



"For 30 years 2N has been at the forefront of access control and telecommunications. We make sure our products are truly cutting edge, as well as 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."





"The 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."

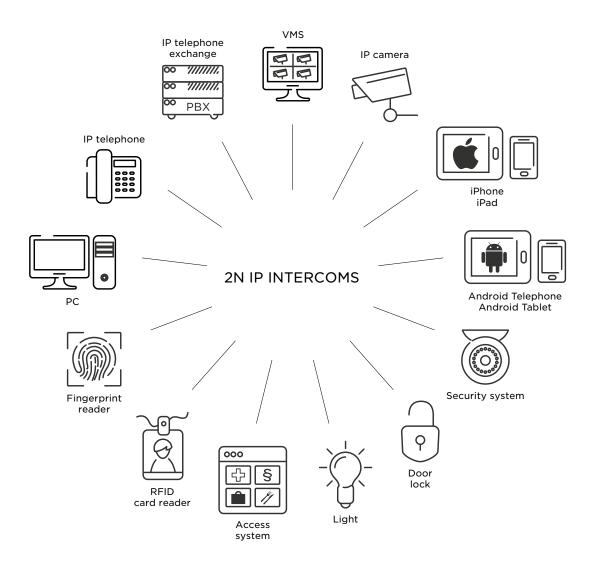


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### CONNECTIVITY IN AN IP ENVIRONMENT

Thanks to open standards, IP Intercoms from 2N can connect with a wide range of external devices:



For information about Licencing Policy visit please our website.



### WaveKey

# The future is mobile access control

Today, a mobile phone can fully replace an RFID card or a fingerprint. Rely today on an access control method that will dominate the market.

#### RECOMMENDED USE

#### **Touch Mode**

Touch mode ensures complete comfort. The user only touches the reader with their hand or elbow, while leaving the phone in their pocket.

### Tap in App Mode

Contactless Tap in app mode brings higher security. The user must unlock their mobile phone, open the application, and press the virtual button. It is also an ideal way to open the car park entrance from your car.

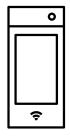
### **Motion Mode**

Completely contactless door opening ensures Motion mode. Just approach the camera intercom with your phone in your pocket, or wave your hand, and the door will open.

#### Card Mode

The last option is Card mode. The phone works as a card and the user has to tap it close to the access reader. It's similar to popular NFC technology, but Wavekey works with both Android and iOS phones.

#### SUPPORTED PRODUCTS



2N® IP Style



2N® IP Verso 2N® LTE Verso



2N® Access Unit 2.0 Bluetooth & RFID

2N® Access Unit Bluetooth



2N® Access Unit M Bluetooth & RFID

### **COMPARISON TABLES**

Detailed overview of intercoms and answering units functions and parameters to help you make the right choice.

### Overview of Intercoms

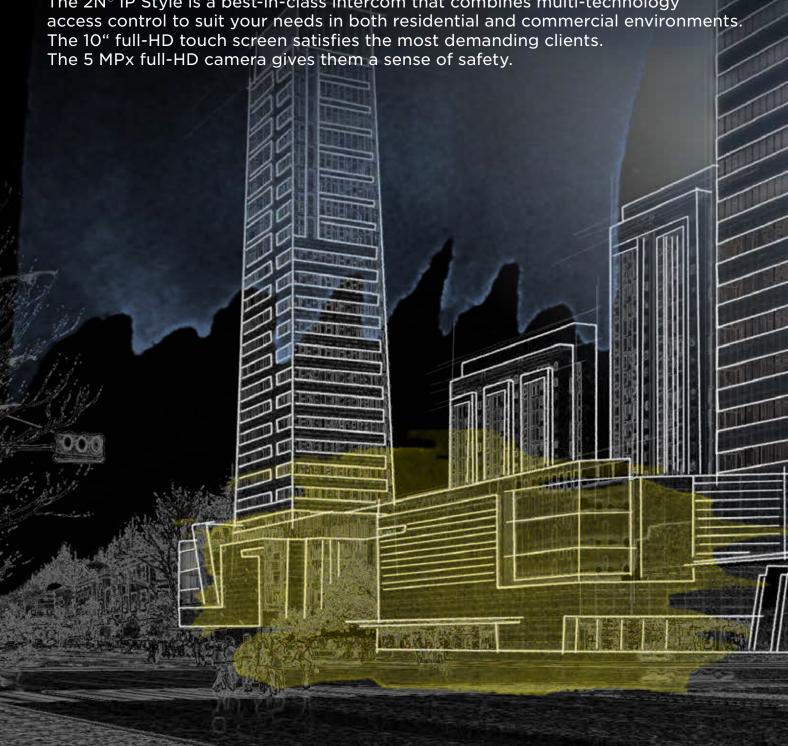
Intercom	2N® IP Style	2N® IP Verso	2N® IP Solo	2N® IP Force	2N® IP Safety	2N® IP Base	2N® LTE Verso
Integrated camera available	yes	yes	yes	yes	no	yes	yes
Integrated electric switch	yes	yes	yes	yes	yes	yes	yes
Numerical keypad available	yes, virtual	yes	no	yes	no	no	yes
Internal RFID card reader available	yes	yes	no	yes	no	yes	yes
Biometrics available	no	yes	no	no	no	no	yes
Bluetooth available	yes	yes	no	no	no	no	yes
Buttons	no	up to 146	1	1, 2 or 4	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	line-out	no	line-out
Display - optional	yes, 10"	yes	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	yes	no	yes
Suitable for outdoor use	yes	yes	yes	yes	yes	yes	yes
IP/IK coverage	IP65/ IK08	IP54/IK8 (touch- screen IK7)	IP54/IK8	IP69K/IK10	IP69K/IK10	IP65/IK7	IP54/IK8 (touchscreen IK7)
Number of users	10 000	10 000	10 000	10 000	10 000	10 000	10 000
Security Relay support	yes	yes	yes	yes	yes	yes	yes
Dimensions WxHxD (including frame)	6.693 x 13.976 x 1.575 inch (surface)	5.118 x 10.118 x 0.197 inch (2 modules)	4.213 x 5.118 x 1.102 inch	8.543 x 4.291 x 3.268 inch	8.543 x 4.291 x 3.268 inch	9.016 x 4.291 x 1.220 inch	5.118 x 10.118 x 0.197 inch (2 modules)
Power supply POE	yes, PoE+	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

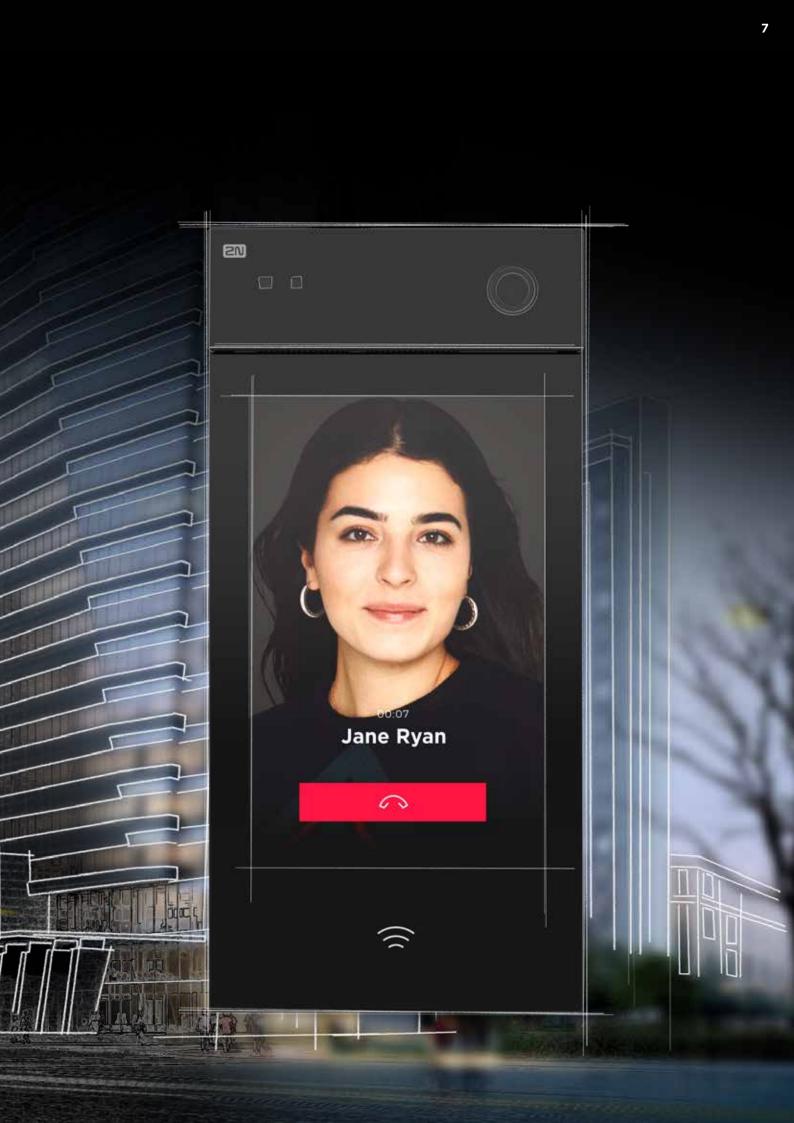
# Overview of Answering Units

Answering Unit	2N® Indoor Touch 2.0	2N® Indoor View	2N® Indoor Compact	2N® Indoor Talk
Recommended use	luxury MDU; smart home; offices	high-end MDU; offices	mid-range MDU; offices	secondary unit; offices
Display	7"	7"	4.3"	no
Display resolution [pixels]	1024 x 600	1024 x 600	480 x 272	
Unit control	capacitive touch display	capacitive touch display	capacitive buttons	capacitive buttons
Operation system	Android	2N OS	2N OS	2N OS
3 <sup>rd</sup> party apps	yes	no	no	no
Video voicemail	yes	no	no	no
Video preview	yes	yes	yes	no
Colour variants	black, white	black, white	black, white	black, white
Mounting options	wall mount, desk stand	flush, surface, desk stand	flush, surface, desk stand	flush, desk stand
WiFi(802.11bgn)	(optional)	no	no	no
Dimensions WxHxD [inch]	9.252 x 6.496 x 1.575	7.598 x 6.181 x 1.969	5.984 x 6.024 x 1.969	7.283 x 5.039 x 1.898
POE or 12V power supply	yes	yes	yes	yes
Integrated speaker	2W	2W	2W	2W
Integrated microphone	yes	yes	yes	yes
Digital input (doorbell button)	2	1	1	1
Line out (induction loop)	yes	yes	yes	yes
Digital output, Relay	2; 2	no	no	no

# Designed to fit modern architecture

The 2N® IP Style is a best-in-class intercom that combines multi-technology access control to suit your needs in both residential and commercial environments. The 10" full-HD touch screen satisfies the most demanding clients.





INTERCOMS

ACCESS ANSWERING CLOUD SIP AUDIO
UNITS SERVICES SIP AUDIO

IP ENVIRONMENT

8

# 2N® IP Style



















#### **KEY FEATURES**

- · Designed to fit modern architecture
- Full HD camera with WDR
- Multi-technology access control
- Patented mounting mechanism



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#### **RECOMMENDED USES**

## For convenient entry to residential complexes

This luxury looking intercom with multi-technology access control is a great fit for an equally modern apartment building. The Bluetooth technology lets the residents into their homes not only safely, but also faster and more conveniently than an access card.

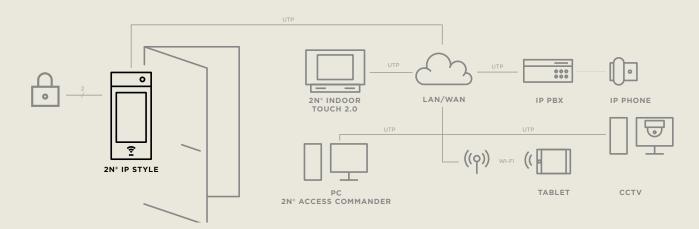
### As a smart intercom for smart office buildings

10" HD display with a clear list of all companies including their logos, bidirectional video calls with ambient noise, and echo cancellation – this is what 2N\* IP Style offers in an office environment. 2 microphones allow the receptionist to identify the newcomer and verify their purpose of arrival.

### As a highly desirable security solution

The 5 MPx full HD camera of the intercom makes the 2N\* IP Style a fully-fledged addition for any VMS. The intercom camera is conveniently situated, facing the visitor, and it supports WDR. Bad lighting isn't an issue. Take the advantage of ONVIF and RTSP protocols for the integration or another advanced automation feature.

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



SIP (UDP, TCP, TLS)

# Technical parameters

Signalling protocol

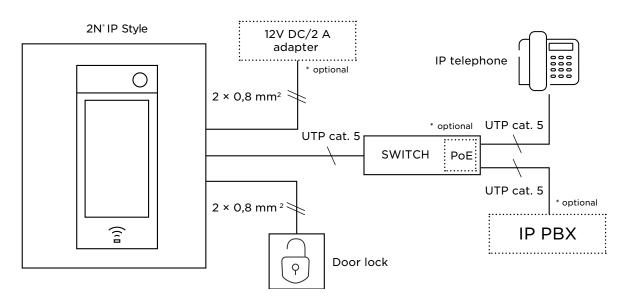
2N® IP Style

User interface	
Control	High-capacity touchscreen
Display size	10.1"
Display resolution	1280x800 TFT IPS
Display viewing angle	170°
Directory	2 modes: office/residential (10,000 users)
Audio	
Microphone	2 integrated microphones
Speaker	2 x 4 W/ 4 Ω
Amplifier	2 W (class D) amplifier
Sound pressure at 1kHz at 1m distance (SPL max)	85 dB
Output line out	1 VRMS/ 600 Ω
Volume control	Adjustable with automatic adaptive mode
Full duplex	Yes
Audio stream	
Protocols	RTP/RTSP
Codecs	G.711, G.722, G.729, L16/ 16 KHz
Camera	
Sensor	1/2.7" colour CMOS
Video resolution	2560x1920 (4:3); max QHD (16:9)
Frame rate	max 60 fps
Sensitivity	14 000 e <sup>-</sup> /lux-sec
View angle	110° (H), 95° (V), 150° (D)
Infrared light/night vision	Yes
Forensic WDR	Yes
Video stream	
Protocols	RTP/RTSP/HTTP
Codecs	H.264, MJPEG
IP camera function	Yes, ONVIF v2.4 profile S compatible
Interface	
Interface Power supply	12 V ±15 % / 4 A DC or PoE+
PoE	PoE+ IEEE 802.3at (Class 4-25.5 W)
LAN	10/100BASE-TX with Auto-MDIX, RJ-45
Recommended cabling	Cat-5e or higher
Supported protocols	SIP 2.0, DHCP opt.66, SMTP, 802.1x, RTSP, RTP, TFTP, http, HTTPS, Syslog, ONVIF
Active switch output	NO/NC contact, up to 30 V / 1 A AC/DC
Active switch output	12 V / 0.6 A DC
Passive / active input	3; (-30 V to +30 V)
rassive / active ilibut	13, 1-30 V 10 T30 V)



RFID card reader	
Supported frequencies	125 kHz and 13.56 MHz
125kHz	125 kHz EM4xxx
13.56 MHz	ISO14443A, ISO14443B, ISO15693, NFC support
13.56 MHz secured	HID SE (Seos, iClass SE, Mifare SE), HID Prox
Bluetooth	
Version	Bluetooth 5.0 LE compliant
Range	Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)
Security	RSA-1024 and AES-128 encryption
Modes	Touch, Tap in App, Motion, Card
Mobile app support	2N® Mobile Key
Mechanical properties	S
Cover	0,157 inch tempered glass
Operating temperature	-30°C to 60 °C
Operating relative humidity	-22°F - 140°F (non-condensing)
Storage temperature	- 22°F - 158°F
Surface mounting	6.693 (W) x 13.976 (H) x 1.575 (D) inch
Flush mounting	6.693 (W) x 13.976 (H) x 0.866 (D) inch
Weight	4.3 lb
Covering level	IP65
Resistance level	IK08

### **CONNECTION DIAGRAM**



# Order numbers

### 2N® IP Style



Order No.	02407-001
Name	2N® IP Style
Desc.	main unit with 125 kHz and secured 13.56 MHz RFID rea- der, Bluetooth, QR codes and virtual keypad



Orc	ler No.	02406-001
Nar	ne	Surface-mount box
Des	sc.	backplate for surface installation

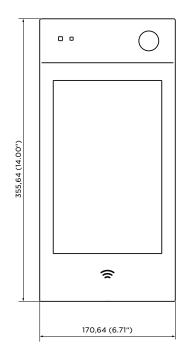


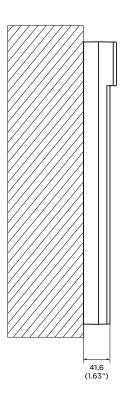
Order No.	02405-001
Name	Flush-mount box
Desc.	box for installation in the wall

