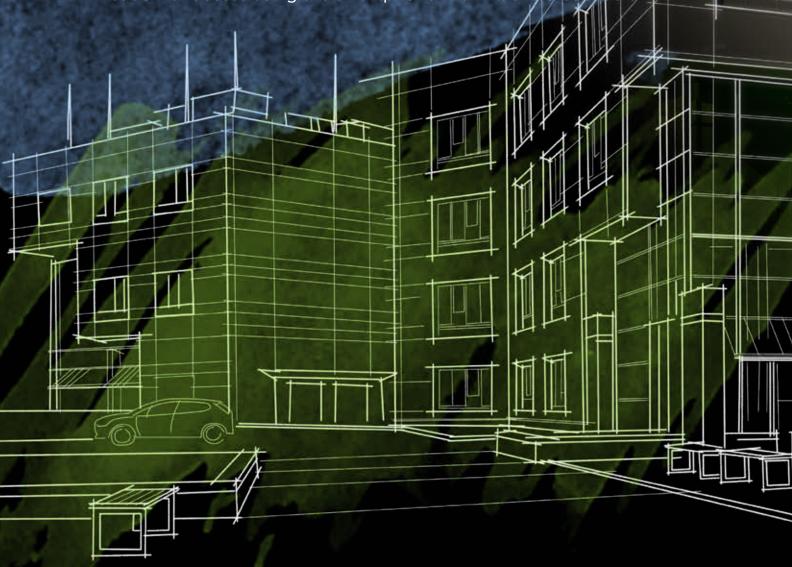






Multi-technology readers

The inbuilt multi-frequency readers of the access units allow a gradual employment of new secure 13.56MHz cards while continual use of the older unsecured ones. Except for the RFID technology, these units can be also equipped with a touch keypad for PIN entering or Bluetooth reader for access using the smartphone with mobile credentials.





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2N Access Unit 2.0



KEY FEATURES

- Easily installed edge device
- Transition to secured cards
- Remote configuration and management
- Multi-factor authentication

RECOMMENDED USE

Highly protected areas

Users must prove their identity by swiping their RFID cards and using a PIN code to enter an area with a higher level of security such as a bank, lab or warehouse in a store. This can be easily done thanks to the 2N Access Unit 2.0 combining a card reader and keypad in one compact unit supporting a dual-factor authentication.

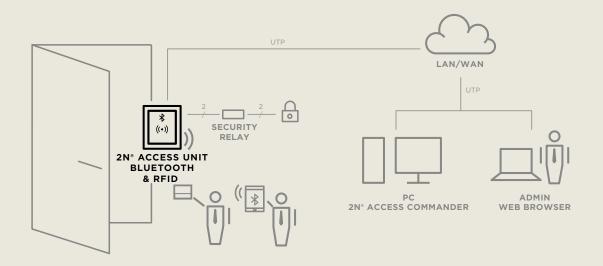
Office complex transiting to secured cards

Majority of companies are still using the old, unsecured proximity technology that can be easily compromised. 2N Access Unit 2.0 is a multi-frequency reader supporting 125kHz as well as 13.56MHz credentials, which allows a transition to modern and secure access control in a very smooth way, minimizing one-off

Convenient way of accessing a common space

In modern residential building, people use their mobile phone typically for home automation application such as heat and lights control or air condition. Now, these people can use the mobile phone also for the access control once they want to enter common areas. For the rest, there are traditional RFID cards.

EXAMPLE OF CONNECTION OF THE 2N ACCESS UNIT 2.0



Technical parameters

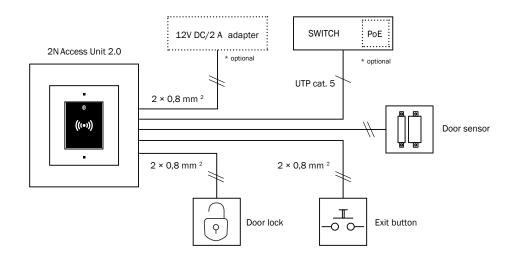
2N Access Unit 2.0

| Audio | |
|-------------------------|--|
| Speaker | 0.8 W / 8 Ω |
| | |
| Interfaces | |
| Power supply | 12 V ±15 % / 2 A DC or PoE |
| PoE | PoE 802.3af (Class 0-12.95 W) |
| LAN | 10/100BASE-TX with Auto-MDIX, RJ-45 modular jack |
| Recommended wiring | Cat-5e or higher |
| Supported protocols | DHCP opt. 66, SMTP, 802.1x, TFTP, HTTP, HTTPS, Syslog |
| Passive switch | NO/NC contact, up to 30 V / 1 A AC/DC |
| Active switch output | 8 to 12 V DC according to power supply (PoE: 10 V; adapter: power voltage minus 2 V), up to 400 mA |
| Inputs | 2; can be used in passive or active mode (-30V to +30V DC) |
| Tamper switch is part o | f the 2N Access Unit 2.0 |
| | |
| RFID card reader | |
| Supported frequencies | 125kHz and 13.56MHz |
| 125 kHz | EM4100, EM4102, HID Proximity |
| 13.56 MHz | ISO14443A, ISO14443B, ISO15693, NFC support |
| | reads UID (CSN) |
| | reads PACs ID (iCLASS SIO-enabled cards) |
| | |
| Bluetooth | |
| Version | Compatible with Bluetooth 4.0 or higher (BLE) |
| RX sensitivity | Up to -93 dBm |
| Range | Adjustable (short ~ 0.5m, middle ~ 2m, long ~ up to 10 m) |
| Security | RSA-1024 and AES-128 encryption |
| Mobile applications | 2N® Mobile Key (Android 5.0 and higher, iOS 11.0 and higher) |
| | |
| Touch Keypad | |
| Technology | Capacitive (0.1pF sensitivity) |
| Calibration | SmartSence (regular automatic calibration) |
| Signalization | Acoustic and multi-coloured LED |



| Mechanical properties | |
|--|--------------------------------------|
| Frame | Robust zinc cast with surface finish |
| Operating temperature | -40 °C to 60 °C |
| Operating relative humidity | 10 % - 95 % (non-condensing) |
| Storage temperature | -40 °C to 70 °C |
| Weight | max: 0.5 kg (based on configuration) |
| Cover rating | IP54 |
| Resistance level | IK08 |
| | |
| Dimensions | |
| Wall (surface) mounting frame | |
| 1 module | 107 (W) x 130 (H) x 28 (D) mm |
| | |
| Flush mounting frame | |
| 1 module | 130 (W) x 153 (H) x 5 (D) mm |
| | |
| Flush mounting box (minimum hole dimensions) | |
| 1 module | 108 (W) x 131 (H) x 45 (D) mm |

CONNECTION DIAGRAM



Order numbers

2N Access Unit 2.0



| Order No. | 9160334 |
|-----------|--------------------------|
| Name | 2N® Access Unit 2.0 RFID |
| Desc. | 125kHz, 13.56MHz, NFC |



| Order No. | 9160334-S |
|-----------|----------------------------------|
| Name | 2N® Access Unit 2.0 RFID |
| Desc. | 125kHz, secured 13.56MHz, NFC |



| Order No. | 9160335 |
|-----------|---|
| Name | 2N® Access Unit 2.0 Bluetooth & RFID |
| Desc. | 125kHz, 13.56MHz, NFC |



| Order No. | 9160335-S |
|-----------|---|
| Name | 2N® Access Unit 2.0 Bluetooth & RFID |
| Desc. | 125kHz, secured 13.56MHz, NFC |



| Order No. | 9160336 |
|-----------|--|
| Name | 2N® Access Unit 2.0 Touch Keypad & RFID |
| Desc. | 125kHz, 13.56MHz, NFC |



| Order No. | 9160336-S |
|-----------|--|
| Name | 2N® Access Unit 2.0 Touch Keypad & RFID |
| Desc. | 125kHz, secured 13.56MHz, NFC |

Accessories



| Order No. | 9155011/ 9155011B |
|-----------|---|
| Name | 1 module flush frame zinc/ black |
| Desc. | frame for surface installation, in zinc or black colour |



| Order No. | 9155021/ 9155021B |
|-----------|--|
| Name | 1 module surface frame zinc/ black |
| Desc. | frame for installation on the surface, in zinc or black colour |



| Order No. | 9155014 |
|-----------|----------------------------------|
| Name | 1 module flush box |
| Desc. | box for installation in the wall |



| Order No. | 9155061 |
|-----------|--|
| Name | 1 module backplate |
| Desc. | backplate for surface installation, 1 module |



| Order No. | 916012 |
|-----------|--------------------------------------|
| Name | NFC license |
| Desc. | NFC license for 13.56MHz card reader |

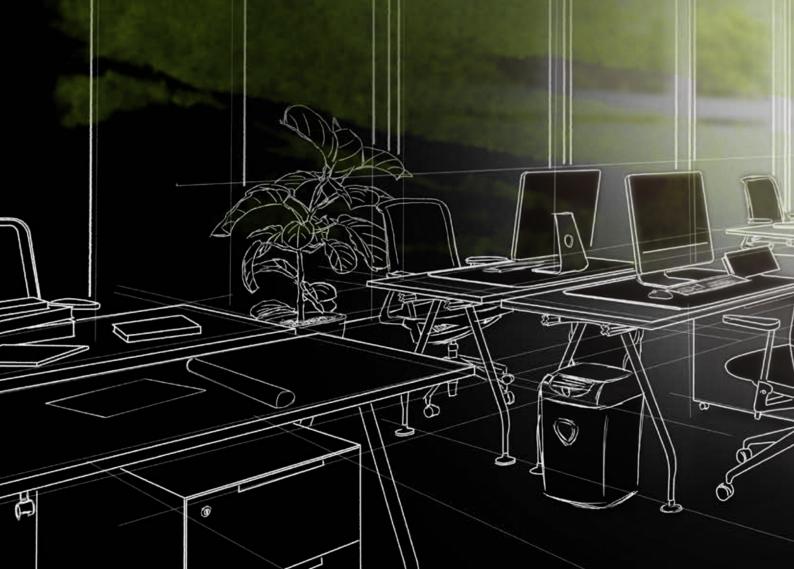


| Name | 2N® Mobile Key |
|-------|---|
| Desc. | a free application that turns your mobile phone into an access card |
| | le et |

2N Access Unit M

Access control readers in mullion design

Very narrow design makes these readers ideal for installation on a door frame or to places where there is not enough space, regardless whether it is a brick wall, glass or metal surface. The hardened glass on the front of the unit looks not only elegant but also guarantees resistance to scratches.