# Dimensions and fitting

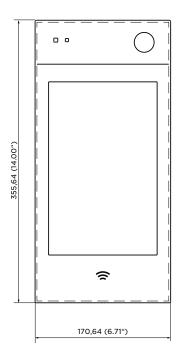
2N® IP Style

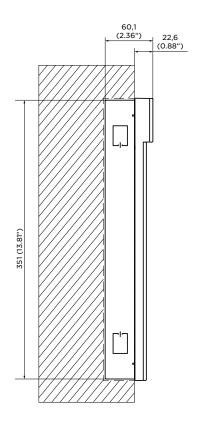
WALL-MOUNTED

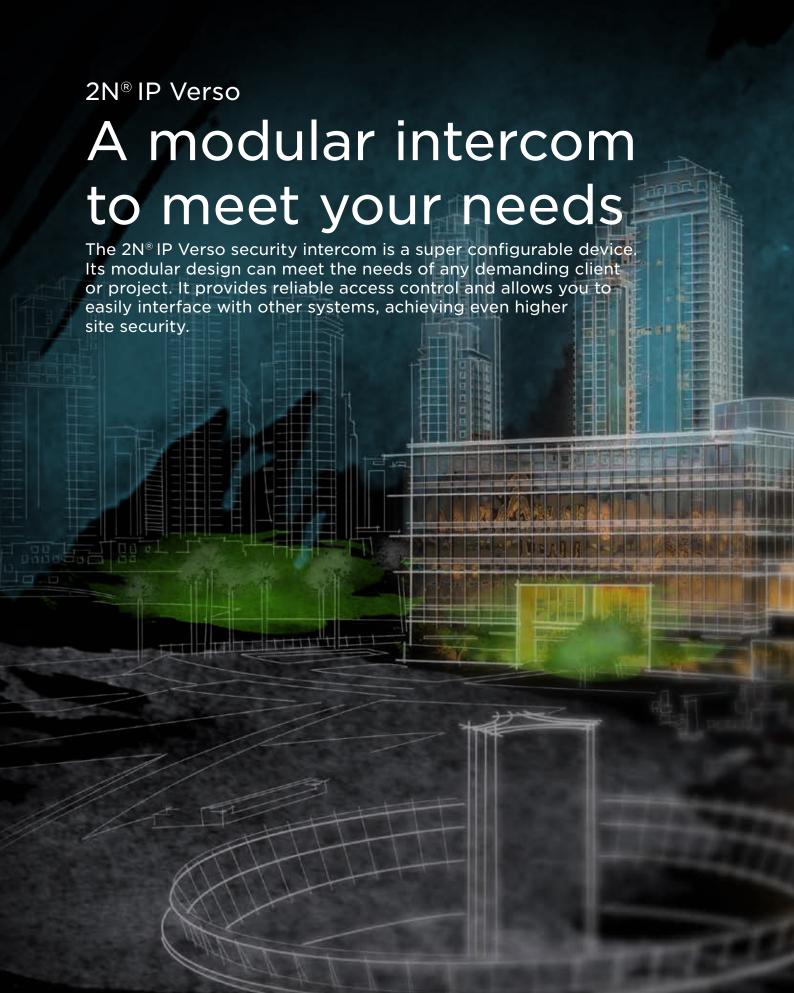




### FLUSH-MOUNTED WITH BOX









**ANSWERING** ACCESS CLOUD INTERCOMS 18 SIP AUDIO CONTROL **UNITS SERVICES** 

IP ENVIRONMENT

# 2N® IP Verso

















#### **KEY FEATURES**

- Fully modular IP intercom
- Discrete HD camera
- Mobile access control
- · Integration with security systems



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#### **RECOMMENDED USES**

### At the main entrances of residential complexes

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.

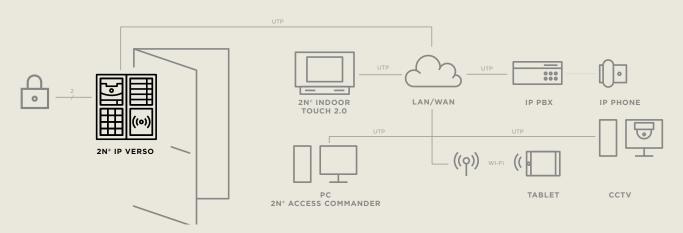
## A highly secure office building

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. What's more, the intercom's camera can stream to a VMS system. An integration with 3rd party systems such as Milestone or Genetec is a matter of course.

### A single villa with home automation

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

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



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Signalling protocol

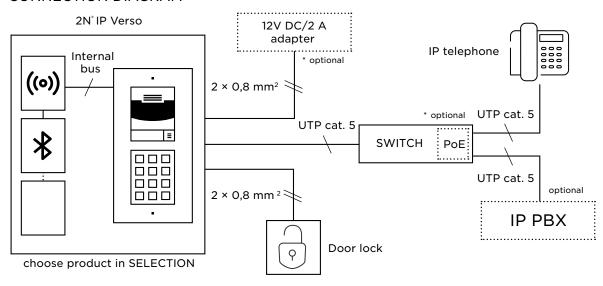
2N® IP Verso

	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	
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	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



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		ic 1k & 4k, DESFire EV1, &X, SmartMX, Ultralight
	Ultralight C, PayPass, Le	SLE44R35, my-d move (SLE66Rxx), gic Advant
ISO14443B	Calypso, CE PicoPass, HI	PAS, Moneo, SRI512, SRT512, SRI4K, SRIX4K, D iCLASS
Mechanical properties		
Cover	Robust zinc	casting with surface finish
Operating temperature	-40°F - 140	
Operating relative humidity	10% - 95% (	non-condensing)
Storing temperature	-40°F - 158°	'F
Covering level	IP54	
Resistance level	IK08, Touch	Display module IK07
Dimensions		
Surface mounting frame	1 module: 4.	213 (W) x 5.118 (H) x 1.102 (D) inch
	2 modules:	4.213 (W) x 9.213 (H) x 1.102 (D) inch
	3 modules:	4.213 (W) x 13.346 (H) x 1.102 (D) inch
Flush mounting frame	1 module: 5.	118 (W) x 6.024 (H) x 0.197 (D) inch
	2 modules:	5.118 (W) x 10.118 (H) x 0.197 (D) inch
	3 modules:	5.118 (W) x 14.213 (H) x 0.197 (D) inch
Flush mounting box (minimum hole dimensions)	1 module: 4.	252 (W) x 5.157 (H) x 1.772 (D) inch
	2 modules:	4.252 (W) x 9.37 (H) x 1.772 (D) inch
	3 modules:	4.252 (W) x 13.504 (H) x 1.772 (D) inch
Weight	From 4.41 lb	o, based on configuration

### **CONNECTION DIAGRAM**



# Order numbers

### Main unit and modules



Order No.	01273-001/ 01274-001
Name	Main unit with camera nickel / black
Desc.	main unit, 1 button, HD camera



Order No.	01271-001/ 01272-001
Name	Main unit without camera nickel/ black
Desc.	main unit, 1 button



Order No.	01275-001
Name	Touch Display module
Desc.	module for 2N° IP Verso, tree-structured phone book, touch keypad



Order No.	01252-001
Name	Infopanel module
Desc.	module for 2N® IP Verso, backlit



Order No.	01276-001
Name	Fingerprint Reader module
Desc.	module for 2N* IP Verso, spoof fingerprint detection, optical technology



Order No.	01277-001
Name	Touch Keypad module
Desc.	module for 2N® IP Verso, capacitive touchscreen regular automatic calibration



Order No.	01253-001/ 01254-001
Name	Keypad module nickel/black
Desc.	module for 2N® IP Verso, mechanical keypad, backlit symbols



Order No.	01258-001
Name	5 Buttons module
Desc.	module for 2N® IP Verso, quick dial buttons



Order No.	02140-001
Name	RFID Card Reader module, 125kHz
Desc.	supports the 125kHz EM-41xx or HID Proximity

Order No.	02141-001
Name	RFID Card Reader module, 13.56MHz, NFC ready
Desc.	supports 13.56MHz cards



Order No.	01639-001
Name	Bluetooth & RFID module
Desc.	125kHz, secured 13.56MHz, NFC ready, Bluetooth 4.0



Order No.	01638-001
Name	Touch Keypad & RFID module
Desc.	125kHz, secured 13.56MHz, NFC ready



Order No.	01263-001
Name	Induction Loop module
Desc.	module for 2N® IP Verso, audio signal directly into a hearing aid



Order No.	01261-001
Name	Blind Panel module
Desc.	module for 2N° IP Verso, 1 blind module supplied with the main unit



Order No.	01257-001
Name	I/O module
Desc.	module for 2N® IP Verso, installed under another module, 2 inputs and 2 relay outputs



Order No.	01259-001
Name	Wiegand module
Desc.	module for 2N® IP Verso, installed under another module, for interconnection of systems



Order No.	01260-001
Name	Tamper Switch module
Desc.	module for 2N* IP Verso



Order No.	01975-001
Name	Security Bundle for 2N® IP/LTE Verso
Desc.	includes Tamper switch, I/O module and 2N* Security Relay



0	rder No.	02577-001
N	ame	OSDP
D	esc.	connects the 2N IP intercom reader to a third-party access control system

### Frames



Order No.	01278-001/ 01279-001
Name	1 module flush frame nickel / black
Desc.	frame for installation in the wall, 1 module



Order No.	01287-001/ 01288-001
Name	1 module surface frame nickel / black
Desc.	frame for installation on the surface, 1 module



Order No.	01280-001/ 01281-001
Name	2 module flush frame nickel / black
Desc.	frame for installation in the wall, 2 modules



Order No.	01289-001/ 01290-001
Name	2 module surface frame nickel / black
Desc.	frame for installation on the surface, 2 modules



Order No.	01282-001/ 01283-001
Name	3 module flush frame nickel / black
Desc.	frame for installation in the wall, 3 modules



Order No.	01291-001/ 01292-001
Name	3 module surface frame nickel / black
Desc.	frame for installation on the surface, 3 modules

# Backplates and boxes



Order No.	01293-001
Name	1 module backplate
Desc.	backplate for installation on glass or uneven surface, 1 module



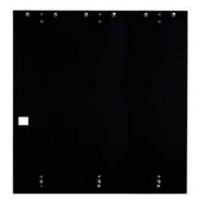
Order No.	01294-001
Name	2 modules backplate
Desc.	backplate for installation on glass or uneven surface, 2 modules



Order No.	01295-001
Name	3 modules backplate
Desc.	backplate for installation on glass or uneven surface, 3 modules



Order No.	01296-001
Name	2 (w) x2 (h) modules backplate
Desc.	backplate for installation on glass or uneven surface, 2x2 modules



Order No.	01297-001
Name	3 (w) x3 (h) modules backplate
Desc.	backplate for installation on glass or uneven surface, 3x3 modules

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Order No.	01298-001
Name	2 (w) x3 (h) modules backplate
Desc.	backplate for installation on glass or uneven surface, 2x3 modules



Order No.	01299-001
Name	3 (w) x2 (h) modules backplate
Desc.	backplate for installation on glass or uneven surface, 3x2 modules



Order No.	01284-001
Name	1 module flush box
Desc.	box for installation in the wall, 1 module



Order No.	01940-001
Name	Wedge Backplate
Desc.	angle 25°, only for surface installation of 2N* IP/LTE Verso double-modules



Order No.	01285-001
Name	2 modules flush box
Desc.	box for installation in the wall, 2 modules



Order No.	01286-001
Name	3 modules flush box
Desc.	box for installation in the wall, 3 modules

### Other



Order No.	01267-001
Name	Extension cable- 3 ft long
Desc.	connection of modules in greater distance from the main unit



Order No.	01268-001
Name	Extension cable- 9 ft long
Desc.	connection of modules in greater distance from the main unit

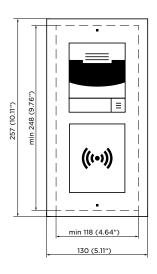


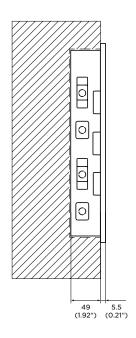
Order No.	01269-001
Name	Extension cable- 15 ft long
Desc.	connection of modules in greater distance from the main unit

# Dimensions and fitting

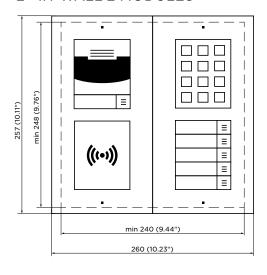
### 2N® IP Verso

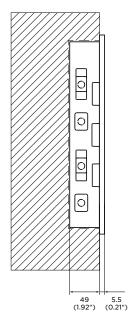
### **IN-WALL 2 MODULES**



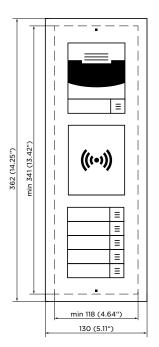


### 2× IN-WALL 2 MODULES

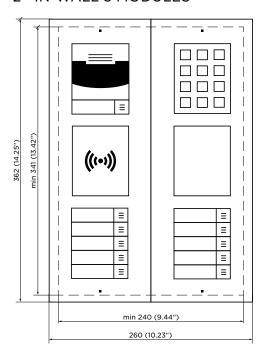


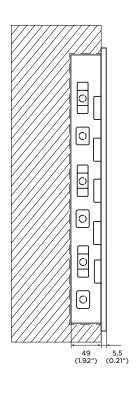


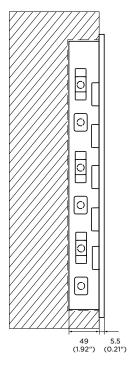
### IN-WALL 3 MODULES



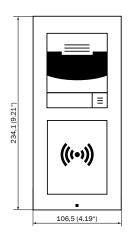
### 2× IN-WALL 3 MODULES

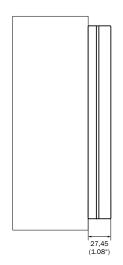




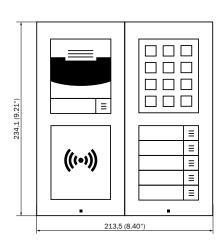


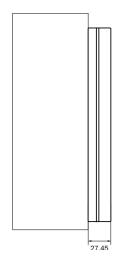
### WALL-MOUNTED 2 MODULES



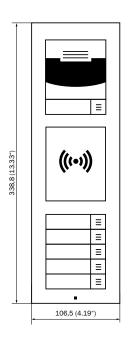


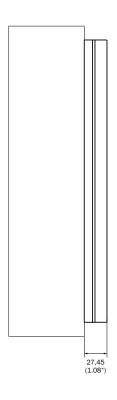
### 2× WALL-MOUNTED 2 MODULES



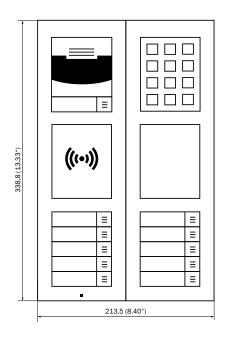


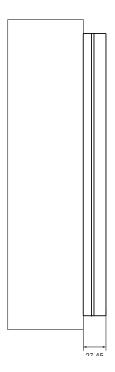
### WALL-MOUNTED 3 MODULES



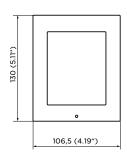


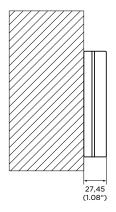
### 2× WALL-MOUNTED 3 MODULES



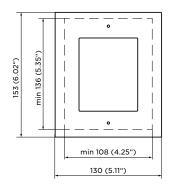


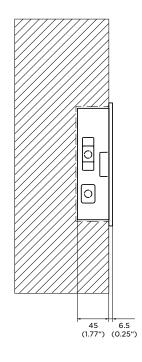
### WALL-MOUNTED 1 MODULE





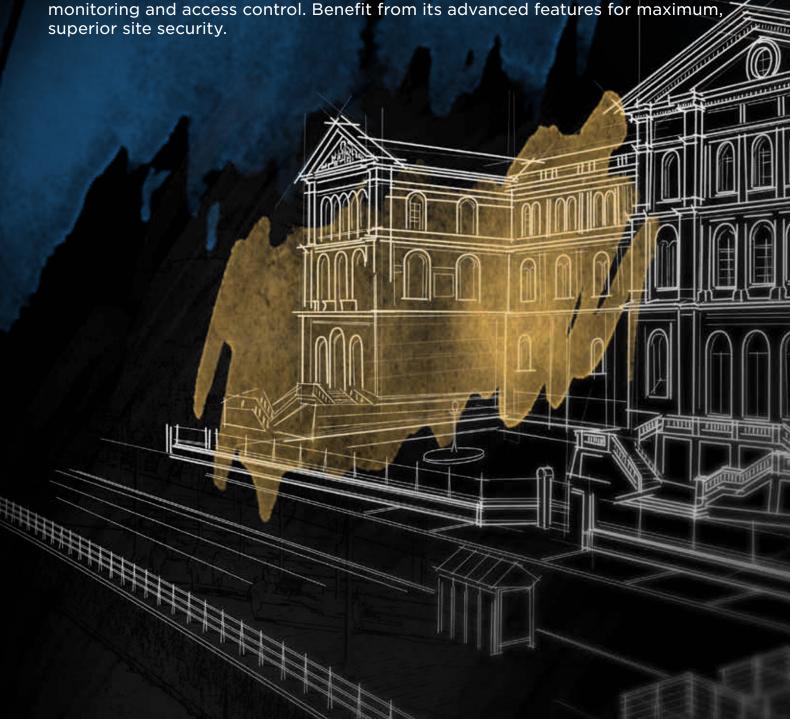
### IN-WALL 1 MODULE





# A door guard for extreme conditions

The 2N® IP Force is an extremely durable IP intercom that can withstand even the most demanding conditions. It allows for rigorous visitor communication





ACCESS **ANSWERING** CLOUD INTERCOMS SIP AUDIO 36 CONTROL **SERVICES** 

IP ENVIRONMENT

# 2N® IP Force



















### **KEY FEATURES**

- · Built for extreme conditions
- Professional night vision
- Clear sound in noisy environments
- The most durable intercom on the market

### RECOMMENDED USES

# For communication at school entrances

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

# For secure detention centres

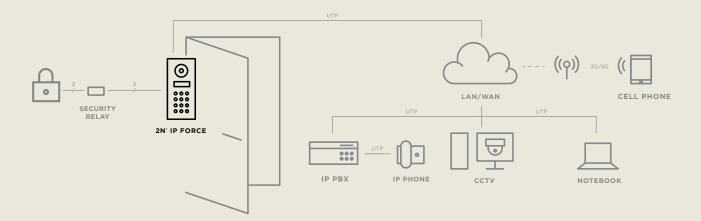
All communication and surveillance systems in detention centres must be highly reliable, durable and guarantee a maximum protection and security for wardens as well as prisoners.

The 2N® IP Force more than meets this requirement as the toughest intercom on the market.

# For communication in parking lots

Want to avoid queues when people cannot enter or leave the parking place? The 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



SIP (UDP, TCP, TLS)

# Technical parameters

Signalling protocol

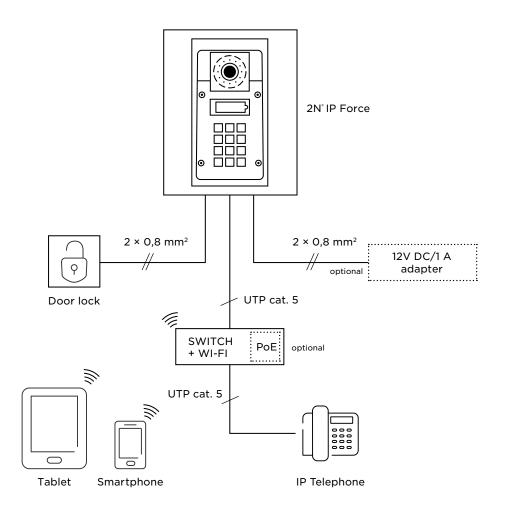
2N® IP Force

	SIP (ODP, TCP, TLS)
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 stroom	
Audio stream Protocols	RTP/RTSP
Codecs	
COUECS	G.711, G.722, G.729, L16/16kHz
Camera HD / SD	
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
minarea ngile	
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)



Mechanical properties	
Cover	Robust aluminium casting
Operating temperature	-40°F to 131 °F
Operating relative humidity	10 % - 95 % (non-condensing)
Storage temperature	-40 °F to 158 °F
Dimensions	8.543 x 4.291 x 3.268 inch
	9.528 x 5.354 x 3.268 inch incl. frame
Weight	net max. 4.409 lb / brutto max. 5.511 lb
Covering level	IP69K
Resistance level	IK10

## **CONNECTION DIAGRAM**



# Order numbers

## 2N® IP Force



Order No.	01337-001
Name	2N® IP Force, 1 button, HD camera
Desc.	1 button, HD camera



Order No.	01339-001
Name	2N® IP Force, 1 button + keypad + HD camera
Desc.	1 button, keypad, HD camera



Order No.	01343-001
Name	2N® IP Force, 4 buttons + HD camera
Desc.	4 buttons, HD camera



Order No.	01340-001
Name	2N® IP Force, 2 buttons + card reader ready + HD camera
Desc.	2 buttons, card reader ready, HD camera



Order No.	01334-001
Name	2N° IP Force, 1 button + pictograms + card reader ready + HD camera
Desc.	1 button, pictograms, card reader ready, HD camera



Order No.	01336-001
Name	2N® IP Force, 1 button, without camera
Desc.	1 button



Order No.	01338-001
Name	2N® IP Force, 1 button + keypad, without camera
Desc.	1 button, keypad



Order No.	01342-001
Name	2N® IP Force, 4 buttons, without camera
Desc.	4 buttons



Order No.	01341-001
Name	2N° IP Force, 2 buttons + card reader ready, without camera
Desc.	2 buttons, card reader ready



Order No.	01335-001
Name	2N* IP Force, 1 button + pictograms + card reader ready, without camera
Desc.	1 button, pictgrams, card reader ready



Order No.	01344-001
Name	2N® IP Force, 125kHz RFID
Desc.	Wiegand interface, 2 logical inputs and 2 output relays, tamper switch



Order No.	01730-001
Name	2N® IP Force, 13.56MHz secured RFID
Desc.	NFC ready, Wiegand interface



Order No.	01350-001
Name	2N® IP Force/Safety, Additional Switch
Desc.	additional input and output relays, tamper switch



Order No.	01976-001
Name	Security Bundle for 2N® IP Force
Desc.	includes additional switch and 2N® Security Relay



Order No.	02338-001
Name	Induction Loop
Desc.	Transfers audio from the intercom to the person who is wearing a hearing aid

# Mounting



Order No.	01348-001
Name	2N® IP Force, flush box
Desc.	brick flush mounting box



Order No.	01349-001
Name	2N® IP Force, plaster box
Desc.	plasterboard flush mounting box



Order No.	01351-001
Name	2N® IP Force/Safety - Gooseneck
Desc.	Gooseneck stand, height 120cm/47in

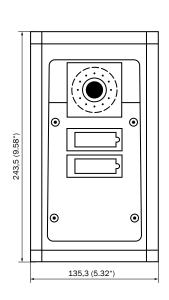


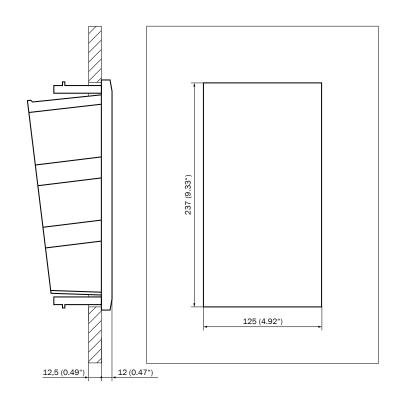
Order No.	01550-001
Name	2N® IP Force/Safety - Gooseneck stand double
Desc.	Gooseneck stand double, height 115cm/45in and 203cm/80in

# Dimensions and fitting

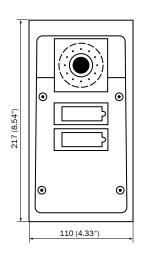
## 2N® IP Force

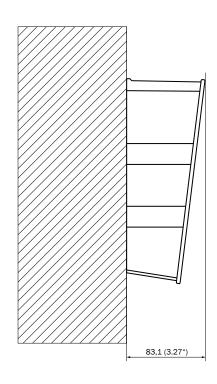
### MOUNTING IN PLASTERBOARD



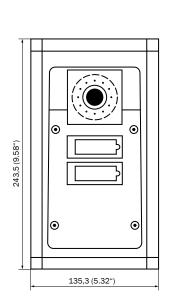


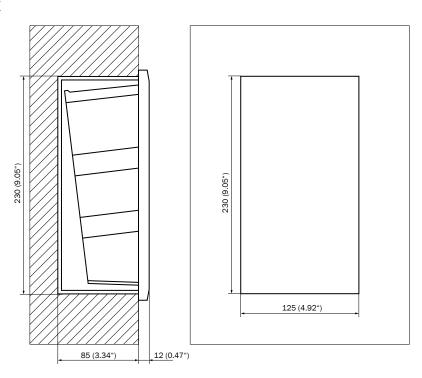
## WALL-MOUNTED

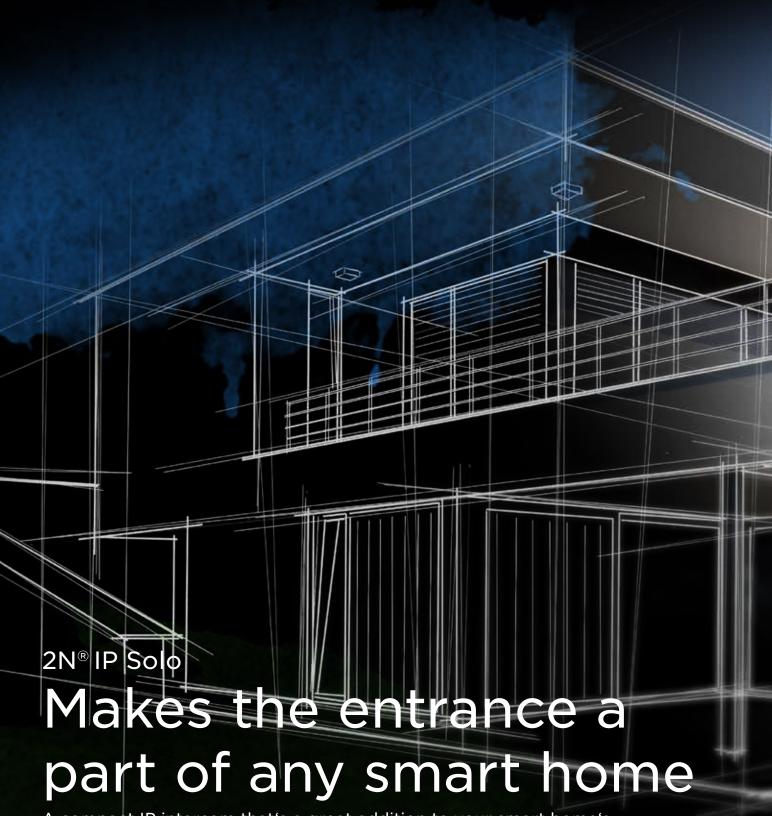




## FLUSH-MOUNTED WITH BOX







A compact IP intercom that's a great addition to your smart home's entrance. Despite only having one fitted button, it can still astonish you with its hidden HD camera, multiple functionalities including calls to your smartphone, and easy integration into the existing home automation system.



**ANSWERING** ACCESS CLOUD INTERCOMS SIP AUDIO 48 CONTROL UNITS **SERVICES** 

IP ENVIRONMENT

# 2N® IP Solo

















### **KEY FEATURES**

- Entrance to your smart home
- Sharp video quality day and night
- Integration with Home Automation
- Tailored for the residential market

#### **RECOMMENDED USES**

# As a doorbell for smart homes

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

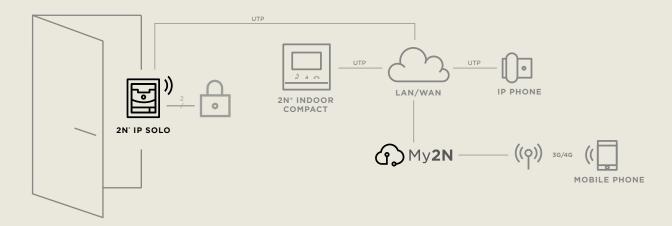
# As an accessory for the villa entrance

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

# Communication in office buildings

The 2N® IP Solo is also perfectly suited for indoor office buildings where an intercom is only required for communication, as there is an existing access system in the building. An example would be the entrance from the staircase or the entrance to the reception on a given floor.

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



50

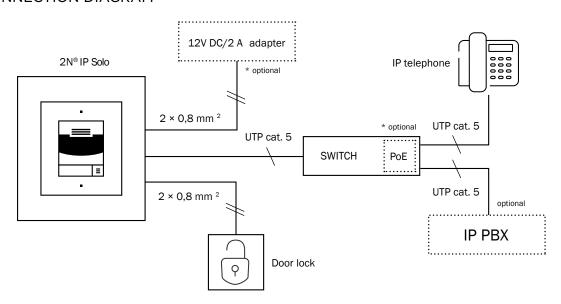
2N® IP Solo

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
	H.263, H.263+, H.264, MPEG-4, M-JPEG
Codecs	
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



<b>Mechanical properties</b>	
Cover	Robust zinc casting with surface finish
Operating temperature	-40°F to 140°F
Operating relative humidity	10% - 95% (non-condensing)
Storing temperature	-40°F to 158°F
Covering level	IP54
Resistance level	IK08
Dimensions	
Surface mounting frame	1 module: 4.21 (W) x 5.12 (H) x 1.10 (D) inch
Flush mounting frame	1 module: 5.12 (W) x 6.02 (H) x 0.20 (D) inch
Flush mounting box (minimum hole dimensions)	1 module: 4.25 (W) x 5.16 (H) x 1.77 (D) inch

## **CONNECTION DIAGRAM**



# Order numbers

## 2N® IP Solo



Order No.	01300-001/ 01303-001
Name	2N® IP Solo with camera, nickel/ black
Desc.	unit for flush installation, in nickel and black colour



Order No.	01301-001/ 01302-001
Name	2N® IP Solo with camera, nickel/ black
Desc.	unit for surface installation, in nickel and black colour



Order No.	02205-001/ 02204-001
Name	2N® IP Solo without camera, nickel/black
Desc.	unit for flush installation, in nickel and black colour



Order No.	02203-001/ 02202-001
Name	2N® IP Solo without camera, nickel/black
Desc.	unit for surface installation, in nickel and black colour



Order No.	01304-001
Name	2N® IP Solo, flush mounting box
Desc.	backbox for flush installation



Order No.	01305-001
Name	2N® IP Solo, backplate
Desc.	backplate for easier surface installation



Order No.	02077-001
Name	Wedge backplate
Desc.	angle 25°, for surface installation only

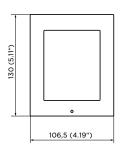


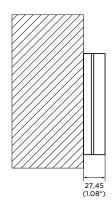
Order No.	02078-001
Name	Glass mount
Desc.	for installation on a glass surface, must be combined with 01305-001

# Dimensions and fitting

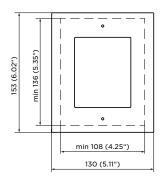
## 2N® IP Solo

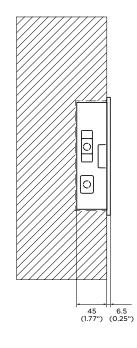
### WALL-MOUNTED



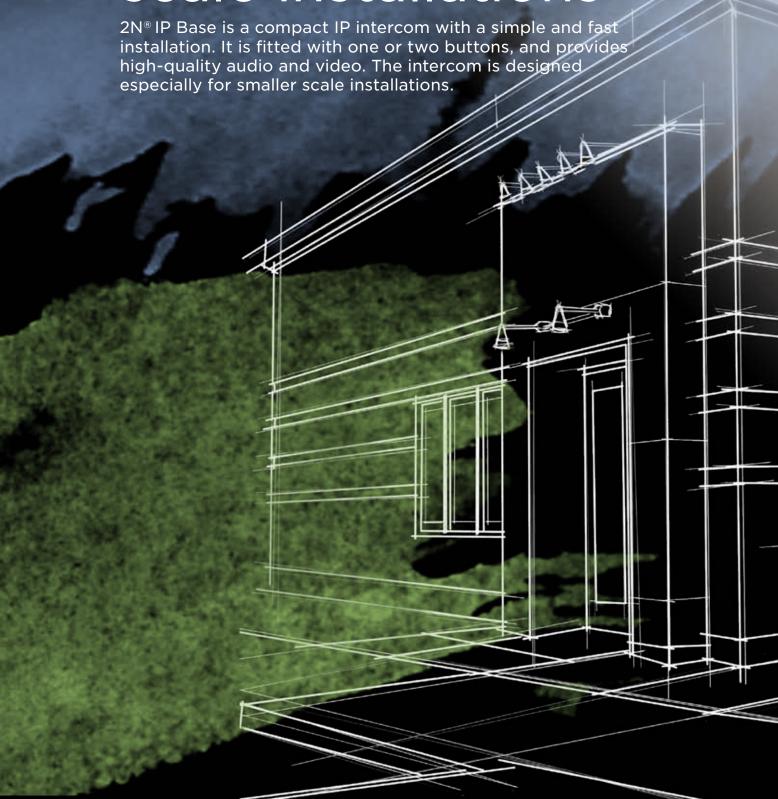


### **FLUSH-MOUNTED**





# Designed for small scale installations





IP ENVIRONMENT

# 2N® IP Base



















### **KEY FEATURES**

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

### **RECOMMENDED USES**

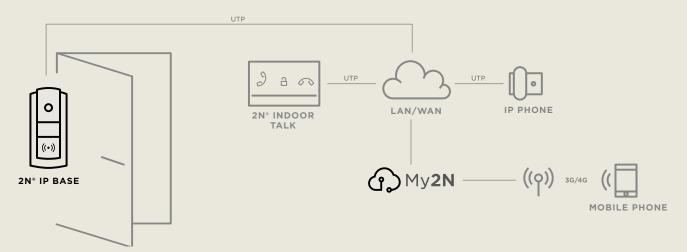
# For door communication in small offices

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.