IP ENVIRONMENT

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2N Access Unit M



KEY FEATURES

- Based purely on IP technology
- Mullion style mounting
- Multi-technology readers
- Remote configuration and management

RECOMMENDED USE

High level of protection for server room

All servers with sensitive data deserve real protection – cybersecurity as well as physical security. Let the employees identify themselves by an RFID card, PIN code or both. The only thing needed is then the 2N* Access Unit M Touch Keypad & RFID.

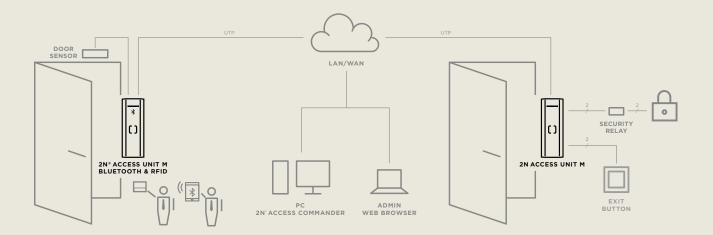
Meeting rooms under the control

A project with glazed meeting rooms and access only for authorized employees has a simple solution. 2N Access Unit M can be easily installed on glass surface or metal door frame and allows access in traditional manner, via RFID cards, as well as the trendy way using a smartphone with Bluetooth. Each employee can pick what suit them better.

Most common access control for office buildings

There are many rooms and places inside an office building that need to be protected. RFID cards are often connected to an attendance system, which makes them the most widespread method of employees identification. Besides, the multi-frequency 2N* Access Unit M RFID can also be used as T&A terminal and send the date to 2N* Access Commander.

EXAMPLE OF CONNECTION OF THE 2N® ACCESS UNIT M



Audio

Technical parameters

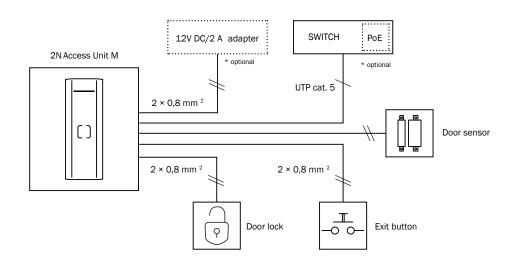
2N Access Unit M

| Speaker | 0.8 W / 8 Ω |
|--------------------------|--|
| | |
| Interfaces | |
| Power supply | 12 V ±15 % / 2 A DC or PoE |
| PoE | PoE 802.3af (Class 0-12.95 W) |
| LAN | 10/100BASE-TX with Auto-MDIX, RJ-45 modular jack |
| Recommended wiring | Cat-5e or higher |
| Supported protocols | DHCP opt. 66, SMTP, 802.1x, TFTP, HTTP, HTTPS, Syslog |
| Passive switch | NO/NC contact, up to 30V / 1A AC/DC |
| Active switch output | 8 to 12V DC according to power supply (PoE: 10V; adapter: power voltage minus 2V), up to 600mA |
| Inputs | 2; can be used in passive or active mode (-30V to +30V DC) |
| Tamper switch is part of | f the 2N Access Unit M |
| | |
| RFID card reader | |
| Supported frequencies | 125kHz and 13.56MHz |
| 125 kHz | EM4100, EM4102, HID Proximity |
| 13.56 MHz | ISO14443A, ISO14443B, ISO15693, NFC support |
| | reads UID (CSN) |
| | reads PACs ID (iCLASS SIO-enabled cards) |
| | |
| Bluetooth | |
| Version | Compatible with Bluetooth 4.0 or higher (BLE) |
| RX sensitivity | Up to -93 dBm |
| Range | Adjustable (short ~ 0.5m, middle ~ 2m, long ~ up to 10 m) |
| Security | RSA-1024 and AES-128 encryption |
| Mobile applications | 2N* Mobile Key (Android 5.0 and higher, iOS 11.0 and higher) |
| | |
| Touch Keypad | |
| Technology | Capacitive (0.1pF sensitivity) |
| Signalization | Acoustic and multi-coloured LED |



| Mechanical properties | |
|-----------------------------|------------------------------|
| Frame | Tough plastic box |
| Operating temperature | -40 °C to 60 °C |
| Operating relative humidity | 10 % - 95 % (non-condensing) |
| Storage temperature | -40 °C to 70 °C |
| Weight | max: 0.5 kg |
| Cover rating | IP55 |
| Resistance level | IK07 |
| | |
| Dimensions | |
| Wall (surface) mounting | g frame |
| | 50 (W) x 132 (H) x 27 (D) mm |

CONNECTION DIAGRAM



Order numbers

2N Access Unit M



| Order No. | Coming soon |
|-----------|------------------------------------|
| Name | 2N® Access Unit M RFID |
| Desc. | 13.56MHz, NFC ready |
| | |
| Order No. | Coming soon |
| Order No. | Coming soon 2N* Access Unit M RFID |



| Order No. | Coming soon |
|-----------|---|
| Name | 2N® Access Unit M RFID |
| Desc. | secured 13.56MHz, NFC ready |
| | |
| | |
| Ol N | • · · · · · · · · · · · · · · · · · · · |
| Order No. | Coming soon |
| Order No. | Coming soon 2N® Access Unit M RFID |
| | |
| Name | 2N® Access Unit M RFID |



| Order No. | Coming soon |
|-----------|---------------------------------------|
| Name | 2N® Access Unit M Bluetooth & RFID |
| Desc. | 125kHz, 13.56MHz, NFC |



| Order No. | Coming soon |
|-----------|---------------------------------------|
| Name | 2N® Access Unit M Bluetooth & RFID |
| Desc. | 125kHz, secured 13.56MHz, NFC |



| Order No. | Coming soon |
|-----------|--|
| Name | 2N® Access Unit M Touch Keypad & RFID |
| Desc. | 125kHz, 13.56MHz, NFC |



| Order No. | Coming soon |
|-----------|--|
| Name | 2N® Access Unit M Touch Keypad & RFID |
| Desc. | 125kHz, secured 13.56MHz, NFC |

Accessories



| Order No. | Coming soon |
|-----------|--|
| Name | Recessed installation box |
| Desc. | cabling back box for installation in the wall |



| Order No. | Coming soon |
|-----------|--|
| Name | Backplate |
| Desc. | backplate for installation on a glass surface |



| Order No. | 916012 |
|-----------|--------------------------------------|
| Name | NFC license |
| Desc. | NFC license for 13.56MHz card reader |



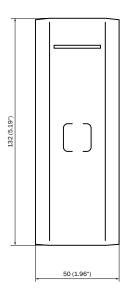
| Order No. | |
|-----------|---|
| Name | 2N® Mobile Key |
| Desc. | free application that turns your mobile phone into an access card |
| | ▶ ★ |

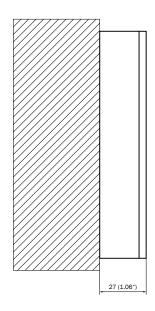
Dimensions and fitting

2N Access Unit M

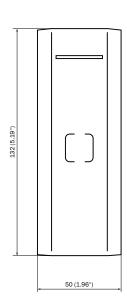
WALL-MOUNTED

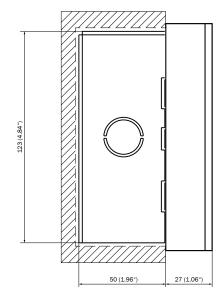
124



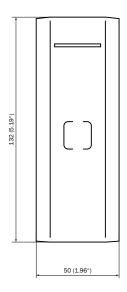


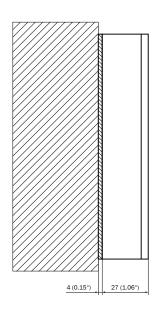
IN-WALL





GLASS-MOUNTED

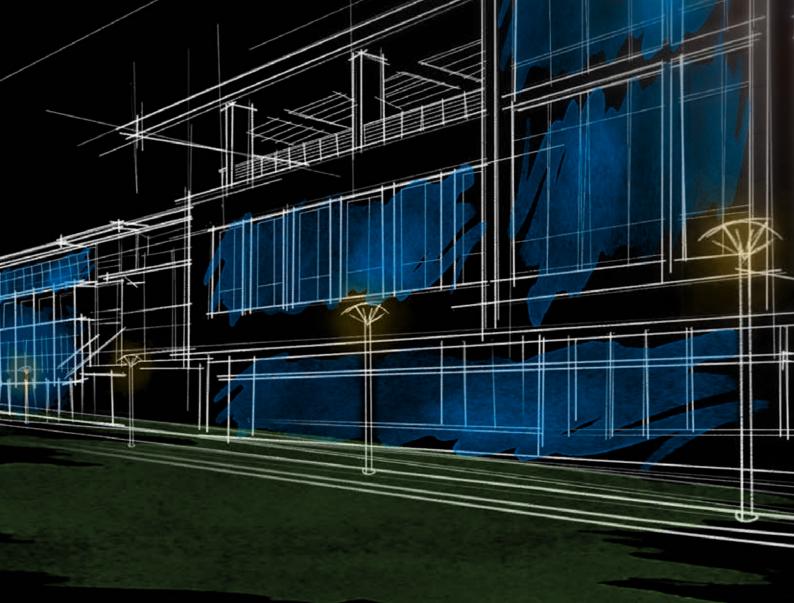






Software for access control and bulk management

2N® Access Commander, a nerve centre of the whole 2N IP access control system, has a simple and intuitive user interface. Use it not only for managing access to the building, but also for time and attendence tracking, visitor management or for monitoring the status of connected access control devices in real time.