# As an entry level intercom for the residential market

Easy installation using the quick mounting frame, high durability in outdoor and simple features are the key benefits of 2N\* IP Base. Both 1 or 2 button can be included in the basic package solving the problem of a 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

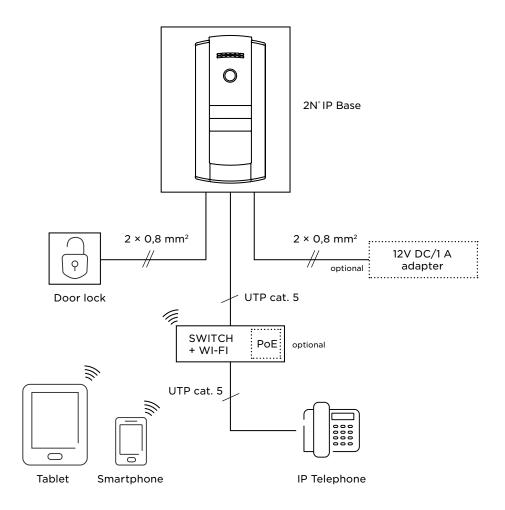
2N® IP Base

	SIP (UDP, TO	CP, TLS)
Buttons		
Button design		it transparent buttons able nametags
Button count	1 or 2 (both	options included in the package)
A		
Audio	1 integrated	micronhono
Microphone		
Amplifier	2 W (class D 2 W / 8 Ω	)
Speaker	· ·	vith automotic adoutive manda
Volume control	-	vith automatic adaptive mode
Full duplex	Yes (AEC)	
Audio stream		
Protocols	RTP	
Codecs		G.722, L16/16 kHz
	0.7, 0.7 20,	
Camera		
Sensor	1/3" colour (	CMOS
JPEG resolution		H) x 960 (V)
Video resolution	640 (H) x 48	
Frame rate	Up to 30 sna	
Sensor sensitivity	5.6 V/lux-se	
Viewing angle	-	9 ° (V), 141 °(D)
Infrared light	No	
Video stream		
Protocols	RTP/RTSP/F	ITTP
Codecs	H.263, H.263+, H.264, MPEG-4, M-JPEG	
IP camera function yes, O		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, 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 600 mA	
RFID card reader		
Supported	105141	17 FCMU
frequencies	125kHz and 13.56MHz	
	125 kHz:	EM4100, EM4102, HID Proximity
	13.56 MHz:	ISO14443A, ISO14443B, ISO18092
		reads UID (CSN)



<b>Mechanical properties</b>	
Cover	Robust aluminium casting with surface finish
Operating temperature	-40°F to 131°F
Operating relative humidity	10 % - 95 % (non-condensing)
Storing temperature	-40°F to 158°F
Weight	Max net weight: 2.20 lb
Covering level	IP65
Resistance level	IK 7
Dimensions	9.016 × 4.291 × 1.22 inch

## **CONNECTION DIAGRAM**



# Order numbers

## 2N® IP Base



Order No.	01357-001
Name	2N® IP Base, with frame
Desc.	main unit with black frame, HD camera



Order No.	01360-001
Name	2N® IP Base, backplate
Desc.	backplate for easier surface installation



Order No.	01358-001
Name	2N® IP Base, 125kHz card reader
Desc.	125kHz RFID card reader

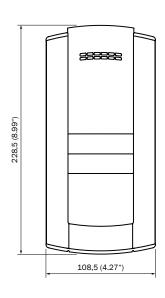


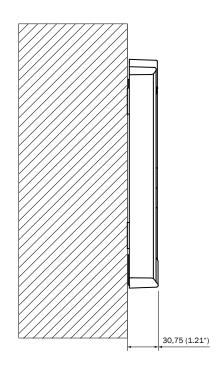
Order No.	01359-001
Name	2N® IP Base, 13.56MHz card reader
Desc.	13.56MHz RFID card reader, reads UID

# Dimensions and fitting

2N® IP Base

WALL-MOUNTED









**ACCESS ANSWERING** CLOUD **INTERCOMS** 64 SIP AUDIO CONTROL **UNITS SERVICES** 

IP ENVIRONMENT

# 2N® IP Safety



















### **KEY FEATURES**

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

### **RECOMMENDED USES**

### To make cities safer

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. Also integrate it also with VMS and public address systems. The external camera zooms in on the area and the speaker can immediately sound a safety warning.

## On roads & highways

Accidents can easily happen on highways and therefore 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.

### In industrial enviroments

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 it's also possible to manage the situation and get back on track in no time.

### EXAMPLE OF CONNECTION OF 2N® IP SAFETY ON MOTORWAY



66

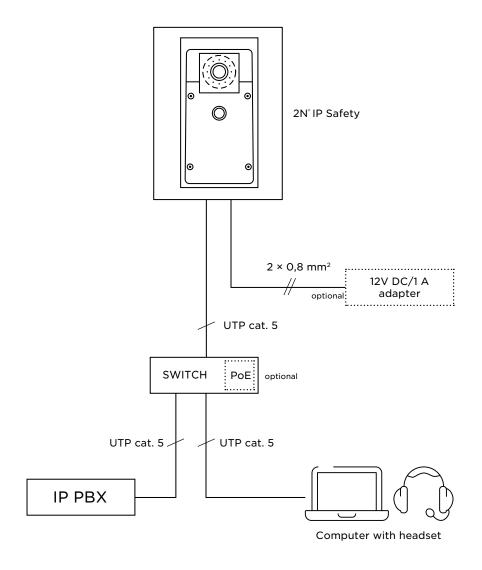
Signalling protocol

2N® IP Safety

	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
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 properties	5
Cover	Robust aluminium casting
Operating temperature	-40 °F to 131 °F
Operating relative humidity	10 % - 95 % (non-condensing)
Storing temperature	-40 °F to 158 °F
Weight	netto max. 4.409 lb / brutto max. 5.511 lb
Covering level	IP69K
Resistance level	IK10
Dimensions	8.543 x 4.291 x 3.268 inch, 9.528 x 5.354 x 3.268 inch incl. frame



## **CONNECTION DIAGRAM**



<sup>\*</sup> Power from external 12V adapter or POE

# Order numbers

# 2N® IP Safety



Order No.	01353-001
Name	2N® IP Safety, 1 button
Desc.	1 button, 10W speaker



Order No.	01354-001
Name	2N® IP Safety, 2 button
Desc.	INFO button and SOS button, blue backlight



Order No.	01355-001
Name	2N® IP Safety, red button
Desc.	red emergency button



Order No.	01356-001
Name	2N® IP Safety, frame
Desc.	2N® IP Safety - metal frame (orange colour)



Orc	ler No.	01350-001
Nar	ne	2N® IP Force/Safety, Additional Switch
Des	sc.	additional input and output relays, tamper switch

# Mounting



Order No.	01348-001
Name	2N® IP Safety, flush box
Desc.	brick flush mounting box



Order No.	01349-001
Name	2N® IP Safety, flush box
Desc.	plasterboard flush mounting box



Order No.	01351-001
Name	2N® IP Force/Safety - Gooseneck
Desc.	Gooseneck stand, height 120cm/47in



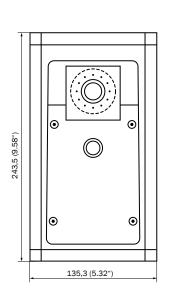
Order No.	01550-001
Name	2N® IP Force/Safety - Gooseneck stand double
Desc.	Gooseneck stand double, height 115cm/45in and 203cm/80in

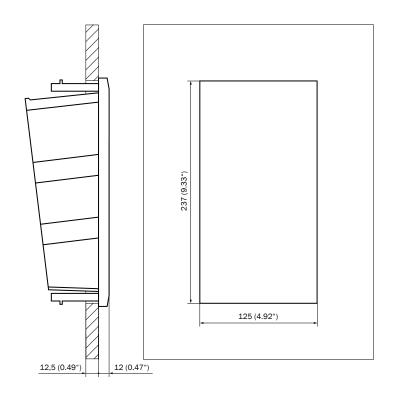
# Dimensions and fitting

2N® IP Safety

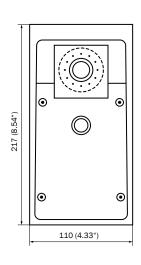
70

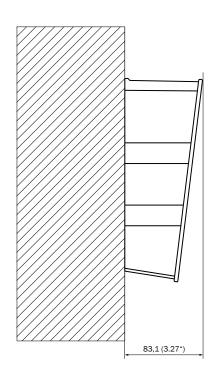
### MOUNTING IN PLASTERBOARD



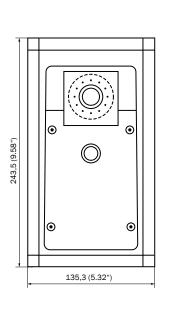


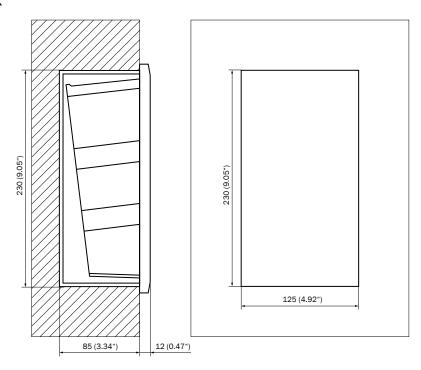
### WALL-MOUNTED





#### FLUSH-MOUNTED WITH BOX





Using LTE technology means no other cable apart from a power supply

communication. The main unit with HD camera can be accompanied

is needed, with a benefit of all advanced features such as video

by RFID, Bluetooth or biometrics supporting modules.



# 2N® LTE Verso

















#### **KEY FEATURES**

- Ideal retrofit solution
- Secure configuration via My2N cloud
- Pick any of the 16 modules available
- Minimal installation costs

#### RECOMMENDED USES

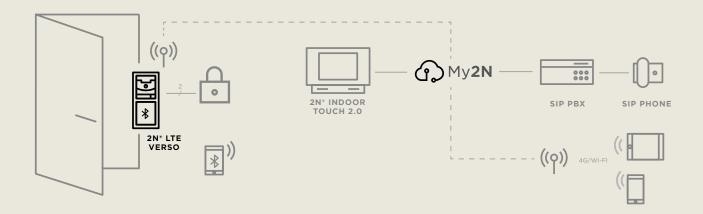
## For an easy and effective upgrade to video intercoms

State protected historical buildings, older terraced houses - all these sites could run into problems when 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, meaning the user benefits from all advanced features such as video communication.

## For communication at remote sites

Imagine a farm with a gate 2 miles 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 a minimum.

#### EXAMPLE OF CONNECTION OF THE 2N® LTE VERSO



SIP (UDP, TCP, TLS)

# Technical parameters

Signalling protocol

**Buttons** 

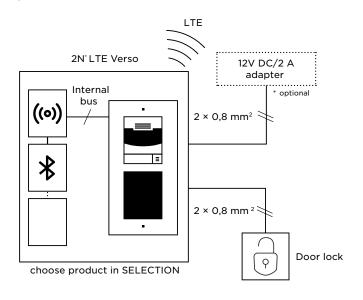
2N® LTE Verso

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
Trainerie Rey pad	
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, L16/16 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
minured 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	10 1/ 115 0/ / 0 4 5 0
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	
Gain	4.1 dB
Power handling	25 W
Operating temperature	- 40°F - 185°F
Dimensions	0.55 x 0.236 x 4.803 inch
Mounting	Adhesive Mount
Cable length	6 ft



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	'S	
Cover	Robust zinc	casting with surface finish
Operating temperature	-40°F to 140	D°F
Operating relative humidity	10 % - 95 %	(non-condensing)
Storing temperature	-40°F to 158	3°F
Weight	Max net we	ight: From 4.41 lb, based on configuration
Covering level	IP54	
Resistance level	IK08	
Dimensions		
Surface mounting fra	me	
1 module	4.213 (W) x	5.118 (H) x 1.102 (D) inch
2 modules	4.213 (W) x	9.213 (H) x 1.102 (D) inch
3 modules	4.213 (W) x	13.346 (H) x 1.102 (D) inch
Flush mounting frame	е	
1 module	5.118 (W) x	6.024 (H) x 0.197 (D) inch
2 modules	5.118 (W) x	10.118 (H) x 0.197 (D) inch
3 modules	5.118 (W) x	14.213 (H) x 0.197 (D) inch
Flush mounting box (	minimum hol	e dimensions)
1 module	4.252 (W) x	5.157 (H) x 1.772 (D) inch
2 modules	4.252 (W) x	9.37 (H) x 1.772 (D) inch
3 modules	4.252 (W) x	13.504 (H) x 1.772 (D) inch
Module internal cutor	ut	
2.835 x 3.516 inch		

#### **CONNECTION DIAGRAM**



# Order numbers

### Main unit and modules



Order No.	01792-001/ 01791-001
Name	Main unit with camera nickel/ black
Desc.	internal LTE antenna, 1 button, HD camera



Order No.	01275-001
Name	Touch Display module
Desc.	module for 2N° LTE Verso, tree-structured phone book, touch keypad



Order No.	01252-001
Name	Infopanel module
Desc.	module for 2N® LTE Verso, backlit



Order No.	01276-001
Name	Fingerprint Reader module
Desc.	module for 2N° LTE Verso, spoof fingerprint detection, optical technology



Order No.	01277-001
Name	Touch Keypad module
Desc.	module for 2N° LTE Verso, capacitive touchscreen regular automatic calibration



Order No.	01253-001/ 01254-001
Name	Keypad module nickel/black
Desc.	module for 2N° LTE Verso, mechanical keypad, backlit symbols



Order No.	01258-001
Name	5 Buttons module
Desc.	module for 2N® LTE Verso, quick dial buttons



Order No.	02140-001
Name	RFID Card Reader module, 125kHz
Desc.	supports the 125kHz EM-41xx or HID Proximity

Order No.	02141-001
Name	RFID Card Reader module, 13.56MHz, NFC ready
Desc.	supports 13.56MHz cards



Order No.	01639-001
Name	Bluetooth & RFID module
Desc.	125kHz, secured 13.56MHz, NFC ready, Bluetooth 4.0



Order No.	01638-001
Name	Touch Keypad & RFID module
Desc.	125kHz, secured 13.56MHz, NFC ready



Order No.	01263-001
Name	Induction Loop module
Desc.	module for 2N° LTE Verso, audio signal directly into a hearing aid



Order No.	01261-001
Name	Blind Panel module
Desc.	module for 2N° LTE Verso, 1 blind module supplied with the main unit



Order No.	01257-001
Name	I/O module
Desc.	module for 2N° LTE Verso, installed under another module, 2 inputs and 2 relay outputs



Order No.	01259-001
Name	Wiegand module
Desc.	module for 2N° LTE Verso, installed under another module, for interconnection of systems



Order No.	01260-001
Name	Tamper Switch module
Desc.	module for 2N® LTE Verso



Order No.	01975-001
Name	Security Bundle for 2N® IP/LTE Verso
Desc.	includes Tamper switch, I/O module and



Order No.	02577-001
Name	OSDP
Desc.	connects the 2N IP intercom reader to a third-party access control system

## Frames



Order No.	01278-001/ 01279-001
Name	1 module flush frame nickel / black
Desc.	frame for installation in the wall, 1 module



Order No.	01287-001/ 01288-001
Name	1 module surface frame nickel / black
Desc.	frame for installation on the surface, 1 module



Order No.	01280-001/ 01281-001
Name	2 module flush frame nickel / black
Desc.	frame for installation in the wall, 2 modules



Order No.	01289-001/ 01290-001
Name	2 module surface frame nickel / black
Desc.	frame for installation on the surface, 2 modules



Order No.	01282-001/ 01283-001
Name	3 module flush frame nickel / black
Desc.	frame for installation in the wall, 3 modules



Order No.	01291-001/ 01292-001
Name	3 module surface frame nickel / black
Desc.	frame for installation on the surface, 3 modules

## Backplates and boxes



Order No.	01293-001
Name	1 module backplate
Desc.	backplate for installation on glass or uneven surface, 1 module



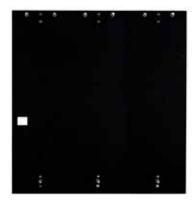
Order No.	01294-001
Name	2 modules backplate
Desc.	backplate for installation on glass or uneven surface, 2 modules



Order No.	01295-001
Name	3 modules backplate
Desc.	backplate for installation on glass or uneven surface, 3 modules



Order No.	01296-001
Name	2 (w) x2 (h) modules backplate
Desc.	backplate for installation on glass or uneven surface, 2x2 modules



Order No.	01297-001
Name	3 (w) x3 (h) modules backplate
Desc.	backplate for installation on glass or uneven surface, 3x3 modules



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Order No.	01298-001
Name	2 (w) x3 (h) modules backplate
Desc.	backplate for installation on glass or uneven surface, 2x3 modules



Order No.	01299-001
Name	3 (w) x2 (h) modules backplate
Desc.	backplate for installation on glass or uneven surface, 3x2 modules



Order No.	01284-001
Name	1 module flush box
Desc.	box for installation in the wall, 1 module



Order No.	01940-001
Name	Wedge Backplate
Desc.	angle 25°, only for surface installation of 2N® IP/LTE Verso double-modules



Order No.	01285-001
Name	2 modules flush box
Desc.	box for installation in the wall, 2 modules



	Order No.	01286-001
	Name	3 modules flush box
	Desc.	box for installation in the wall, 3 modules

## Other



Order No.	01267-001
Name	Extension cable- 3 ft long
Desc.	connection of modules in greater distance from the main unit



Order No.	01268-001
Name	Extension cable- 9 ft long
Desc.	connection of modules in greater distance from the main unit



Order No.	01269-001
Name	Extension cable- 15 ft long
Desc.	connection of modules in greater distance from the main unit

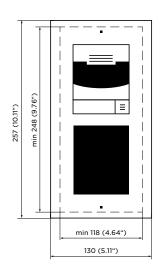


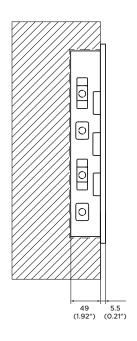
Order No.	01943-001
Name	External antenna for 2N® LTE Verso
Desc.	6 ft long cable