IP ENVIRONMENT

2N® Access Commander

KEY FEATURES

· Software for access control and bulk management

With this Access Control system you can bulk manage all 2N Intercoms and access units made by 2N, which you will appreciate especially when it comes to larger installations.

Device monitoring and notification

Monitor key parameters of 2N devices in real time. Providing there is an obstruction, $2N^{\circ}$ Access Commander sends the admin an email notification with the device's name and the issue.

Easy to install solution

2N* Access Commander can be got up and running easily by people without any installation experience. All without even having to go through intensive training or to pore over cryptic manuals.

Visitor management

Fully solved visitor management ensures that the system can be comfortably used by the receptionist. She can quickly add the visitor to the system (Access Commander) with all important information, e.g. visitor's name, reason of the visit, time validation of the card, group assignment.

Multiple site control

Multiple sites control from a single location is a huge benefit for companies having branch offices in different locations that are interconnected via VPN. Admin sits in one city and oversees the access control system in other cities through the LAN. With serial cable systems it would be impossible.

Open for integration

The Access Control system integrates easily into third-party systems such as Time & Attendance or CRM using the REST API web interface.

TECHNICAL PARAMETERS

General

2N® Access Commander is delivered either pre-installed on mini-PC, or in the .OVA format intended for importing into the Oracle VM VirtualBox or VMware (version 5) virtual systems.

| or VMware (version 5) v | irtual systems. |
|---------------------------------------|---|
| | |
| Minimum HW requireme | ents for the PC/server |
| | The specifications below allow for 100 devices (2N Intercoms or 2N Access Units) connected to 2N® Access Commander. |
| Operating system | Any 64-bit system (Windows, Linux, OS X, Solaris) |
| CPU | 2GHz; 4 core (x86 - 64) |
| RAM | 4GB |
| Internet connectivity | To upgrade the system, an Internet connection is required with a minimum throughput of 512kbit/s |
| | |
| Communication security | |
| | https protocol |
| | |
| Supported browsers | |
| Optimised for the browser | Google Chrome (version 40 or higher) |
| Other supported browsers are | Mozilla Firefox (version 35 or higher) Internet Explorer (version 11 or higher) |
| | |
| Number of log events | |
| 2N® Access Unit and 2N IP intercom | up to 10 000 events in RAM memory |
| 2N® Access Commander | unlimited |
| | |
| 2N® Access Commander | Вох |
| | Ultra compact PC design (56.1 x 107.6 x 114.4mm) |
| | Intel® Celeron® Processor J3160 - 4 cores |
| | 2.5" SSD SATA III Hard Drive - 32GB |
| | DDR3 SODIMM memory - 4GB |
| | Gigabit LAN port for Ethernet connection |
| | |
| | 2N® Access Commander Box is intended and optimized for SME installations (80 devices, 1000 users) |

Order numbers

ACCESS CONTROL

2N® Access Commander



| Order No. | 91379030 |
|-----------|---|
| Name | 2N® Access Commander Box |
| Desc. | Access Control software pre-installed on mini-PC (56.1 x 107.6 x 114.4mm) |



| Order No. | 91379040 |
|-----------|---|
| Name | 2N® Access Commander, Licence +5 devices |
| Desc. | license for adding devices |



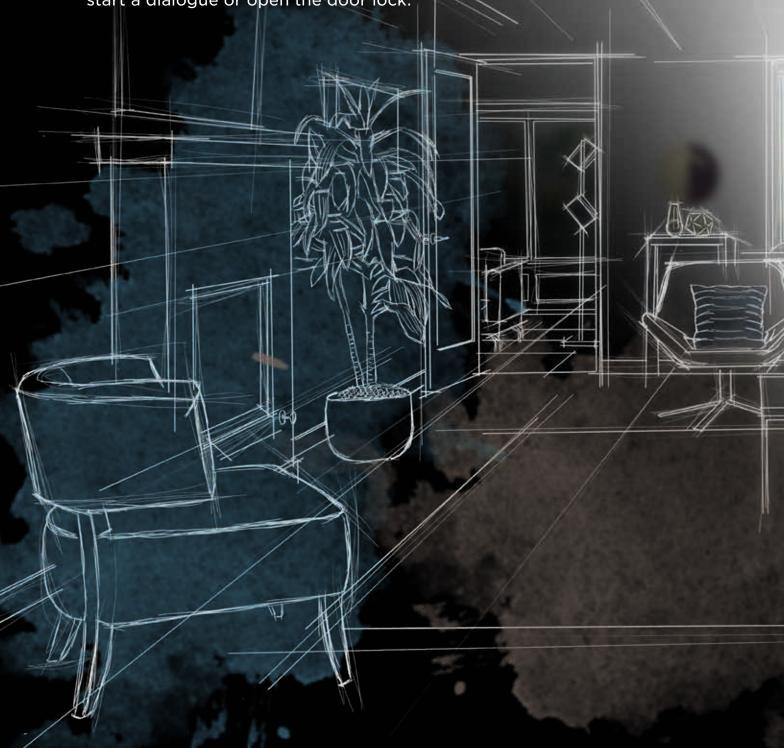
| Order No. | 91379041 |
|-----------|---|
| Name | License +25 users for T&A |
| Desc. | license for adding users - used only for attendance tracking! |



| Order No. | 91379042 |
|-----------|---|
| Name | 2N® Access Commander, Integration License |
| Desc. | license for data synchronization with data stored in third-party databases. Active Directory and CSV import |

Luxury designed for your interior

The stylish multifunctional communicator 2N® Indoor Touch 2.0 fits elegantly into any interior. One glance at the display panel will let you know who is standing outside your door, start a dialogue or open the door lock.





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2N® Indoor Touch 2.0



KEY FEATURES

- See what's happening outside your door
- Easy integration with home automation systems
- 4mm glass with capacitive touch
- Long-lasting luxury



reddot design award winner 2017

RECOMMENDED USE

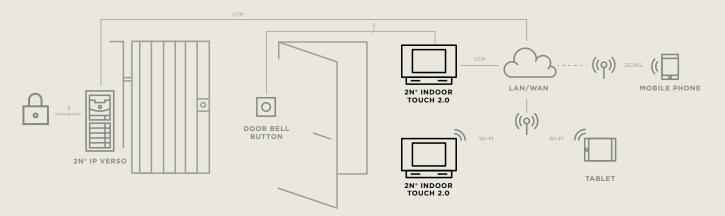
Home entrance monitoring

Keep track of what is happening outside your front door. Thanks to the 2N® Indoor Touch 2.0 you can comfortly communicate with your visitor via the 2N Intercom installed at your door. With its non-stop video monitoring of your building entrance you are always an attentive host to your guests.

Integration into home automation systems

The 2N* Indoor Touch 2.0 allows easy control of home automation systems. The answering unit is supplied with a preinstalled licence for the installation of third-party applications for Android. You will thus have air-conditioning, lights, music playback and even visitors at your door under your complete control.

EXAMPLE OF CONNECTION OF THE 2N® INDOOR TOUCH 2.0



Technical parameters

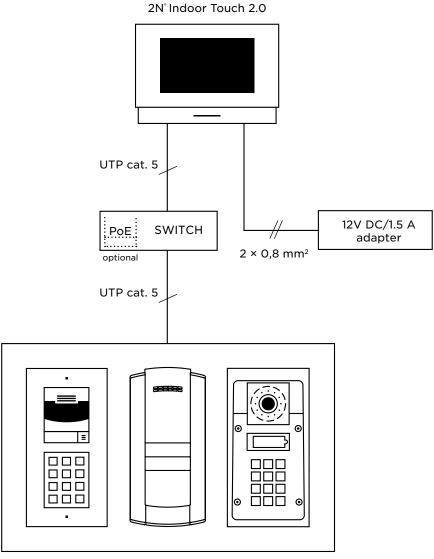
ACCESS CONTROL

2N® Indoor Touch 2.0

| Signalling protocol | |
|-------------------------------------|---|
| | SIP |
| | |
| User interface | |
| Display | High-capacity touchscreen 16:9, 7" display, resolution 1024 × 600 px 24 bpp (16.7 million colours), backlit LED with power saving mode, 1× RGB LED status indicator (missed calls, power saving mode, etc.) |
| Audio | |
| Microphone | Integrated microphone |
| Speaker | Integrated 2W |
| | |
| Video | |
| Protocols | RTSP, MJPEG/HTTP |
| Supervision and control of intercom | Yes |
| IP camera surveillance | Yes |
| | |
| Operating system | |
| OS version | Android 6.0 |
| | |
| Interface | |
| LAN | Ethernet 10/100BaseT, RJ-45 |
| Recommended cabling | Cat-5e or better |
| Memory card | SD type (up to 16 GB) |
| Power supply | External power adapter 12 V DC 2 A / PoE 802.3af, power consumption 10 W, GPIOs |
| Mechanical properties | |
| General | On-wall instalation |
| Operating temperature | 0 °C - 60 °C |
| Operating relative humidity | 10 % - 90 % (non-condensing) |
| Storage temperature | -20 °C - 70 °C |
| Dimensions | 235 × 165 × 40 mm |
| Weight | 850 g |
| vveignt | 85∪ g |



CONNECTION DIAGRAM



Optional VIDEO INTERCOM

Order numbers

2N® Indoor Touch 2.0



| Order No. | 91378375 |
|-----------|--|
| Name | 2N® Indoor Touch 2.0, PoE, black |
| Desc. | 7" touchscreen, 4mm glass, capacitive touch, license for installation of 3 rd party applications for Android |



| Order No. | 91378375WH |
|-----------|---|
| Name | 2N® Indoor Touch 2.0, PoE, white |
| Desc. | 7" touchscreen, 4mm glass, capacitive touch, license for installation of 3 rd party applications for Android |



| Order No. | 91378376 |
|-----------|---|
| Name | 2N [®] Indoor Touch 2.0, PoE, WiFi, black |
| Desc. | 7" touchscreen, capacitive touch, Wi-Fi, license for installation of 3 rd party applications for Android |



| Order No. | 91378376WH |
|-----------|---------------------------------------|
| Name | 2N® Indoor Touch 2.0, |
| | PoE, WiFi, white |
| Desc. | 7" touchscreen, capacitive |
| | touch, Wi-Fi, license for |
| | installation of 3 rd party |
| | applications for Android |



| Order No. | 91378380 |
|-----------|---|
| Name | 2N® Indoor Touch 2.0, power supply flush |
| Desc. | power supply for installation in the wall |



| Order No. | 91378382 |
|-----------|---|
| Name | 2N® Indoor Touch 2.0, desk stand black |
| Desc. | Desk stand black |

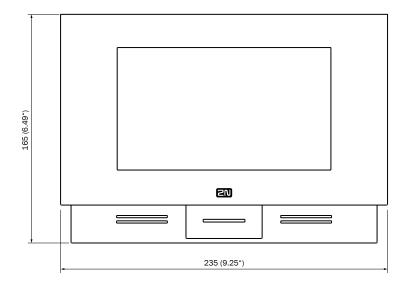


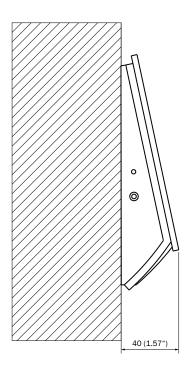
| Order No. | 91378382W |
|-----------|---|
| Name | 2N® Indoor Touch 2.0, desk stand white |
| Desc. | Desk stand white |

Dimensions and fitting

2N® Indoor Touch 2.0

WALL-MOUNTED









IP ENVIRONMENT

2N® Indoor Compact



KEY FEATURES

- Intuitive controls, even for inexperienced users
- Designer surface made of tempered glass
- Configuration via a web interface
- HD quality sound with noise suppression

RECOMMENDED USE

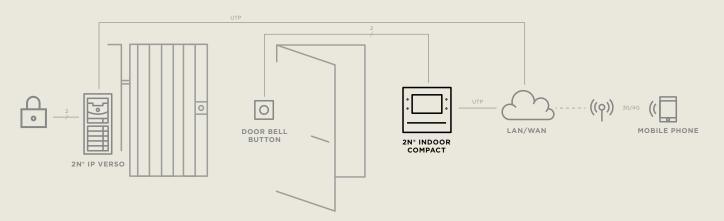
Video door communication for an apartment

As soon as a visitor rings the bell at the front door, the call can be accepted in the living room or kitchen with a single touch of the button and just as easily can be opened the door. In case the resident is not at home, a call log with snapshots is saved in the unit.

Video from internal and external cameras

When accepting a call on the 2N* Indoor Compact, it is possible to switch from the intercom's camera to video from an external IP camera by the entrance. Make sure that only the person you want to let in enters the building.

EXAMPLE OF CONNECTION OF THE 2N® INDOOR COMPACT



Technical parameters

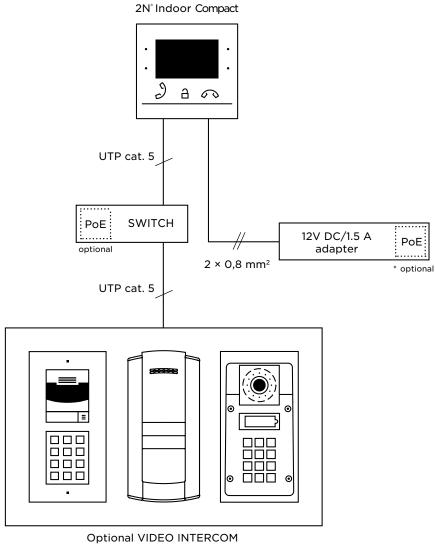
ACCESS CONTROL

2N® Indoor Compact

| Signalling protocol | |
|-----------------------------|---|
| | SIP |
| | |
| User interface | |
| Control | 7 capacitive buttons with white and RGB LED backlight |
| Display | 4,3" display, resolution 480 x 272 pixels |
| Service | RESET button with long press option for factory reset, 3 status LEDs |
| Power supply | 12VDC +/-10% adapter or PoE 802.3af injector Phihong PSA16U-480 (POE) |
| Recommended power supply | 12V / 1A |
| Reverse polarity protection | Yes |
| Audio | |
| Microphone | Integrated migraphone |
| Speaker | Integrated microphone Integrated 2W |
| Induction loop output | 600 mV _{RMS} |
| Codecs | G.711, G.729, G.722, L16/16kHz |
| Codecs | G./11, G./29, G./22, L10/10kH2 |
| Video | |
| Display | 4.3" display, resolution 480 x 272 pixels |
| Codecs | H.264, MJPEG |
| | |
| Interface | |
| LAN | 10/100BaseT, RJ-45 |
| Recommended cabling | Cat5e or higher |
| | |
| Doorbell Input | |
| Input type | Switching contact (button/relay) |
| Contact type | Normally open (NO) |
| Contact parameters | Up to 50 V / 5 mA, DC |
| Mechanical Parameters | |
| Operating temperature | O to 50°C |
| Relative humidity | 10 to 90% non-condensing |
| Storing temperature | -20 to 70°C |
| Recommended altitude | 0 - 2000m |
| Weight | 387g |
| Dimensions (w x h x d) | 152 x 153 x 50 |



CONNECTION DIAGRAM



Order numbers

ACCESS CONTROL

2N® Indoor Compact



| Order No. | 91378501 |
|-----------|--|
| Name | 2N® Indoor Compact, black |
| Desc. | 4.3" display, slim design (10mm), PoE |



| Order No. | 91378501WH |
|-----------|--|
| Name | 2N® Indoor Compact, white |
| Desc. | 4.3" display, slim design (10mm), PoE |

SIP AUDIO

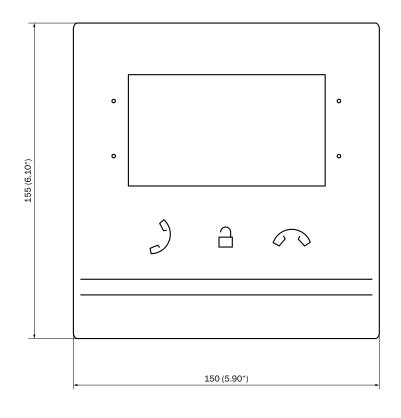


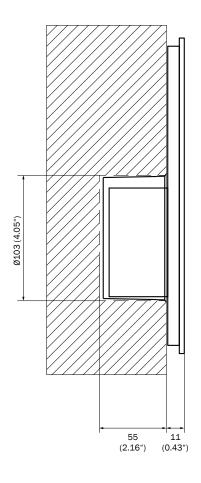
| Order No. | 91378800 |
|-----------|----------------------------------|
| Name | 2N Indoor Flush Box |
| Desc. | box for installation in the wall |

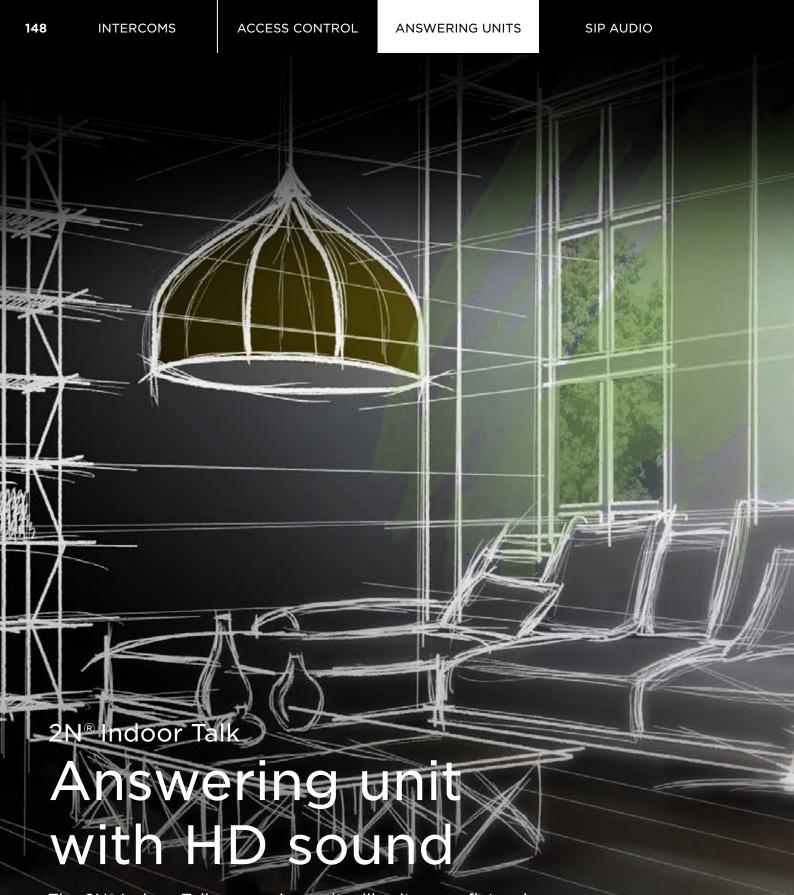
Dimensions and fitting

2N® Indoor Compact

FLUSH-MOUNTED







The 2N® Indoor Talk answering unit will suit every flat or home. The aesthetic appearance of this product was achieved by using a glass surface and striking backlighting of its icons. However, an emphasis was placed on selecting the highest-quality audio components in order to achieve a high-quality sound.