# Dimensions and fitting

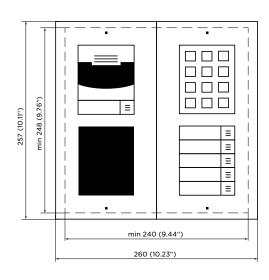
2N® LTE Verso

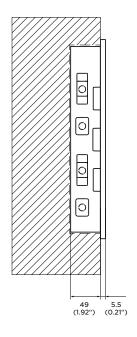
#### **IN-WALL 2 MODULES**



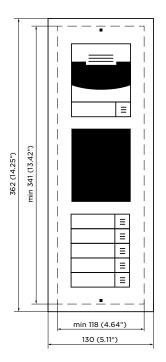


#### 2× IN-WALL 2 MODULES

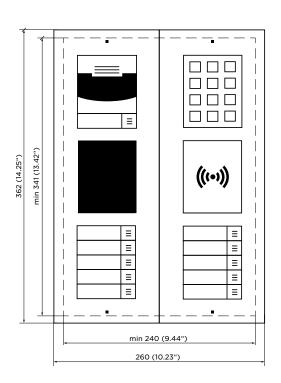


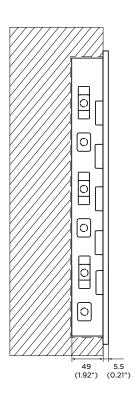


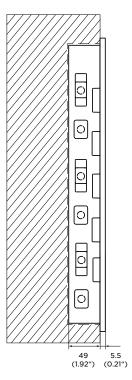
#### IN-WALL 3 MODULES



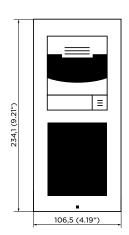
#### 2× IN-WALL 3 MODULES

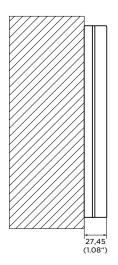




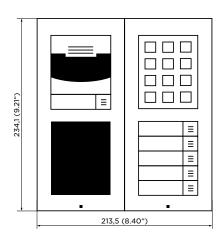


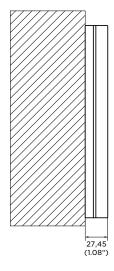
#### WALL-MOUNTED 2 MODULES



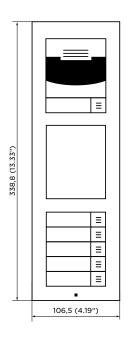


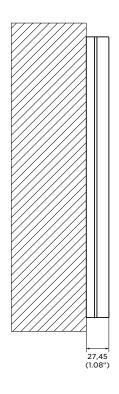
#### 2× WALL-MOUNTED 2 MODULES



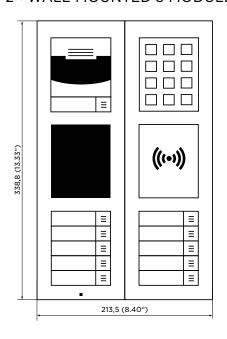


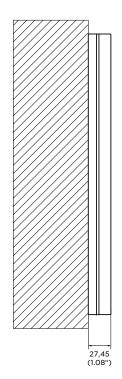
#### WALL-MOUNTED 3 MODULES



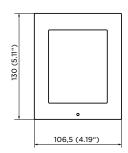


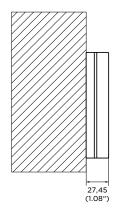
#### 2× WALL-MOUNTED 3 MODULES



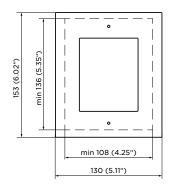


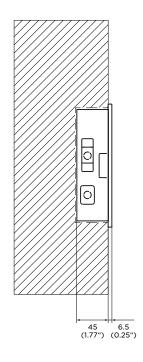
#### WALL-MOUNTED 1 MODULE





#### IN-WALL 1 MODULE





2N® IP Audio Kit

# Create your own IP intercom

This OEM IP intercom is intended for incorporation into a variety of devices. It is designed to value in the form of remote control, monitoring, and audio communication. Benefit from live support at the push of a button.



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# 2N® IP Audio Kit

#### **KEY FEATURES**

#### · VoIP solution you don't have to develop

This OEM intercom is easily incorporated into your existing device.

Thanks to IP technology you simply extend it to include

IP audio functionality.

#### • Wide range of connectors

Choose from a wide range of interfaces. Hook up a microphone, speakers, headphones or keypad buttons.

#### SIP support, with no server needed

With its 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 this OEM intercom system to be easily integrated into the master system for remote administration. Alternatively, save time and money on on-site support thanks to our free service 2N\* Remote Configuration. Access all your devices remotely via secured cloud connection.

#### Adaptive volume

The 2N® IP Audio Kit automatically adjusts speaker volume based on ambient noise level.

#### TECHNICAL PARAMETERS

Signalling protocol	
	SIP (UDP, TCP, TLS)
Buttons/Keypad Interface	
	Up to 16 separate buttons in 4x4 matrix
Audio	
Microphone	electret microphone, Max. Vpp = 100mV, Rin = 4.4kΩ, Vbias = 1.5V
Line input	Max. 755mV RMS, Rin = $47k\Omega$
Amplifier	10W (class D), MONO output, THD < 1%, min. loudspeaker impedance: $4\Omega$
Line output	Max. 755mV RMS, Rout = $600\Omega$
Full duplex	Yes (AEC)
Protocols	RTP/RTSP
Codecs	G.711
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
Active switch outputs	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°F - 131°F
Working relative humidity	10% - 95% (non-condensing)
Storing temperature	-40°F - 158°F
Dimensions	5.591 x 3.858 x 1.339 inch
Weight	Up to 0.617 lb
Protection class	IP20

# Order numbers

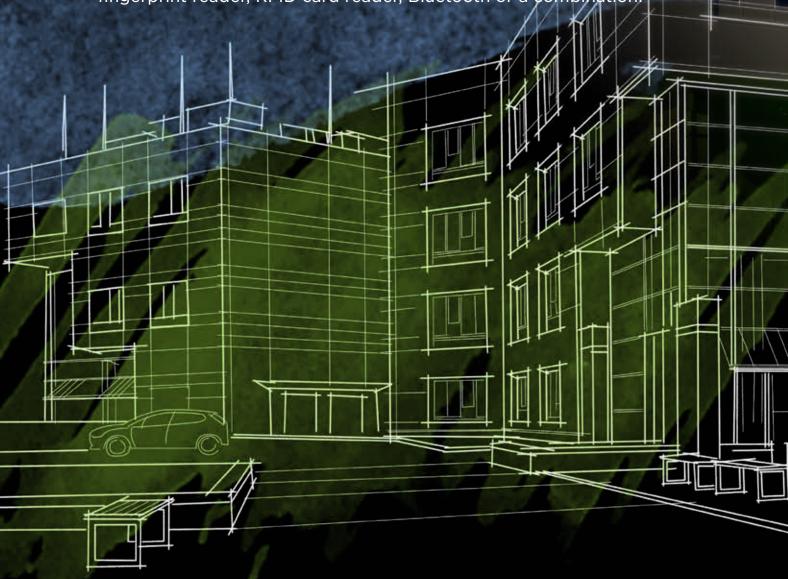
2N® Audio Kit



Order No.	01526-001
Name	2N® IP Audio Kit
Desc.	OEM IP Intercom, audio addition

# Readers with complete intelligence

The innovative 2N Access Units 2.0 are based on IP technology and combine the functions of a traditional controller and end access device simultaneously. The units are available with a touch keypad, fingerprint reader, RFID card reader, Bluetooth or a combination.





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# 2N Access Unit 2.0



#### **KEY FEATURES**

- · Controller and reader in one
- Single cable installation
- · Wide variety of access technologies
- Remote configuration and management

#### **RECOMMENDED USES**

## A villa secured by a fingerprint reader

The 2N® Access Unit 2.0 Fingerprint Reader offers a perfect solution for a family house. Keep what's most important to you under maximum protection. The residents can rest assured they will never have problems getting in - the access unit is both weather resistant and very secure - it cannot be tricked, even by spoof fingerprints.

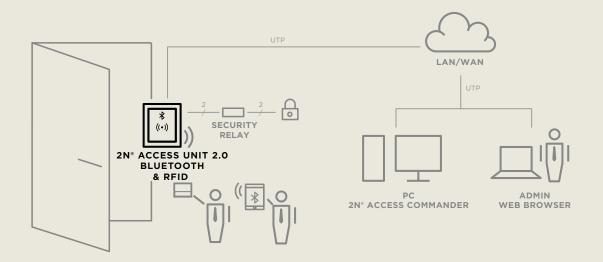
## For areas needing high protection

In places where a higher level of security is needed (such as banks, labs, warehouses or stores), users need to prove their identity twice - once by swiping their RFID card, and again by entering a PIN code. This is 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.

## As a convenient way of accessing a common space

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

#### EXAMPLE OF CONNECTION OF THE 2N ACCESS UNIT 2.0



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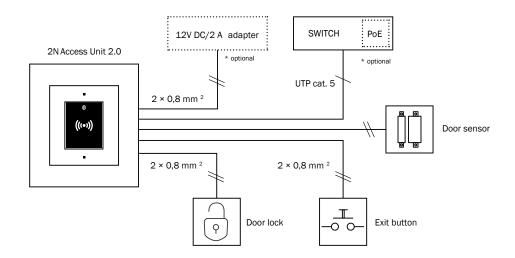
2N Access Unit 2.0

Interfaces   Power supply   12 V ±15 % / 2 A DC or PoE	Audio	
Power supply PoE PoE PoE PoE PoE 802.3af (Class 0-12.95 W) PoE 802	Speaker	0.8 W / 8 Ω
Power supply PoE PoE PoE PoE PoE B02.3af (Class O-12.95 W) PoE B02		
PoE PoE 802.3af (Class 0-12.95 W)  10/100BASE-TX with Auto-MDIX, RJ-45 modular jack (916013 has terminal block or needs RJ-45 pigtail)  Recommended wiring Cat-5e or higher  Supported protocols DHCP opt. 66, SMTP, TFTP, HTTP, HTTPS, Syslog Passive switch NO/NC contact, up to 30 V / 1 A AC/DC  Active switch output 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 of the 2N Access Unit  RFID card reader  Supported frequencies 125kHz or 13.56MHz  EM4100, EM4102 HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  13.56 MHz IS014443A, IS014443B, IS015693, NFC support reads UID (CSN) reads PACs ID (ICLASS SIO-enabled cards)  Bluetooth  Version Compatible with Bluetooth 4.0 or higher (BLE) (Short - 1.5 ft, middle - 6 ft, long - up to 30 ft)  Security RSA-1024 and AES-128 encryption  Mobile applications 2N° Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)  Fingerprint reader  Sensor Optical, with resistant glass  Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity)  Calibration SmartSence (regular automatic calibration)	Interfaces	
LAN RJ-45 modular jack (916013 has terminal block or needs RJ-45 pigtail)  Recommended wiring Cat-5e or higher  Supported protocols DHCP opt. 66, SMTP, 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 of the 2N Access Unit  RFID card reader  Supported frequencies 125kHz or 13.56MHz  EM4100, EM4102 HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  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  Adjustable (short - 1.5 ft, middle - 6 ft, long - up to 30 ft)  Security RSA-1024 and AES-128 encryption  Mobile applications 2N° Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)  Fingerprint reader  Sensor Optical, with resistant glass  Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity)  Calibration SmartSence (regular automatic calibration)	Power supply	12 V ±15 % / 2 A DC or PoE
Recommended wiring Cat-5e or higher Supported protocols Passive switch NO/NC contact, up to 30 V / 1 A AC/DC Active switch output Inputs RefiD card reader Supported frequencies 125kHz or 13.56MHz 15kHz 15	PoE	PoE 802.3af (Class 0-12.95 W)
Supported protocols Passive switch NO/NC contact, up to 30 V / 1 A AC/DC  Active switch output B 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 of the 2N Access Unit  RFID card reader  Supported frequencies 125kHz EM4100, EM4102 HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  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 Adjustable (short - 1.5 ft, middle - 6 ft, long - up to 30 ft)  Security RSA-1024 and AES-128 encryption  Mobile applications  Pingerprint reader  Sensor Optical, with resistant glass Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity) Calibration SmartSence (regular automatic calibration)	LAN	RJ-45 modular jack (916013 has
Passive switch  NO/NC contact, up to 30 V / 1 A AC/DC  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 of the 2N Access Unit  RFID card reader  Supported frequencies  125 kHz  EM4100, EM4102  HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  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  Adjustable (short - 1.5 ft, middle - 6 ft, long - up to 30 ft)  Security  RSA-1024 and AES-128 encryption  Mobile applications  Pringerprint reader  Sensor  Optical, with resistant glass  Signalization  Acoustic and multi-coloured LED  Sensing area  O,6 x 0,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)	Recommended wiring	Cat-5e or higher
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 of the 2N Access Unit  RFID card reader  Supported frequencies  125 kHz  EM4100, EM4102  HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  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  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security  RSA-1024 and AES-128 encryption  Mobile applications  Pringerprint reader  Sensor  Optical, with resistant glass  Signalization  Acoustic and multi-coloured LED  Sensing area  O,6 x 0,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)	Supported protocols	DHCP opt. 66, SMTP, TFTP, HTTP, HTTPS, Syslog
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 of the 2N Access Unit  RFID card reader  Supported frequencies  125kHz	Passive switch	NO/NC contact, up to 30 V / 1 A AC/DC
Tamper switch is part of the 2N Access Unit  RFID card reader  Supported frequencies 125 kHz  EM4100, EM4102  HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  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  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security  RSA-1024 and AES-128 encryption  Mobile applications  Fingerprint reader  Sensor  Optical, with resistant glass Signalization  Acoustic and multi-coloured LED  Sensing area  0,6 x 0,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)	Active switch output	, , , , ,
RFID card reader  Supported frequencies  125 kHz  EM4100, EM4102  HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  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  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security  RSA-1024 and AES-128 encryption  Mobile applications  Pingerprint reader  Sensor  Optical, with resistant glass  Signalization  Acoustic and multi-coloured LED  Sensing area  O,6 x 0,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)	Inputs	1 :
Supported frequencies  125 kHz  EM4100, EM4102  HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  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  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security  RSA-1024 and AES-128 encryption  Mobile applications  Pringerprint reader  Sensor  Optical, with resistant glass  Signalization  Acoustic and multi-coloured LED  Sensing area  O,6 x O,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)	Tamper switch is part o	f the 2N Access Unit
Supported frequencies  125 kHz  EM4100, EM4102  HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  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  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security  RSA-1024 and AES-128 encryption  Mobile applications  Pringerprint reader  Sensor  Optical, with resistant glass  Signalization  Acoustic and multi-coloured LED  Sensing area  O,6 x O,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)		
frequencies  125 kHz  EM4100, EM4102  HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  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  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security  RSA-1024 and AES-128 encryption  Mobile applications  Fingerprint reader  Sensor  Optical, with resistant glass  Signalization  Acoustic and multi-coloured LED  Sensing area  O,6 x 0,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)	RFID card reader	
HID Proximity (only versions with 125kHz reader and marked "S" or "US" in Order No.)  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  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security  RSA-1024 and AES-128 encryption  Mobile applications  Pingerprint reader  Sensor  Optical, with resistant glass  Signalization  Acoustic and multi-coloured LED  Sensing area  O,6 x 0,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)		125kHz or 13.56MHz
marked "S" or "US" in Order No.)  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  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security  RSA-1024 and AES-128 encryption  Mobile applications  Pingerprint reader  Sensor  Optical, with resistant glass Signalization  Acoustic and multi-coloured LED  Sensing area  O,6 x 0,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)	125 kHz	EM4100, EM4102
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 ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security RSA-1024 and AES-128 encryption  Mobile applications 2N* Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)  Fingerprint reader  Sensor Optical, with resistant glass Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity) Calibration SmartSence (regular automatic calibration)		
reads PACs ID (iCLASS SIO-enabled cards)  Bluetooth  Version Compatible with Bluetooth 4.0 or higher (BLE)  RX sensitivity Up to -93 dBm  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security RSA-1024 and AES-128 encryption  Mobile applications 2N® Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)  Fingerprint reader  Sensor Optical, with resistant glass Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity)  Calibration SmartSence (regular automatic calibration)	13.56 MHz	ISO14443A, ISO14443B, ISO15693, NFC support
Bluetooth  Version Compatible with Bluetooth 4.0 or higher (BLE)  RX sensitivity Up to -93 dBm  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security RSA-1024 and AES-128 encryption  Mobile applications 2N® Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)  Fingerprint reader  Sensor Optical, with resistant glass Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity)  Calibration SmartSence (regular automatic calibration)		reads UID (CSN)
Version Compatible with Bluetooth 4.0 or higher (BLE) RX sensitivity Up to -93 dBm  Range Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security RSA-1024 and AES-128 encryption  Mobile applications 2N* Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)  Fingerprint reader  Sensor Optical, with resistant glass Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity) Calibration SmartSence (regular automatic calibration)		reads PACs ID (iCLASS SIO-enabled cards)
Version Compatible with Bluetooth 4.0 or higher (BLE) RX sensitivity Up to -93 dBm  Range Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security RSA-1024 and AES-128 encryption  Mobile applications 2N* Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)  Fingerprint reader  Sensor Optical, with resistant glass Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity) Calibration SmartSence (regular automatic calibration)		
RX sensitivity  Up to -93 dBm  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security  RSA-1024 and AES-128 encryption  Mobile applications  2N* Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)  Fingerprint reader  Sensor  Optical, with resistant glass Signalization  Acoustic and multi-coloured LED  Sensing area  O,6 x 0,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)	Bluetooth	
Range  Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)  Security  RSA-1024 and AES-128 encryption  2N* Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)  Fingerprint reader  Sensor  Optical, with resistant glass  Signalization  Acoustic and multi-coloured LED  Sensing area  O,6 x 0,8 inch  Touch Keypad  Technology  Capacitive (0.1pF sensitivity)  Calibration  SmartSence (regular automatic calibration)	Version	Compatible with Bluetooth 4.0 or higher (BLE)
Security   RSA-1024 and AES-128 encryption	RX sensitivity	Up to -93 dBm
Mobile applications  2N* Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)  Fingerprint reader  Sensor Optical, with resistant glass Signalization Acoustic and multi-coloured LED Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity) Calibration SmartSence (regular automatic calibration)	Range	1 .
Fingerprint reader  Sensor Optical, with resistant glass Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad Technology Capacitive (0.1pF sensitivity) Calibration SmartSence (regular automatic calibration)	Security	RSA-1024 and AES-128 encryption
Sensor Optical, with resistant glass  Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity)  Calibration SmartSence (regular automatic calibration)	Mobile applications	
Signalization Acoustic and multi-coloured LED  Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity)  Calibration SmartSence (regular automatic calibration)	Fingerprint reader	
Sensing area 0,6 x 0,8 inch  Touch Keypad  Technology Capacitive (0.1pF sensitivity)  Calibration SmartSence (regular automatic calibration)	Sensor	Optical, with resistant glass
Touch Keypad  Technology Capacitive (0.1pF sensitivity)  Calibration SmartSence (regular automatic calibration)	Signalization	Acoustic and multi-coloured LED
Technology Capacitive (0.1pF sensitivity) Calibration SmartSence (regular automatic calibration)	Sensing area	0,6 x 0,8 inch
Calibration SmartSence (regular automatic calibration)	Touch Keypad	
	Technology	Capacitive (0.1pF sensitivity)
Signalization Acoustic and multi-coloured LED	Calibration	SmartSence (regular automatic calibration)
	Signalization	Acoustic and multi-coloured LED