IP ENVIRONMENT

2N® Indoor Talk

ACCESS CONTROL



KEY FEATURES

- Luxury design and materials
- Modification to your requirements
- Precision installation box
- HD quality sound with high volume



RECOMMENDED USE

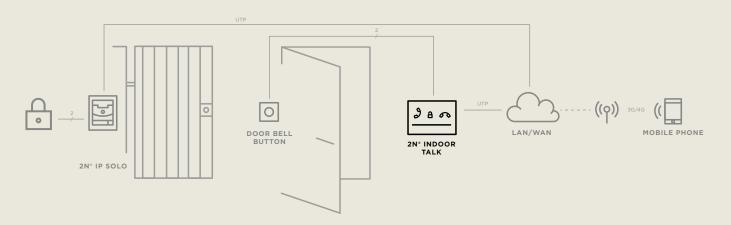
Intuitive unit for the whole family

Due to its simple design, the operation of $2N^{\circ}$ Indoor Talk can quickly master anyone, no matter the age. Have the option to set the required intensity of icon backlighting, choose from the 10 available ringtones or set the unit to "Do not disturb" mode.

Complementary answering unit

Having basic functionalities, 2N* Indoor Talk can serve as an additional unit to the main video answering unit. The 2N* Indoor Talk allows making calls to not only a 2N IP intercom, but to other corresponding answering units at home, or on the reception of the apartment building.

EXAMPLE OF CONNECTION OF THE 2N® INDOOR TALK



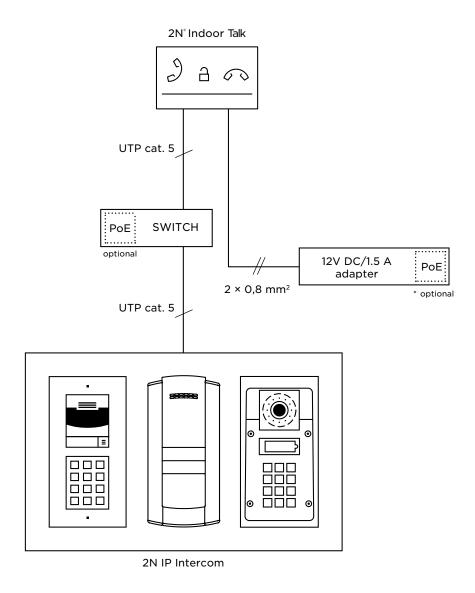
Technical parameters

2N® Indoor Talk

| Signalling protocol | |
|------------------------------|---|
| | SIP |
| | |
| User interface | |
| Control | 7 capacitive buttons with RGB LED backlight |
| Service | RESET button with long press option for factory reset, 3 status LEDs |
| Audio | |
| Microphone | Integrated microphone |
| Speaker | Integrated 2W |
| Induction loop output | 600 mV _{RMS} |
| Interface | |
| LAN | 10/100BaseT, RJ-45; Cat5e or higher |
| Power supply | 12V DC +/-10% adapter or PoE 802.3af injector Phihong PSA16U-480 (POE) |
| Recommended power supply | 12 V / 1 A |
| Polarity reversal protection | Yes |
| Doorbell Input | |
| Input type | Switching contact (button/relay) |
| Contact type | Normally open (NO) |
| Contact parameters | Up to 50 V / 5 mA, DC |
| Mechanical Parameters | |
| Operating temperature | 0 to 50°C |
| Relative humidity | 10 to 90% non-condensing |
| Storing temperature | -20 to 70°C |
| Recommended altitude | 0 - 2000m |
| Weight | 387g |
| Dimensions (w x h x d) | 185 x 128 x 48.2 mm |



CONNECTION DIAGRAM



Order numbers

ACCESS CONTROL

2N® Indoor Talk



| Order No. | 91378401 |
|-----------|------------------------|
| Name | 2N® Indoor Talk, black |
| Desc. | HD sound, slim design |



| Order No. | 91378401WH |
|-----------|------------------------|
| Name | 2N® Indoor Talk, white |
| Desc. | HD sound, slim design |

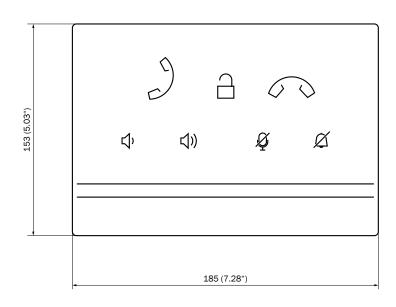


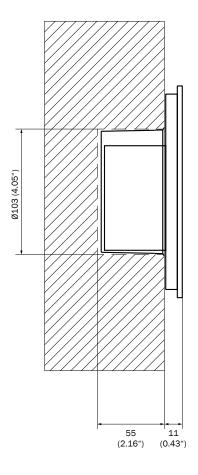
| Order No. | 91378800 |
|-----------|----------------------------------|
| Name | 2N Indoor Flush Box |
| Desc. | box for installation in the wall |

Dimensions and fitting

2N® Indoor Talk

FLUSH-MOUNTED



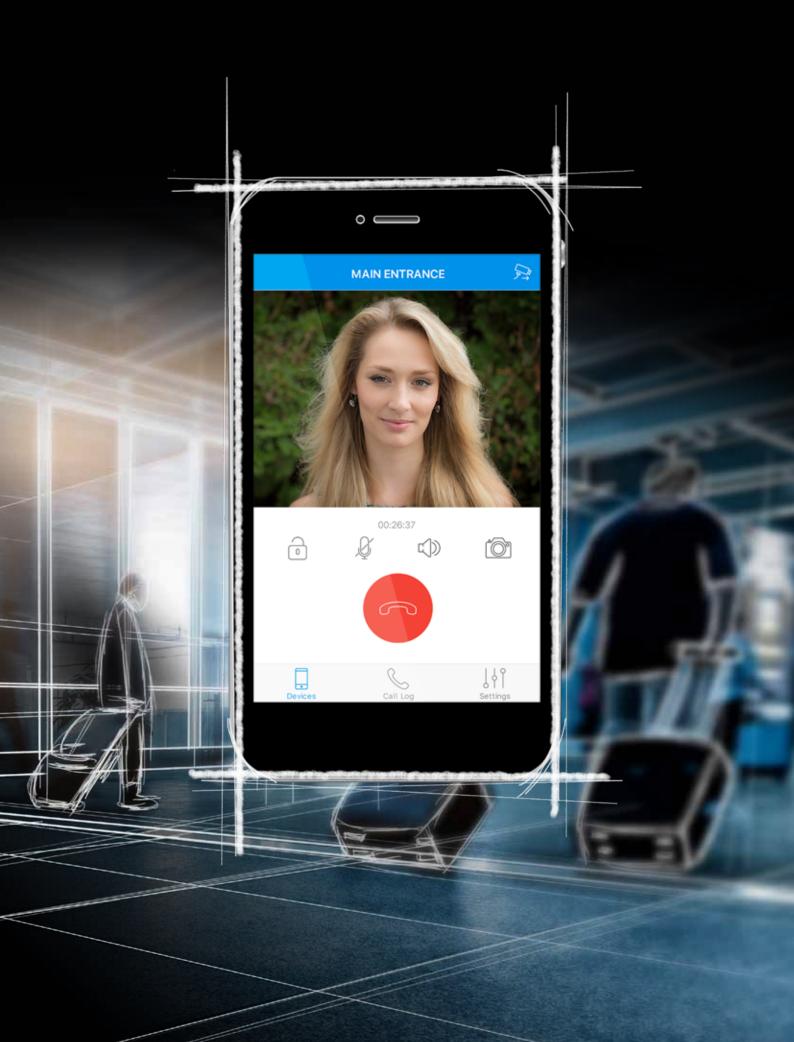


2N® Mobile Video

See who's ringing at your door

Stay informed about everything happening outside your entrance. The 2N[®] Mobile Video service lets you communicate with your visitors via your mobile phone and the 2N Intercom installed at your door.





KEY FEATURES

• See who's ringing at your door

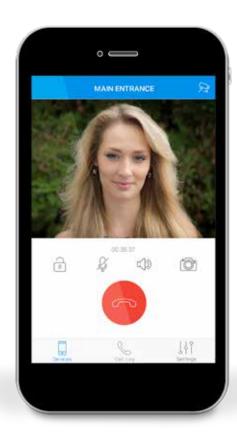
Receive video calls from the 2N intercom on your smartphone over the internet using the $2N^{\circ}$ Mobile Video application or just check the camera of your intercom to see what is happening at your front door.

Open the door remotely with one touch

Open the door for your visitors with a single press of a button on your smartphone. The application is easily accessible on your mobile device or tablet with the iOS or Android operating system.

• Tailored for multi-tentant building needs

Integrate intercom with your home automation system to control lights, alarm or start a any custom action using $2N^{\circ}$ Mobile Video app. In combination with the 2N Intercom that can call to more flats via IP, a tenant can accept a call even when they are not at home.







TECHNICAL PARAMETERS

General

 $2N^{\circ}$ Mobile Video is a cloud service located on the My2N portal. You need to create an account at www.my2n.com to activate this service.

At least one 2N IP intercom with a camera and firmware version 2.25 or newer connected to the internet.

A mobile phone with the Android operating system version 4.4 or newer or iOS version 10.x or newer, and the 2N® Mobile Video application installed.

The mobile phone must be connected to the internet via Wi-Fi or a 3G or 4G mobile data connection. (The service may not function correctly with slower mobile data connections.)

| Supported browsers | |
|------------------------------------|---|
| | Optimized for the Google Chrome browser (version 4.0 and higher). |
| Additional supported browsers are: | Mozilla Firefox (version 3.5 and higher), Internet Explorer (version 11 and higher). On other browsers not tested, we cannot guarantee full functionality. |

Order numbers

2N® Mobile Video



| Order No. | |
|-----------|--------------------------------------|
| Name | 2N® Mobile Video 30-day subscription |
| Desc. | available online on www.my2n.com |



| Order No. | |
|-----------|---------------------------------------|
| Name | 2N® Mobile Video 365-day subscription |
| Desc. | available online on www.my2n.com |





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2N® Remote Configuration

KEY FEATURES

· Save on travel costs

Technicians no longer need to come to you when changes in product configuration are required. Saving both time and costs, all that's required is a computer with internet access.