Mechanical properties	
Frame	Robust zinc cast with surface finish
Operating temperature	-40°F to + 140°F
Operating relative humidity	10 % - 95 % (non-condensing)
Storage temperature	-40°F to +158°F
Weight	max 1,76 pounds (based on configuration)
Cover rating	IP54
Resistance level	IK08
Dimensions	
Wall (surface) mounting frame	
1 module	4,21 (W) x 5,11 (H) x 1,10 (D) inch
Flush mounting frame	
1 module	5,11 (W) x 6,02 (H) x 0,19 (D) inch
Flush mounting box (minimum hole dimensions)	
1 module	4,25 (W) x 5,15 (H) x 1,77 (D) inch

#### **CONNECTION DIAGRAM**



# Order numbers

### 2N Access Unit 2.0



Order No.	02137-001
Name	2N® Access Unit 2.0 RFID
Desc.	125kHz



Order No.	02142-001
Name	2N® Access Unit 2.0 RFID
Desc.	secured 13.56MHz



Order No.	02146-001
Name	2N® Access Unit 2.0 RFID
Desc.	125kHz, secured 13.56MHz, NFC, reads HID Prox



Order No.	01851-001
Name	2N® Access Unit 2.0 Bluetooth & RFID
Desc.	125kHz, secured 13.56MHz, NFC



Order No.	01852-001
Name	2N® Access Unit 2.0 Touch Keypad & RFID
Desc.	125kHz, secured 13.56MHz, NFC



Order No.	02262-001
Name	2N® Access Unit 2.0 Touch Keypad
Desc.	capacitive touch technology, regular automatic calibration, backlit symbols



Order No.	02263-001
Name	2N® Access Unit 2.0 Fingerprint Reader
Desc.	optical technology, acoustic and visual signalling, weatherproof

## Accessories



Order No.	01278-001/01279-001
Name	1 module flush frame nickel/ black
Desc.	frame for installation in the wall, in nickel or black colour



Order No.	01287-001/01288-001
Name	1 module surface frame nickel/ black
Desc.	frame for installation on the surface, in nickel or black colour



Order No.	01284-001
Name	1 module flush box
Desc.	box for installation in the wall



Order No.	01371-001
Name	RJ-45 connector cable
Desc.	cable for interconnecting the Access Units



Order No.	01293-001
Name	1 module backplate
Desc.	backplate for surface installation, 1 module



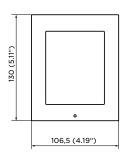
Name	2N® Mobile Key
Desc.	a free application that turns your mobile phone into an access card

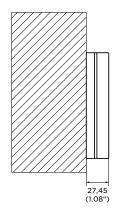
# Dimensions and fitting

### 2N Access Unit 2.0

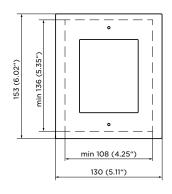
#### WALL-MOUNTED 1 MODULE

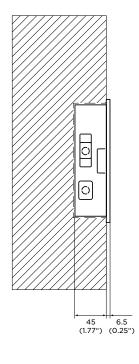
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#### **IN-WALL 1 MODULE**





2N Access Unit M

# Access control readers in mullion design

A very narrow design makes these readers ideal for installation on a door frame or on 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 not only looks elegant, but also guarantees resistance to scratches.



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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 USES**

## For high level of protection of server rooms

All servers with sensitive data deserve real protection – cybersecurity as well as physical security. Let 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.

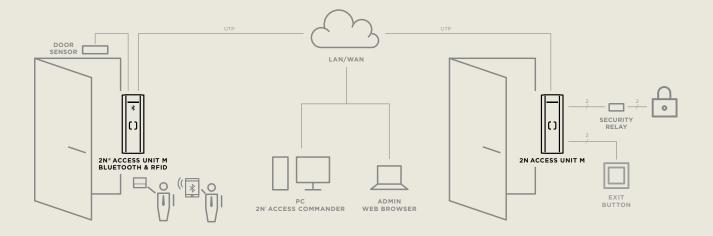
## For securing meeting rooms

A project with meeting rooms that need empoyee authorisation to enter, and have glazd windows can prove difficult. We have a simple solution - the 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 which suits them best.

## In 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



# Technical parameters

Audio

2N Access Unit M

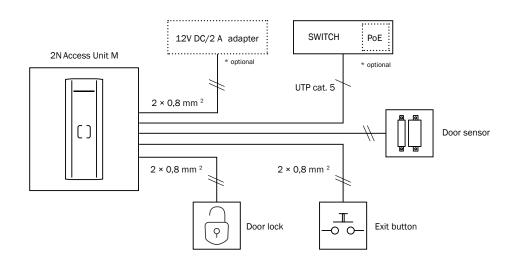
Speaker	0.8 W / 8 Ω
Interfaces	
Power supply	12 V ±15 % / 2 A DC or PoE
PoE	PoE 802.3af (Class 0-12.95 W)
LAN	10/100BASE-TX with Auto-MDIX, RJ-45 modular jack
Recommended wiring	Cat-5e or higher
Supported protocols	DHCP opt. 66, SMTP, 802.1x, TFTP, HTTP, HTTPS, Syslog
Passive switch	NO/NC contact, up 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 o	f the 2N Access Unit M
RFID card reader	
Supported frequencies	125kHz and 13.56MHz
125 kHz	EM4100, EM4102
13.56 MHz	ISO14443A, ISO14443B, ISO15693, NFC support
	reads UID (CSN)
Bluetooth	
Version	Compatible with Bluetooth 4.0 or higher (BLE)
RX sensitivity	Up to -93 dBm
Range	Adjustable (short ~ 1.5 ft, middle ~ 6 ft, long ~ up to 30 ft)
Security	RSA-1024 and AES-128 encryption
Mobile applications	2N® Mobile Key (Android 6.0 and higher, iOS 12.0 and higher)
Touch Keypad	
Technology	Capacitive (0.1pF sensitivity)
Signalization	Acoustic and multi-coloured LED

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Mechanical properties	
Cover	Tempered glass with rugged plastic
Operating temperature	-40°F to + 140°F
Operating relative humidity	10 % - 95 % (non-condensing)
Storage temperature	-40°F to +158°F
Weight	max 1.1 pounds
Cover rating	IP55
Resistance level	IK07
Dimensions	
Wall (surface) mounting	g frame
	1.969 (W) x 5.236 (H) x 1.063 (D) inch

## **CONNECTION DIAGRAM**



# Order numbers

## 2N Access Unit M



Order No.	02393-001
Name	2N® Access Unit M RFID
Desc.	13.56MHz, NFC ready
Order No.	02394-001
Order No.	<b>02394-001</b> 2N* Access Unit M RFID



Order No.	02395-001
Name	2N® Access Unit M Bluetooth & RFID
Desc.	125kHz, 13.56MHz, NFC



Order No.	02396-001
Name	2N® Access Unit M Touch Keypad & RFID
Desc.	125kHz, 13.56MHz, NFC

## Accessories

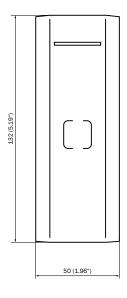


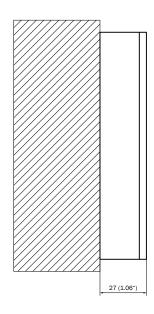
Order No.	
Name	2N® Mobile Key
Desc.	free application that turns your mobile phone into an access card
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# Dimensions and fitting

## 2N Access Unit M

### WALL-MOUNTED

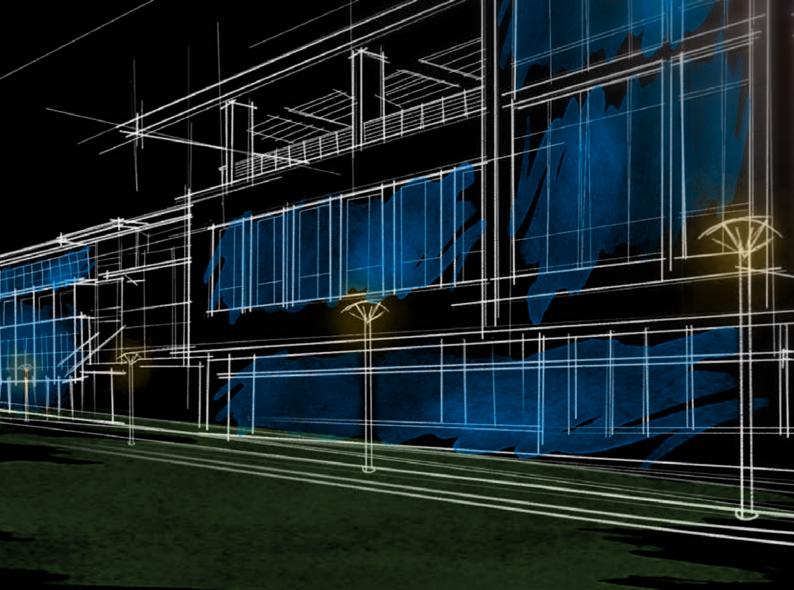






# Software for access control and bulk management

2N® Access Commander, the 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.





## 2N® Access Commander

#### **KEY FEATURES**

### CENTRALISED DEVICE MANAGEMENT

Update firmware in bulk and in a few clicks. It ensures optimal performance and security of devices. Plus you can see immediately if devices are all online and check their door states.

#### MULTI-COMPANY SITES

Admins may control the whole site whilst managers may be granted set privileges in their own company. This makes 2N® Access Commander an ideal solution for buildings with several companies.

#### ATTENDANCE MONITORING

 $2N^{st}$  Access Commander offers native attendance monitoring features. Track user attendance, view reports in the software and export records to PDF or CSV.

## • HIGHLY OPEN TO INTEGRATION

A REST API offers endless integration possibilities. LDAP support and custom mappings streamline workflow with user directories. CSV sync provides low level integration with simpler systems.

### • LOGS AND NOTIFICATIONS

Respond more effectively to designated events thanks to instant alerts by email or in the notification channel. Get the full picture with camera logs offering snapshots surrounding chosen events.

#### • FREE MOBILE CREDENTIALS

Mobile access control, powered by WaveKey, is fully integrated in the software. No separate reader programming tools, no need to use a 3<sup>rd</sup> party mobile credential gateway and best of all, no charge for credentials.

#### VISITOR CREDENTIAL MANAGEMENT

Easily onboard visitors, granting time-limited access to the areas you choose. Issue credentials remotely for self-serve access and maintain an audit trail for compliance.

#### AREA RESTRICTIONS

Tighten security and enforce access policy compliance with the Anti-passback function. Restrict how many people are allowed in an area with Occupancy Management.

## TECHNICAL PARAMETERS

#### General

The  $2N^{\circ}$  Access Commander is distributed as an image for server installation  $(2N^{\circ}$  Access Commander Virtual Machine) or as a software pre-installed on mini-PC  $(2N^{\circ}$  Access Commander Box).

Virtual Machine		
The 2N* Access Commander is an access control software distributed as a complete package in the .OVA format. It is intended to be imported into the virtual systems such as Oracle VM VirtualBox, VMware (v6.5) or Microsoft Hyper-V.  The server should be up and running 24/7 as it records all logs from connected 2N devices.		
Below are the minimum suggested requirements for an installation of up to 500 devices (2N IP intercoms and access units) connected to the 2N® Access Commander and 7,000 users.		
any 64-bit system (Windows, Linux, macOS, Solaris)		
2 GHz & 2 cores (64-bit)		
2 GB		
needed for the software upgrade (512 kbps at least)		
Вох		
The 2N® Access Commander Box is an access control software pre-installed on an ultra-compact, small and powerful computer.		
2.209 x 4.236 x 4.504 inch		
2.24 GHz (Intel® Celeron® Processor J3160)		
120 GB (2.5" SSD SATA III)		
4 GB (DDR3 SODIMM memory)		
VGA and HDMI Gigabit LAN port		
VESA mounting bracket		
32°F to +95°F		
-4°F to +140°F		
500		
7,000		
1,500		
Supported browsers		
Google Chrome browser (version 60 and higher)		
Mozilla Firefox (version 55 or higher), Microsoft Edge (version 40 and higher) As other browsers have not been fully tested, their full functionality cannot be guaranteed.		

## Order numbers

## 2N® Access Commander



Order No.	01672-001
Name	2N® Access Commander Box
Desc.	Access Control software pre-installed on mini-PC (2.209 x 4.236 x 4.504 inch)

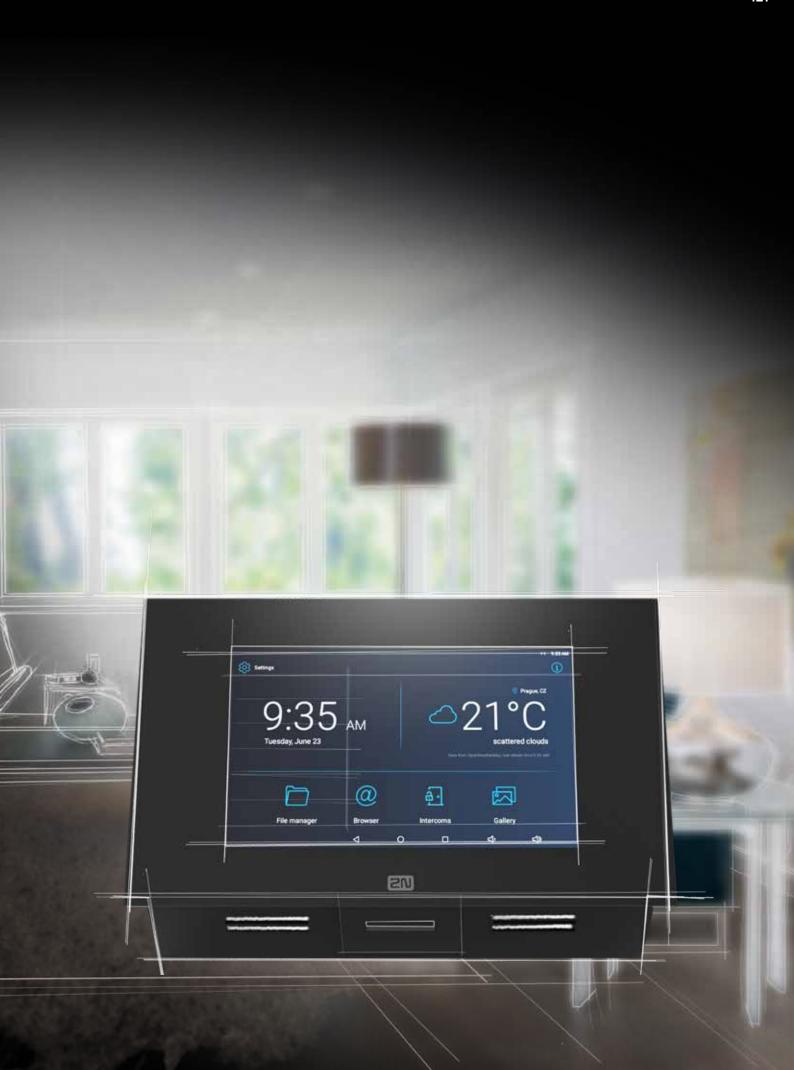


Information about the license policy for 2N\* Access Commander can be found on our website www.2n.com

# 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, and you can open a dialogue or open the door lock.





IP ENVIRONMENT

## 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



reddot design award winner 2017

#### **RECOMMENDED USES**

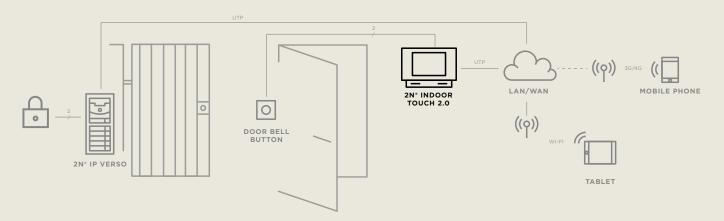
## For home entrance monitoring

Keep track of what's going on 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.

## For 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. Enjoy having air-conditioning, lighting, playing music and even greeting visitors at your door under your complete control.