FREE SERVICE

Offer instant help

Your device may be connected over the internet from anywhere with a web browser. You no longer need to wait for a technician to arrive.

No network setup needed

2N® Remote Configuration works with most of the network setups without any additional configuration necessary.

Comfortable access

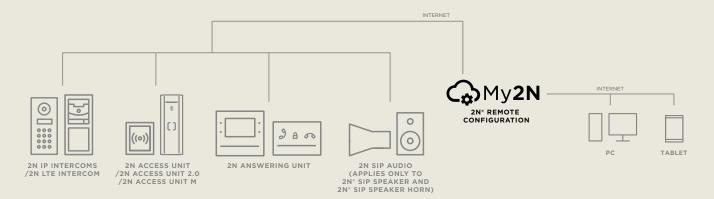
Adding a device to the service and subsequent activation is very simple. Your 2N device is then configured through its regular web interface.

Secure connection

The remote setup of 2N products using the 2N® Remote Configuration service is entirely safe, thanks to double encrypted communication.



SCHEME OF 2N® REMOTE CONFIGURATION



IP ENVIRONMENT

2N® Partner API

KEY FEATURES

• Offer your own branded solution

Use 2N services that allow you to receive video calls on a mobile phone, open the door via Bluetooth or remotely configure products in your own software and mobile application, all under your own brand.

Manage 2N devices online

Use the 2N* Partner API to easily configure 2N devices directly from your own facility management software, CRM or other systems.

All you need are the devices to be connected to the internet.

Robust and secure REST API

The $2N^{\circ}$ Partner API meets the strictest criteria in the field of cybersecurity. Apart from encrypted communication, it also boasts a detailed description, which will certainly be appreciated by your developers during integration.

Video calls from an intercom to your mobile phone

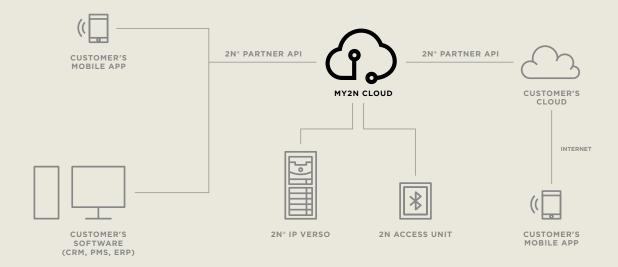
Do you lack the option of receiving video calls from an IP intercom in your home automation application? Thanks to the $2N^{\circ}$ Partner API, with our complete API documentation, you can link it to the $2N^{\circ}$ Mobile Video service.

Access using a mobile phone

Provide your users with the option of opening the door to their house via your mobile application. Generate a user Bluetooth ID for them in your system and download it to the 2N IP access control unit via the $2N^{\circ}$ Partner API.



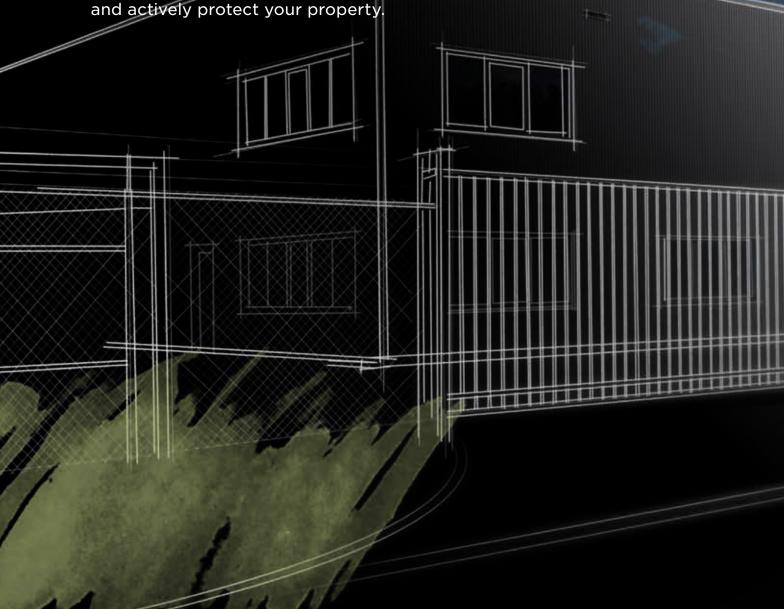
SCHEME OF 2N® PARTNER API



2N® SIP Speaker Horn

Loudest sound on the market

2N® SIP Speaker Horn is an outdoor speaker with exceptionally loud and clear sound. Use the speaker as a practical tool for broadcasting live announcements across large areas and actively protect your property.





IP ENVIRONMENT

2N® SIP Speaker Horn















KEY FEATURES

- Automatic noise detection
- · Highest SPL on the market
- ONVIF for integration with VMS
- Built-in audio self-diagnostics

RECOMMENDED USE

Warning for unwelcomed visitors

If an unwelcome visitor enters your premises, you can respond immediately with a live or preset announcement to promptly deter the trespasser. Especially, when in integration with VMS, the intruder can be addressed specifically by using visual information.

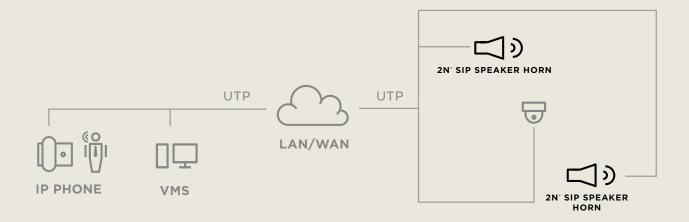
Public address in town

Public announcements have to be loud enough to be heard through closed windows to catch an attention of town residents. Replacing an old analogue solution, 2N* SIP Speaker Horn allows authorized town representatives to make announcements even via their mobile phones.

Assembly line emergency communication

Working in a noisy environment, such as an assembly line, requires wearing earplugs. However, in case of emergency an announcement, let alone an evacuation notice, must be clearly audible despite the earplugs. 2N* SIP Speaker Horn, the loudest speaker on the market, is indeed the best solution.

EXAMPLE OF CONNECTION OF THE 2N® SIP SPEAKER HORN



Order numbers

ACCESS CONTROL

2N® SIP Speaker Horn



| Order No. | 914422E |
|-----------|---------------------------|
| Name | 2N® SIP Speaker Horn |
| Desc. | SPLmax 124dB, outdoor and |



| Order No. | 914423E |
|-----------|---|
| Name | 2N® SIP Speaker Horn Adapter |
| Desc. | stabilised 24V / 2A power source (if no PoE available) |



| Order No. | 914481EM |
|-----------|---|
| Name | SIP Audio external microphone Mono |
| Desc. | Audio surveillance, omnidirectional, outdoor |



| Order No. | 914481ST |
|-----------|--|
| Name | SIP Audio external microphone Stereo |
| Desc. | Audio surveillance, omnidirectional, outdoor |

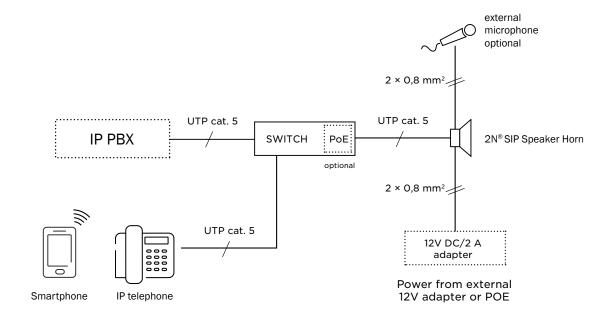
Technical parameters

2N® SIP Speaker Horn

| Audio parameters | |
|-----------------------------------|--|
| Output | 8W (PoE) / 25W (24V) |
| Acoustic pressure | 110dB SPL(1W/1m) / 124dB(SPLmax) |
| Impedance | 8 Ohm |
| Range of frequencies | 400Hz ~ 7,5kHz (-10dB) 275 Hz ~ 12kHz (-20dB) |
| Audio codecs | G.711 (PCMA, PCMU), G.722, L16/16Hz |
| Mechanical properties | |
| Dimensions (h/w/d) | 232.7 (diameter) x 309.6 (length) mm |
| Weight | 2,3kg |
| Color | Grey (RAL 7035) |
| Operating temperature | -30°C ~ +60°C |
| Protection rating | IP67 |
| Installation | Stainless steel holder (U type) |
| Power supply | |
| Power supply from external source | 24V DC / 2A |
| Power supply from LAN | PoE IEEE 802.3af |
| | |
| LAN connection | |
| RJ-45 connector on the rear panel | 10/100BASE-TX s Auto-MDIX |



CONNECTION DIAGRAM



2N® SIP Speaker

INTERCOMS

Live and pre-recorded announcements

Take advantage of the 2N[®] SIP Speaker for playback of live or pre-recorded announcements. This enduring speaker offers a fully-featured audio system with SIP protocol support. What's more, it doesn't need any additional HW or SW investment, e.g. a computer with supporting applications.



IP ENVIRONMENT

2N® SIP Speaker



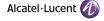












KEY FEATURES

- A wide range of connectors
- Active IP loudspeaker with PoE support
- Possibility to connect 2nd passive speaker
- Simple integration into VMS systems for voice reaction

RECOMMENDED USE

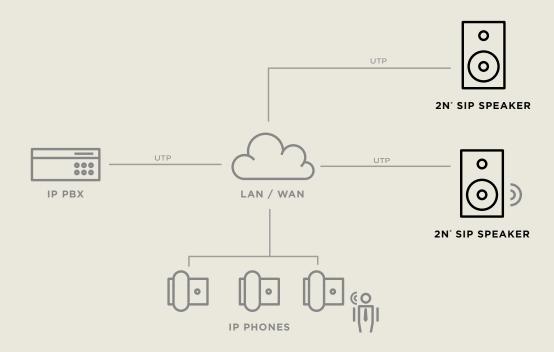
School classroom

2N® SIP Speaker meets the requirements of every School Classroom, where the students and teachers needs to be informed about every lesson start/end by a school bell or by a sound of their own choice. Also the Headmaster's directions and information will be distributed throughout the schools LAN to every Classroom equipped with 2N® SIP Speakers.

Warehouses, waiting rooms, remote sites

In warehouses or waiting rooms there is a need to make loud announcements- typically to report a new order or call another patient. Remote sites, although being monitored, face unwelcome. Experience has shown that in such a case, a verbal warning is very effective. 2N* SIP Speaker allows remote announcements to be made to any places with a data network.

EXAMPLE OF CONNECTION OF THE 2N® SIP SPEAKER



Order numbers

2N® SIP Speaker



| Order No. | 914421B |
|-----------|---|
| Name | 2N® SIP Speaker, wall mounted, black |
| Desc. | loudspeaker set, wall mounted, SIP based active speaker |



| Order No. | 914421W |
|-----------|---|
| Name | 2N® SIP Speaker, wall mounted, white |
| Desc. | loudspeaker set, wall mounted, SIP based active speaker |



| Order No. | 914034B |
|-----------|---|
| Name | 2N® Loudspeaker, wall mounted, black |
| Desc. | wall mounted, SIP based passive speaker |



| Order No. | 914034W |
|-----------|---|
| Name | 2N® Loudspeaker, wall mounted, white |
| Desc. | wall mounted, SIP based passive speaker |

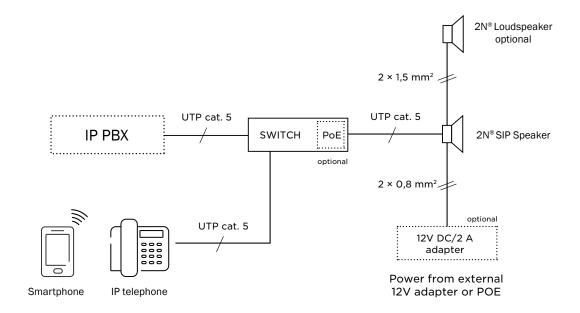
Technical parameters

2N® SIP Speaker

| Audio parameters | | |
|----------------------------------|--|--|
| Output | 8W PoE / 12W 12V | |
| Sound pressure | 99dB (SPLmax) | |
| Impedance | 8 Ohm | |
| Frequency range | 75Hz - 20KHz | |
| Harmonic distortion | 0,05 % @ 1 kHz | |
| Signal-to-noise ratio | 91 dB | |
| Audio codecs | G.711 (PCMA, PCMU), G.729 (Annex A, B), G.722, L16/16kHz | |
| | | |
| Mechanical properties | | |
| Dimensions (h/w/d) | 250 x 176 x 143mm | |
| Weight | 2,3kg | |
| Color | Black/White | |
| | | |
| Power supply | | |
| External power supply | 12V DC / 2A | |
| Power over Ethernet | PoE IEEE 802.3af | |
| | | |
| LAN connection | | |
| RJ-45 connector on rear panel | 10/100BASE-TX with Auto-MDIX | |



CONNECTION DIAGRAM



Server-less paging to up to 12 zones

A SIP based microphone console for paging can appeal not only by wooden designer case, but also by various advanced functions such as broadcasting to 12 zones, two-way communication thanks to an inbuilt speaker, or playing back pre-recorded messages.

2N® SIP Mic





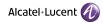












KEY FEATURES

- Sever-less paging
- · Hands-free mode for making voice calls
- Pre-recorded announcements
- Paging to Axis IP Speaker over Axis VAPIX®

RECOMMENDED USE

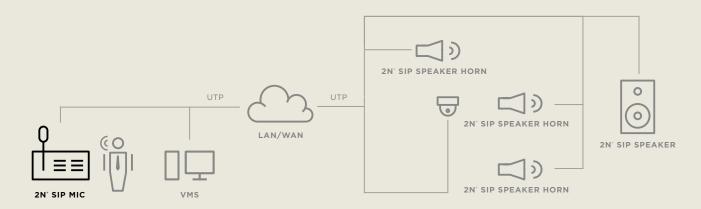
Public address in schools

Broadcast announcements into as many as 12 zones without having to install a server. A headmaster can broadcast specific messages into individual classrooms or to the entire school. Besides, at simple press of a button one can also listen to what is happening in certain areas.

Paging console for supervisory workplaces

Security officers responsible for camera-guarded premises need an effective tool to eliminate property losses in case of intrusion. Thanks to the 2N® SIP Mic IP console, they can report to the disturbed part of the object and inform/ expel/ intimidate the perpetrator with a live message. This method is much more effective than just a siren or a pre-recorded general announcement.

EXAMPLE OF CONNECTION OF THE 2N® SIP MIC



2N® SIP Mic



| Order No. | 914431E |
|-----------|---|
| Name | 2N® SIP Mic |
| Desc. | microphone console, inbuilt speaker, server-less paging |

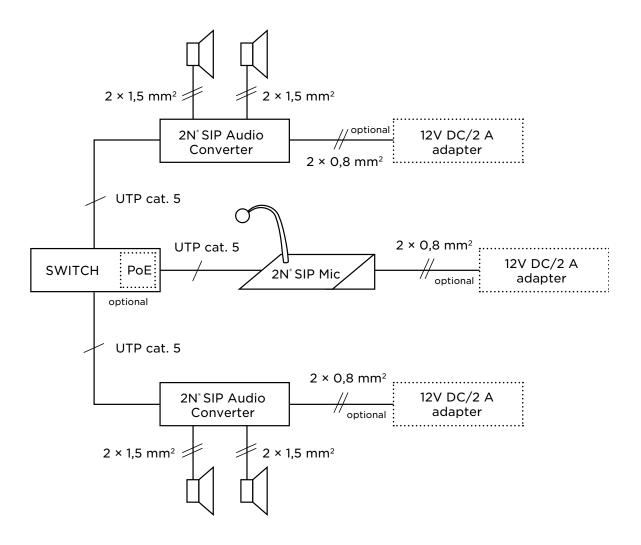
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TECHNICAL PARAMETERS

| Audio stream | | |
|---------------------------------|--|--|
| | SIP2.0, RTP multicast, VAPIX® | |
| Audio codecs | G.711u, G.722, L16/16 kHz | |
| Speakers | 2 built-in, stereo, power output 2x1 W | |
| | | |
| Interfaces | | |
| Logical inputs | 2, galvanically separated, sensitive to contact or voltage from 5 to 48 V | |
| Relay output | 1, galvanically isolated, NO and NC contact, max load 48 V, 1 A | |
| Headphone output | 3.5 mm jack, stereo, power output 2x30 mW, min. load impedance of 16 Ohm, DR. 101 dB, THD+N -85 dB | |
| Primary microphone input | symmetric, XLR, integrated phantom power supply 24 V, DR 88 dB, THD+N -82 dB | |
| Headset microphone input | 3.5 mm jack, integrated power supply for electret microphones, DR 84 dB, THD+N -78 dB | |
| Line input | 3.5 mm jack, mono or stereo non-symmetric stereo, DR 93 dB, THD+N -82 dB | |
| | | |
| Power supply | | |
| | 12 to 32 V, power draw max. 1 A PoE to 802.3af standard | |
| | | |
| Dimensions | | |
| | 209 x 65 x 143 mm | |
| On a ration of tames a rational | | |
| Operating temperature | town austria was a 0,40%C | |
| | temperature range 0-40°C | |
| Buttons and labels | | |
| Double button | 28mm x 14mm | |
| Large button | 14mm x 14mm | |
| Small button | 9mm x 9mm | |

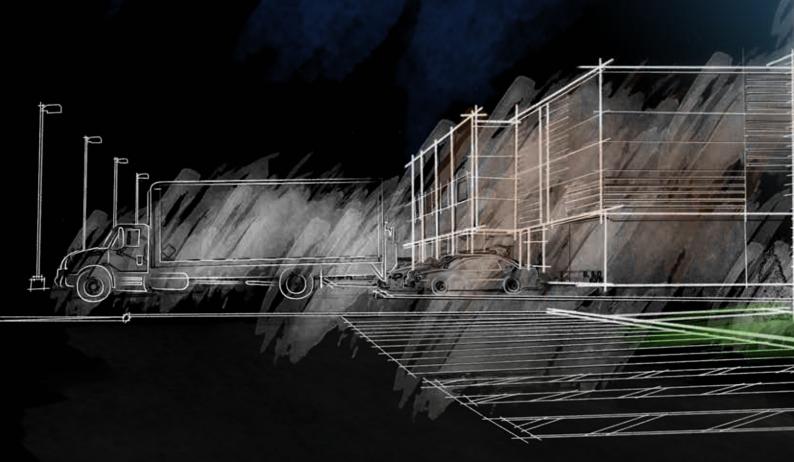


CONNECTION DIAGRAM



Upgrade for analog paging

Connect your Public Address to your telephone system and use it to make announcements via your mobile phone. 2N® SIP Audio Converter converts the sound from a SIP phone system to the classic analogue form so you can broadcast live or pre-recorded messages over the IP network to any distance.