## EXAMPLE OF CONNECTION OF THE 2N® INDOOR TOUCH 2.0



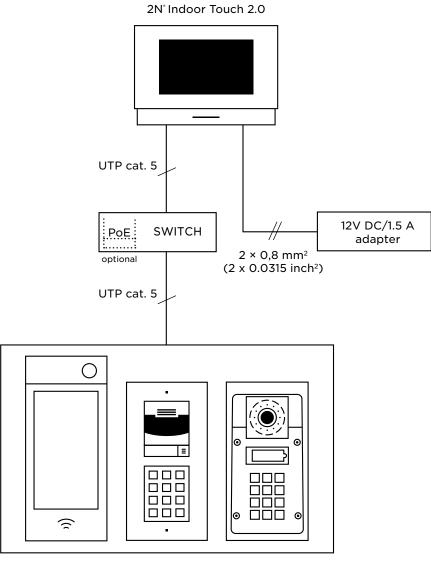
2N® Indoor Touch 2.0

Power Supply	
Туре	12V DC adapter or PoE 802.3af
Recommended	12V/1A
power supply	
Reverse polarity protection	yes
User interface	
Controls	high-capacity touch screen
Display size	7" colour display
Resolution	1024x600px, 16:9
Backlighting	LED with eco mode
Status indicator	1x RGB LED (missed calls, eco mode, etc.)
Operating System	
	Android 6.0
Audio	
Microphone	integrated
Speaker	integrated, 2W
Codecs	G.711, G.722, G.729
Video	
Codecs	H.264, MJPEG
Interface	
LAN	10/100BaseT, RJ-45
Recommended cabling	Cat5e or better
2x relay	
2x GPIO	
(doorbell input, etc.)	
Memory card	microSD card (up to 16GB)



Mechanical Parameters	
Dimensions (W x H x D)	9,252 x 6,496 x 1,575 inch
Weight	1.874 lb
Operating temperature	32°F to 140°F
Relative operating humidity	10% to 90% (non-condensing)
Storage temperature	-4°F to 158°F
Recommended altitude	0 to 6,500 ft

## **CONNECTION DIAGRAM**



Optional VIDEO INTERCOM

## Order numbers

## 2N® Indoor Touch 2.0



Order No.	01668-001
Name	2N® Indoor Touch 2.0, PoE, black
Desc.	7" touchscreen, 0.157 inch glass, capacitive touch, license for installation of 3 <sup>rd</sup> party applications for Android



Order No.	01669-001
Name	2N® Indoor Touch 2.0, PoE, white
Desc.	7" touchscreen, 0.157 inch glass, capacitive touch, license for installation of 3 <sup>rd</sup> party applications for Android



Order No.	01423-001
Name	2N® Indoor Touch 2.0, flush mounted power supply
Desc.	power supply for installation in the wall



Order No.	01425-001
Name	2N® Indoor Touch 2.0, desk stand black
Desc	Dock stand black



Order No.	01426-001
Name	2N® Indoor Touch 2.0, desk stand white
Desc.	Desk stand white

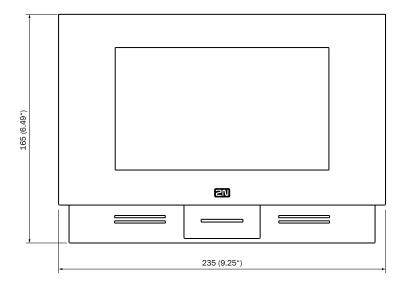


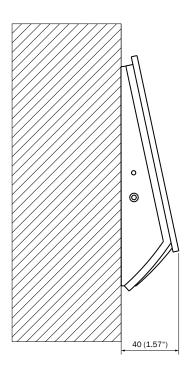
Order No.	02171-001
Name	2N® Meeting Room
Desc.	SW, overview of scheduled occupancy of meeting rooms

# Dimensions and fitting

2N® Indoor Touch 2.0

WALL-MOUNTED





# A lightning-fast indoor station

The main feature of the 2N® Indoor View answering unit is a 7" touchscreen with a wide viewing angle. The tempered glass surface and stylish design are the perfect choice for any luxury residential project. To install the device, all you need is a UTP cable and an installation box.

IP ENVIRONMENT

# 2N® Indoor View



#### **KEY FEATURES**

- 7" touch display with HD resolution
- Immediate response to touch
- Residents' privacy in safe hands
- Remote configuration

#### **RECOMMENDED USES**

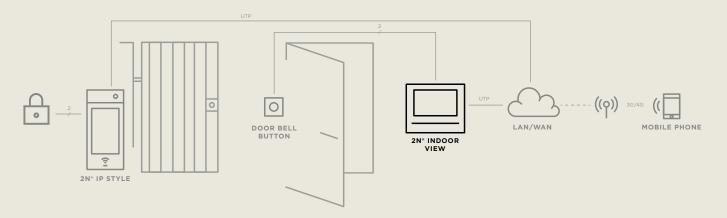
## For full-screen video calls

From a safety perspective, every family will welcome the option of being able to see who is ringing their doorbell. The full-screen preview from the intercom camera is a huge benefit. They can exchange a few words and then remotely let the person in. The full-screen video calls are compatible only with some 2N intercoms.

## Video surveillance and integration

The resident can see what is going on in places where no intercom has been installed, and there is only an IP camera (e.g., a hallway, yard or garage). The resident can turn on the air-conditioning, lighting or call the lift directly from the display on their unit. The unit can send up to 3 different HTTP commands.

### EXAMPLE OF CONNECTION OF THE 2N® INDOOR VIEW



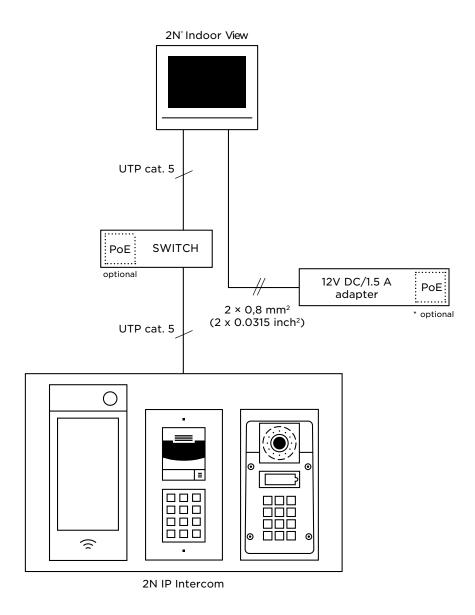
# Technical parameters

## 2N® Indoor View

Power Supply	
Туре	12V DC adapter or PoE 802.3af
Recommended power supply	12V/1A
Reverse polarity protection	yes
User Interface	
Controls	capacitive touch panel
Display size	7"
Resolution	640x480px, 1024x600px
Audio	
Microphone	integrated
Speaker	integrated, 2W
Induction loop output	600mV RMS
Codecs	G.711, G.729, G.722, L16/16kHz
Video	
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 50V/5mA, DC
Mechanical Parameters	
Dimensions (W x H x D)	7.598 x 6.181 x 1.969inch
Weight	1.224 lb
Operating temperature	32°F to 122°F
Relative operating humidity	10 to 90% (non-condensing)
Storage temperature	-4°F to 158°F
Recommended altitude	0 to 6,500 ft



## **CONNECTION DIAGRAM**



## 2N® Indoor View



Order No.	02087-001
Name	2N® Indoor View black
Desc.	in-wall answering unit, 7" display, slim design (0.394 inch)



Order No.	02088-001
Name	2N® Indoor View white
Desc.	in-wall answering unit, 7" display, slim design (0.394 inch)



Order No.	01700-001
Name	2N Indoor Flush Box
Desc.	box for installation in the wall



Order No.	02320-001
Name	2N Indoor Surface Box
Desc.	surface-mount box for 2N answering units, only in black colour

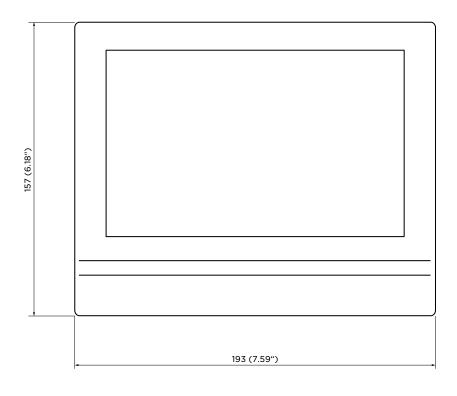


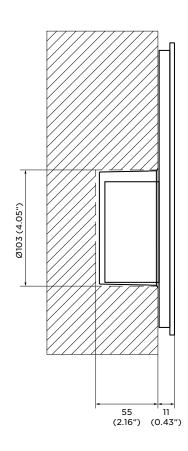
	Order No.	02039-001
	Name	2N Indoor Desk Stand
	Desc.	stand for 2N answering units, only in black colour

# Dimensions and fitting

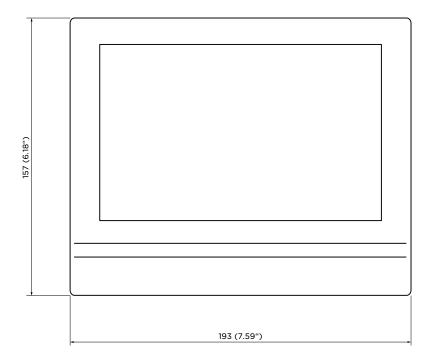
## 2N® Indoor View

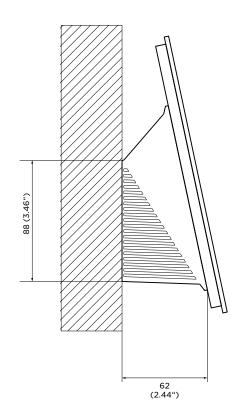
IN-WALL MOUNTED



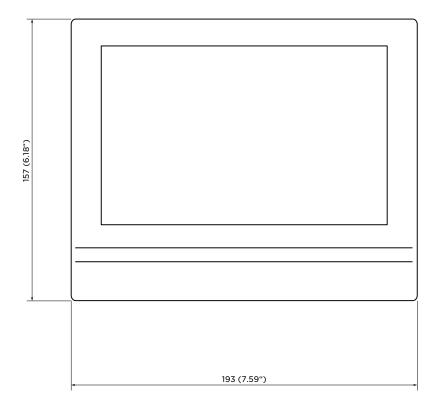


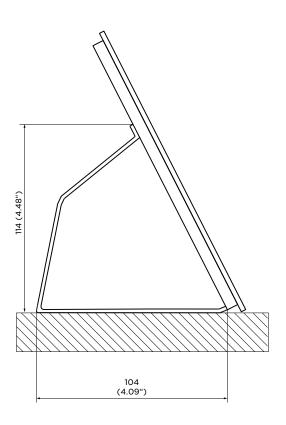
## WALL-MOUNTED





## DESK STAND





# An elegant solution for video communication

The 2N° Indoor Compact is an indoor answering unit designed especially for the residential market. Installation by connecting a single UTP cable and configuration via a web interface guarantees that integrators can get the unit into operation quickly and easily. Users will be impressed by the minimalist design, tempered glass surface, 4.3" colour display and intuitive controls.





IP ENVIRONMENT

# 2N® Indoor Compact



#### **KEY FEATURES**

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

#### **RECOMMENDED USES**

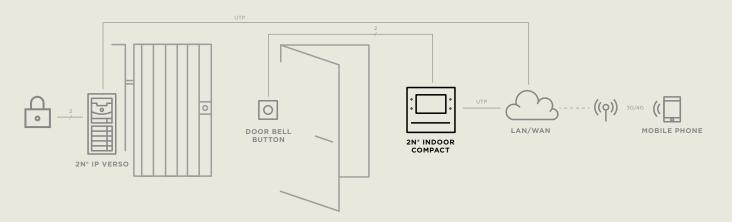
## For video door communication for an apartment

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 the door can be opened just as easily. In case the resident is not at home, a call log with snapshots is saved in the unit.

## To monitor both internal and external views

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

### EXAMPLE OF CONNECTION OF THE 2N® INDOOR COMPACT



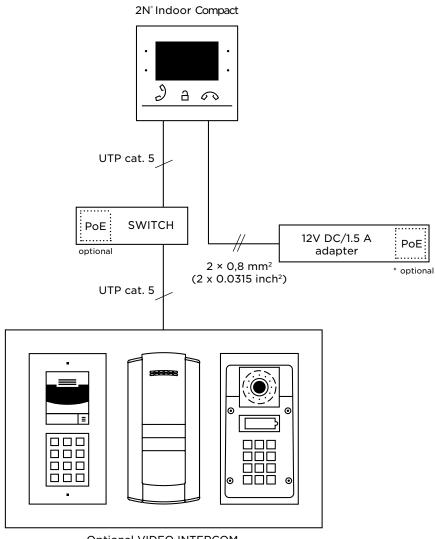
# Technical parameters

## 2N® Indoor Compact

Power Supply	
Туре	12V DC adapter or PoE 802.3af
Recommended power supply	12V/1A
Reverse polarity protection	yes
User Interface	
Controls	7 capacitive buttons with RGB LED backlight
Display size	4.3" colour display
Resolution	480x272px
Audio	
Microphone	integrated
Speaker	integrated, 2W
Induction loop output	600mV RMS
Codecs	G.711, G.729, G.722, L16/16kHz
Video	
Codecs	H.264, H.263, 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 50V/5mA, DC
Mechanical Parameters	
Dimensions (W x H x D)	5.984 x 6.024 x 1.969 inch
Weight	0.853 lb
Operating temperature	32°F to 122°F
Relative operating humidity	10 to 90% (non-condensing)
Storage temperature	-4°F to 158°F
Recommended altitude	0 to 6,500 ft
	·



#### **CONNECTION DIAGRAM**



Optional VIDEO INTERCOM

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### 2N® Indoor Compact



Order No.	01935-001
Name	2N® Indoor Compact, black
Desc.	4.3" display, slim design (10mm), PoE



Order No.	01936-001
Name	2N® Indoor Compact, white
Desc.	4.3" display, slim design (10mm), PoE



Order No.	01700-001
Name	2N Indoor Flush Box
Desc.	box for installation in the wall



Order No.	02320-001
Name	2N Indoor Surface Installation Box
Desc.	surface-mount box for 2N answering units, only in black colour

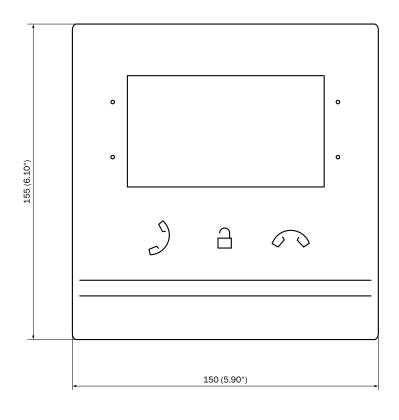


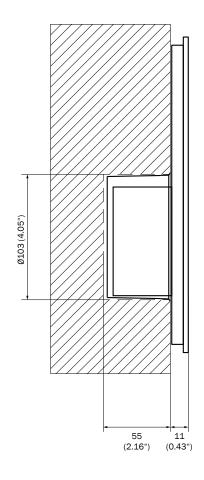
Order No.	02039-001
Name	2N Indoor Desk Stand
Desc.	stand for 2N answering units, only in black colour

# Dimensions and fitting

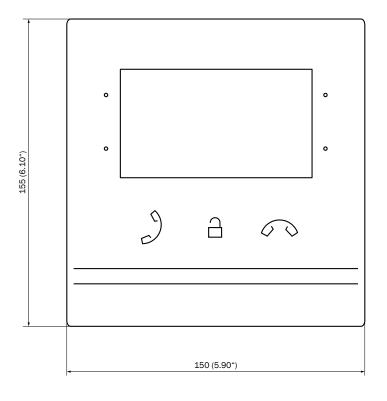
### 2N® Indoor Compact

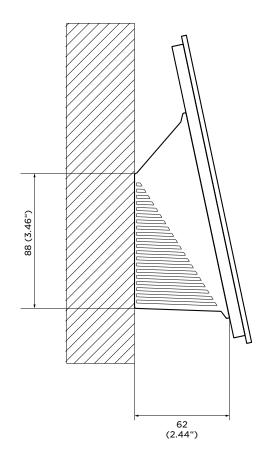
IN-WALL MOUNTED



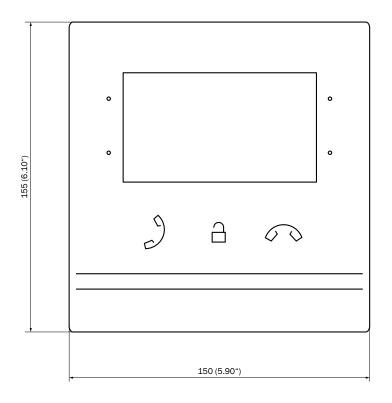


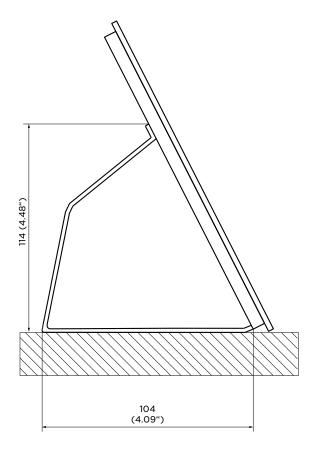
#### WALL-MOUNTED





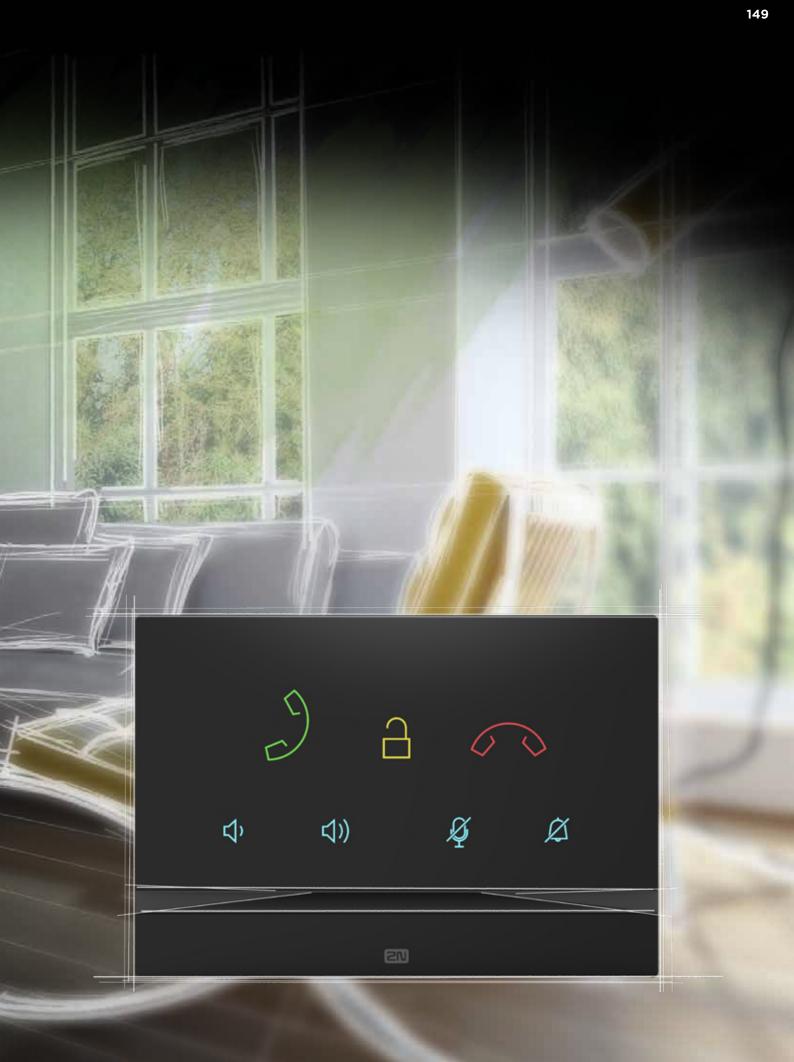
#### DESK STAND







of its icons. Overall, though, our primary focus was to give you the highest-quality sound with top notch audio components.