2N® SIP Audio Converter



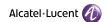












KEY FEATURES

- Makes public address system from any IP telephony system
- Two-way communication
- Upgrade of an analog PA system to flexible IP PA system
- Web interface configuration

RECOMMENDED USE

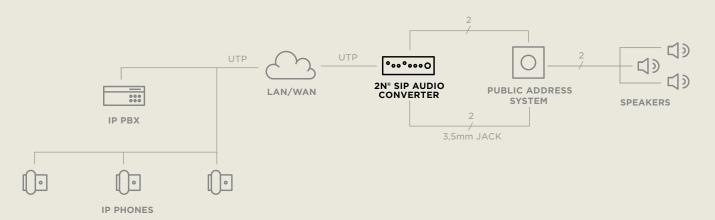
Doctor's waiting room

2N* SIP Audio Convertor lets you make live or pre-recorded messages from an IP connected telephone. Thanks to relay output of the 2N* SIP Audio Converter, it is possible during live paging to turn on a light sign such as "Next one, please", what may help patients with hearing disabilities.

Two-way communication at schools

An integration of the 2N* SIP Audio Convertor with a SIP Speaker and a IP microphone allows teachers to get easily hold of a janitor for a maintenance and service purposes. There is no more a need to leave a classroom when a projector doesn't work. Also, the janitor can easily verify whether everyone left the premises after school thanks to the listen-in function. Both functionalities are particularly useful in case of escalated situation as well.

EXAMPLE OF CONNECTION OF THE 2N® SIP AUDIO CONVERTER



2N® SIP Audio Converter



| Order No. | 914401E |
|-----------|--|
| Name | 2N® SIP Audio Converter |
| Desc. | IP audio decoder, support for SIP protocol, built-in amplifier |



| Order No. | 914490E |
|-----------|---|
| Name | 2N® SIP Audio Converter, set speaker & mic |
| Desc. | package of 2N° SIP Audio Converte, small speaker and microphone |

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2N® SIP Audio Converter

TECHNICAL PARAMETERS

| Interface | | | |
|--|--|---------------------------------------|----------|
| Power from external source | 12 V DC / 2 A | | |
| Power from LAN | PoE IEEE 802.3af | | |
| LAN connection | RJ-45 connector on rear panel 10/100BASE-TX with function Auto-MDIX | | |
| Digital output | 1× Relay output, 24V 1A AC/DC, galvanically insulated | | |
| Digital input | 1× Digital input, 5 to 24 V DC, galvanically uninsulated | | |
| Earphone/line out | 1× STEREO 3,5 mr | n jack on front pan | el |
| Microphone/Line in | 1× STEREO 3,5 mr | n jack on front pan | el |
| Output of powerful amplifier | 4× terminal on rear panel, STEREO/MONO with autodetection | | |
| Company of the second s | | | |
| Control and signalling | Zw DCD LED fo | | |
| Signalling state | 3× RGB LED on front panel | | |
| Local control | 3× button on from | · · · · · · · · · · · · · · · · · · · | |
| Remote control | 1× Infrared detector on front panel | | |
| | | | |
| Audio | | | |
| Speaker impedance | 4 - 8 Ω | T . | T |
| Amplifier performance | Speaker | 12 V/2 A | PoE |
| | 2 × 4 Ω STEREO | 2 × 10 W | 2 × 5 W |
| | 2 × 8 Ω STEREO | 2 × 9 W | 2 × 5 W |
| | 4 Ω ΜΟΝΟ | 1 × 18 W | 1 × 10 W |
| | 8 Ω MONO | 1 × 18 W | 1 × 10 W |
| Frequency range | 20 Hz - 20 kHz (± | 0,5 dB) | |
| Harmonic distortion | 0,05 % @ 1 kHz | | |
| Signal-to-noise ratio | 91 dB | | |
| Audio compression | MPEG-1 Audio Lay | er II (MP2) | |
| Bandwidth | 32-320 kbps | | |
| Audiocodices | G.711 (PCMA, PCMU), G.729 (Annex A, B), L16, G.722 | | |
| | | | |
| Mechanical properties | | | |
| Dimensions | 105 × 34 × 86 mm | | |
| Dimensions (with L-profiles) | 130 × 34 × 86 mm | | |
| Weight | 300 g | | |
| | | | |

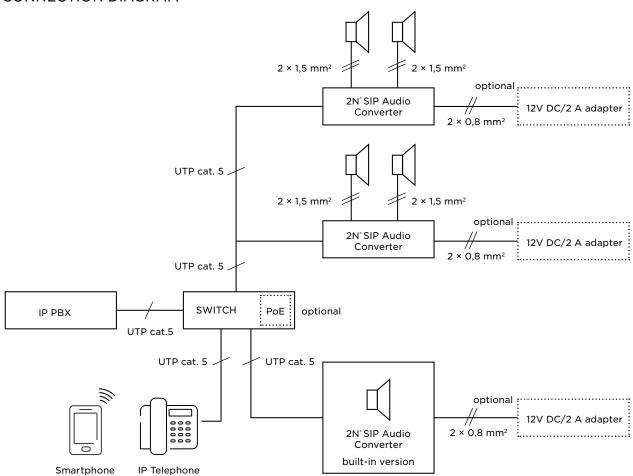


TECHNICAL PARAMETERS

2N® SIP Audio Converter built into speaker

| Interface | |
|------------------------------|--|
| Power from external source | 12 V DC / 2 A |
| Power from LAN | PoE IEEE 802.3af |
| LAN connection | RJ-45 connector on rear panel 10/100BASE-TX with function Auto-MDIX |
| Digital output | Only external contact required |
| Digital input | 1× Digital input, 5 to 24 V DC, galvanically uninsulated |
| Output of powerful amplifier | 6 W |
| | |
| Control and signalling | |
| | 3 buttons |
| | |
| Audio | |
| Sound pressure level | 100 dB |
| Frequency range | 20 Hz - 20 kHz (± 0,5 dB) |
| Harmonic distortion | 0,05 % @ 1 kHz |
| Signal-to-noise ratio | 91 dB |
| Audiocodices | G.711 (PCMA, PCMU), G.729 (Annex A, B), L16, G.722 |
| | |
| Mechanical properties | |
| Dimensions | 237 × 170 × 80 mm |
| Weight | 1 300 g |

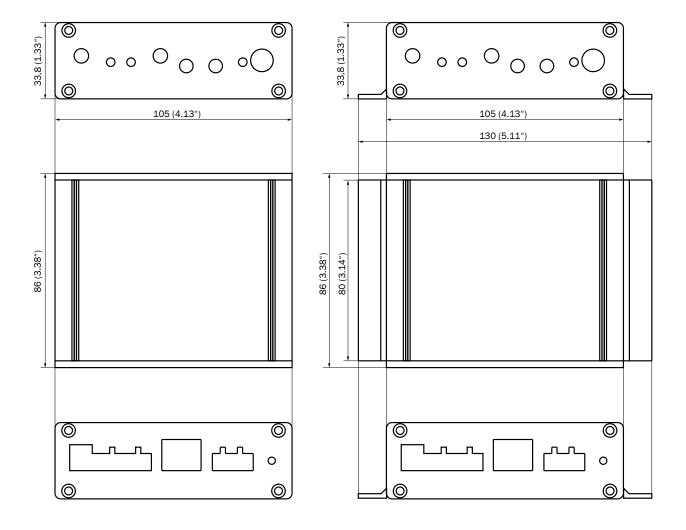
CONNECTION DIAGRAM



^{*} Power from external 12V adapter or POE

WITHOUT LUGS

WITH LUGS



Other Accessories

| Electrical strikes | |
|---|--|
| Electrical strike 11211 12V/230mA DC | 932071E |
| Electrical strike 11221 hold-open 12V/230mA DC | 932081E |
| Electrical strike 11211MB mechanical blocking 12V/230mA DC | 932091E |
| Electrical strike 31211 fail-safe 12V/170mA | 932072E |
| Electrical strike 211211 door signalling 12V/230mA | 932061E |
| Electrical strike 321211 fail-safe, door signalling 12V/170mA | 932062E |
| License | |
| License for G.729 | 9137902 |
| Enhanced Audio | 9137905 |
| Enhanced Video | 9137906 |
| Enhanced Integration | 9137907 |
| Enhanced Security | 9137908 |
| Gold | 9137909 |
| License Informacast | 9137910 |
| License NFC | 9137915 |
| IP videophones | |
| IP telephone Yealink SIP T58A | 91378360 |
| | |
| RFID tags (for Verso and Force) | |
| Card EMarine RFID 125 kHz | 9134165E |
| Key EMarine RFID 125 kHz | 9134166 |
| Card Mifare RFID 13.56 MHz | 9134173 |
| Key Mifare RFID 13.56 MHz | 9134174 |
| External card reader RFID | |
| External card RFID 125 kHz EMarine | 9137420E |
| External card RFID 13.56 MHz | 9137421E |
| External card reader Wiegand 125 kHz EMarine RFID | 9159030 |
| External card reader Wiegand 13.56 MHz Mifare RFID | 9159031 |
| External Bluetooth reader (USB interface) | 9137422E |
| External fingerprint reader (USB interface) | 9137423E |
| External reader secured 125kHz + 13.56MHz (USB) | 9137424E |
| | ************************************** |

Other

| Other | |
|---|-------------------------------------|
| 2N® IP Verso connection cable length 3m | 9155054 |
| 2N° IP Verso connection cable length 5m | 9155055 |
| 2N® IP Verso Blind button | 9155051 |
| 2N® IP Security Relay | 9159010 |
| Wiegand Isolator | 9159011 |
| 2N® Induction Loop | 9159050 |
| External antenna | 9159051 |
| Power supply 12V/1A | 9159052 |
| 2N* 2Wire (plug EU/US/UK) | 9159014EU 9159014US 9159014UK |
| Exit button | 9159013 |
| IP relay - 1 output | 9137410E |
| IP relay – 4 output | 9137411E |
| Magnetic contact | 9159012 |
| Power supply 12V/2A | 91341481E |
| Transformer | 932928 |
| PoE Injector (EU/US plug) | 91378100E 91378100US |

Version: 2.0 Issued: April 2019

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