IP ENVIRONMENT

# 2N® Indoor Talk



#### **KEY FEATURES**

- HD quality sound with high volume
- Luxury design and materials
- · Backlit touch buttons for easy control
- Precision installation box



#### **RECOMMENDED USES**

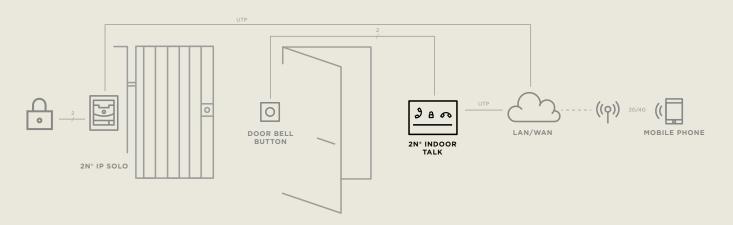
### As an intuitive unit for the whole family

Due to its simple design, anyone can quickly master the operation of the 2N\* Indoor Talk, no matter their 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.

### As a 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 you to make calls not only to 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



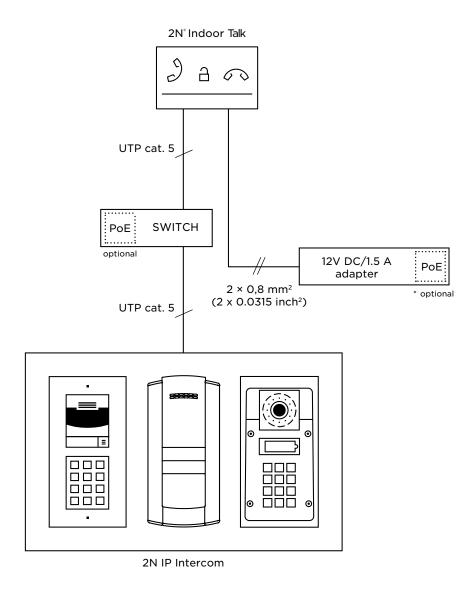
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### 2N® Indoor Talk

Power Supply	
Туре	12V DC adapter or PoE 802.3af
Recommended power supply	12V/1A
Reverse polarity protection	yes
User Interface	
Controls	7 capacitive buttons with RGB LED backlight
Audio	
Microphone	integrated
Speaker	integrated, 2W
Induction loop output	600mV RMS
Codecs	G.711, G.729, G.722, L16/16kHz
Interface	
LAN	10/100BaseT, RJ-45
Recommended cabling	Cat5e or better
Doorbell Input	
Input type	switching contact (button/relay)
Contact type	normally open (NO)
Contact parameters	up to 50V/5mA, DC
Mechanical Parameters	
Dimensions (W x H x D):	7.283 x 5.039 x 1.898 inch
Weight	0.853 lb
Operating temperature	32 °F to 122 °F
Relative operating humidity	10 to 90% (non-condensing)
Storage temperature	-4 °F to 158 °F
Recommended altitude	0 to 6,500 ft



#### **CONNECTION DIAGRAM**



### 2N® Indoor Talk



Order No.	01698-001
Name	2N® Indoor Talk, black
Desc.	HD sound, slim design (10mm), PoE



Order No.	01699-001
Name	2N® Indoor Talk, white
Desc.	HD sound, slim design (10mm), PoE



Order No.	01700-001
Name	2N Indoor Flush Box
Desc.	box for installation in the wall

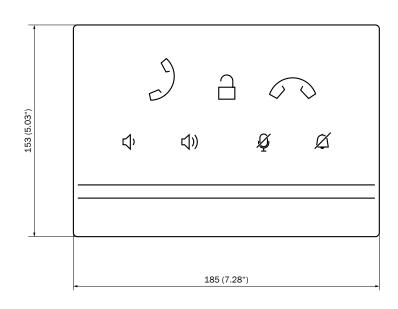


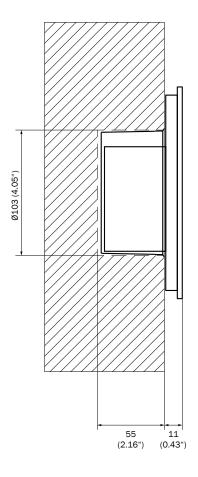
Order No.	02039-001
Name	2N Indoor Desk Stand
Desc.	stand for 2N answering units, only in black colour

# Dimensions and fitting

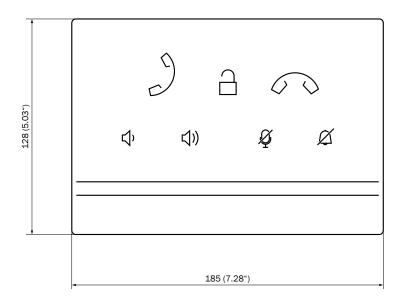
### 2N® Indoor Talk

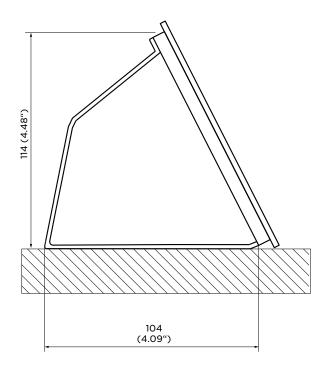
IN-WALL MOUNTED





#### DESK STAND

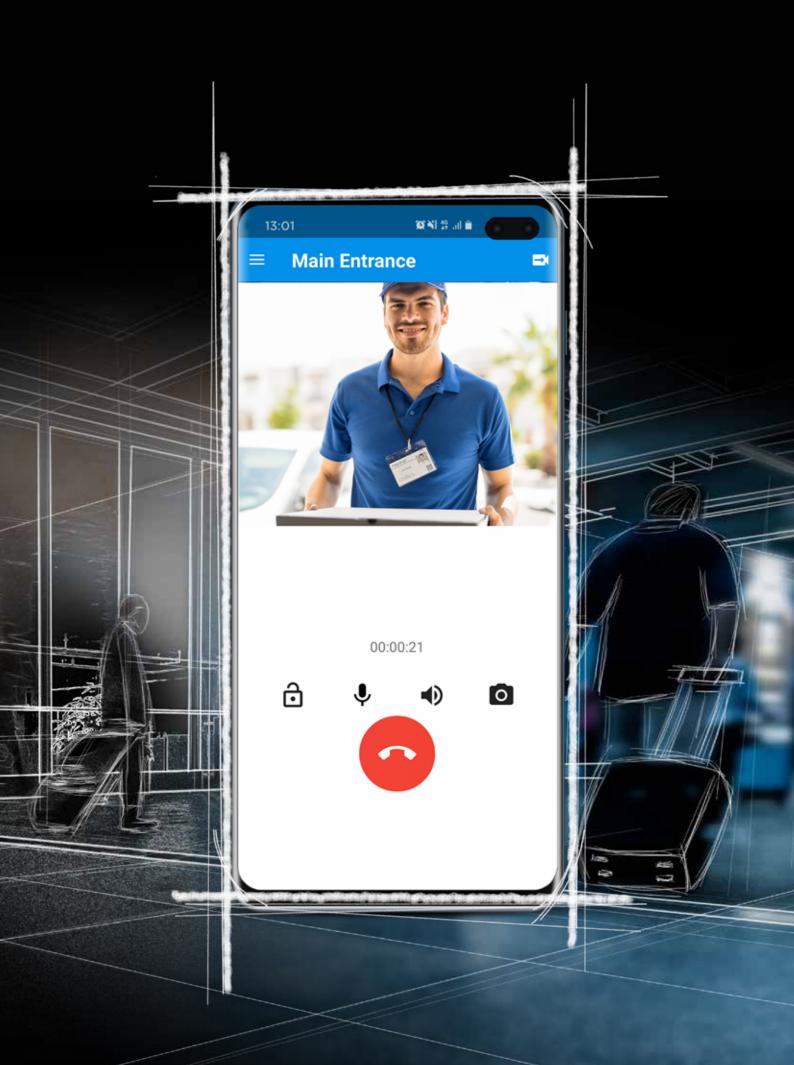




2N® Mobile Video

# The most reliable mobile service

Build your business on a professional cloud service. Guarantee your customers 99,98 % connectivity, manage everything remotely and get recurring revenue. 500



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#### **KEY FEATURES**

#### • The most reliable cloud service

2N® Mobile Video is a key service provided by My2N, which is hosted on world-leading Amazon servers (AWS). Thanks to modern SW architecture based on microservices, it provides top level reliability.

#### The least expensive video answering unit

Apart from the intercom and your smartphone, won't need anything else to open a door, meaning no network gateways or hardware answering units. You'll appreciate its easy setup- especially in large installations.

#### · Tailored for multi-tenant building needs

Intergrate the intercom with your home automation system to control the lights, the alarm, or start any custom action using  $2N^*$  Mobile Video. Also benefit from remote access - in combination with a 2N Intercom with IP technology, the tenant can accept a call even when they're away from home.







#### TECHNICAL PARAMETERS

#### **General requirements**

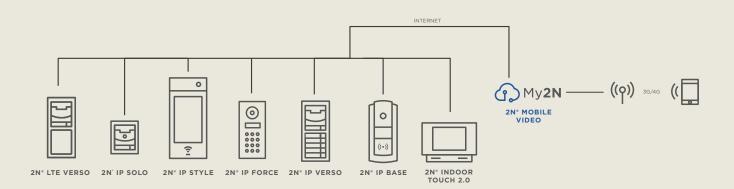
2N® Mobile Video is a cloud service located on the My2N portal. You need to create an account at www.my2n.com to activate this service.

At least one 2N IP intercom with a camera and firmware version 2.22 or newer connected to the internet.

A mobile phone with the Android operating system version 6 or newer or iOS version 12 or newer, and the  $2N^{\circ}$  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 73 and higher).
Additional supported browsers are:	Mozilla Firefox (version 66 and higher), Microsoft Edge (version 44 and higher). On other browsers not tested, we cannot guarantee full functionality.
Limitations	
	The 2N® Mobile Video service can be used for a maximum of 500 devices in one location (site).
	A maximum of 5 devices can be called using one speed-dial button.
Limitations	
	Service reliability is 99.7 % (the service is not guaranteed).



# Order numbers

2N® Mobile Video



The subscriptions are available through my2n.com



The My2N cloud platform offers the administration and configuration of all 2N devices from one location – and much more. Its basic building blocks are reliability, security and stable performance. These are precisely the elements that allow you to set up all 2N devices throughout the whole building remotely, in real time.





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### Remote Management

No one these days wants to travel around solving customer requests face to face. Thanks to our remote management, you can add and remove users and devices, update firmware, diagnose and troubleshoot, all without leaving your home or office.

#### **KEY FEATURES**

#### · Be effective

Configuration directly on the My2N portal is up to 90% faster compared to traditional product-based configuration.

#### Happy customers

Keep your customers happy and respond to their requests almost instantly.

#### • Contactless service

Thanks to remote services, you won't have to make appointments with apartment residents and the property manager. Get the job done when it's convenient for you.

#### Comply with the SLA terms and conditions

Response times to incidents under SLAs tend to be restricted.

My2N will help you meet the requirements.

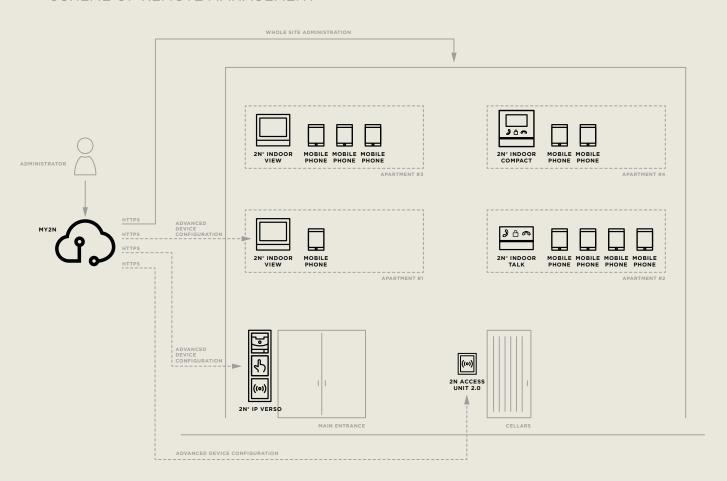
#### Encrypted connection

Take cyber security to the next level with Tribble Tunnel, our own protocol which provides double encryption.

#### Advanced profile settings

While you can't set up complex scenarios on the My2N portal, you can always use it to connect remotely to the product's web interface.

#### SCHEME OF REMOTE MANAGEMENT



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### Cloud calling

You can set up a call from an intercom to a smartphone or an answering unit installed in the apartment in just a few minutes. What's required to set up a cloud call? You only need an intercom and an answering unit connected to the internet. Your phone will be able to accept calls from anywhere in the world, as long as there is sufficient signal.

#### **KEY FEATURES**

#### 99.98% reliability

Our statistics speak for themselves. Cloud calling via My2N is unquestionably the most reliable service on the market.

#### · Set up a call in just a few minutes

Cloud setup for simple residential installations is up to 90% faster compared to traditional web-based configuration..

#### • No extra hidden HW

We don't over-complicate our solution with GSM gateways. You won't even need to buy an answering unit for the intercom to enable phone calling.

#### More than just a phone call

The  $2N^{\circ}$  Mobile Video app can do more than just contact the resident. It can also provide video surveillance, open doors and much more.

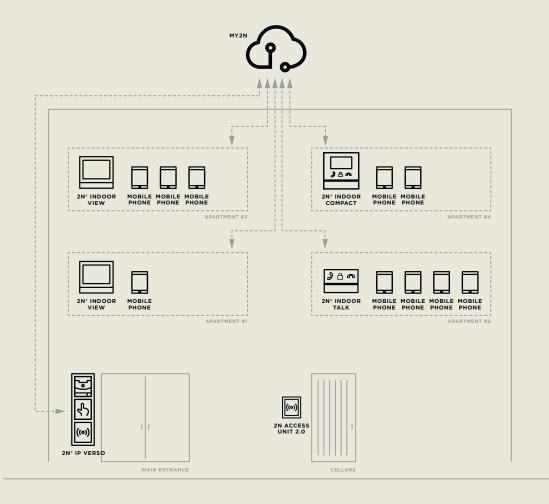
#### Prepare for installation ahead of time

Set up calls between products while you're still in the office without even needing to switch the products on. As soon as the technician has installed the equipment, everything will work instantly.

#### Generate long-term income

Premium calls to smartphones are a paid service. This service has money-making potential in the distribution chain as well.

#### SCHEME OF CLOUD CALLING







IP ENVIRONMENT

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# 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 USES

#### As a 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. What's more, when in integration with VMS, the intruder can be addressed specifically by using visual information.

#### For public announcements in urban areas

Public announcements have to be loud enough to be heard through closed windows to catch the 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.

#### For assembly line emergency communication

Working in a noisy environment, such as an assembly line, requires wearing earplugs. However, in case of emergency an announcement, and especially 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.

#### **ORDER NUMBERS**



Order No.	01433-001
Name	2N® SIP Speaker Horn
Desc.	SPLmax 124dB, outdoor and indoor use, noise detection



Order No.	01696-001
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.	914481EST
Name	SIP Audio external microphone Stereo
Desc.	Audio surveillance, omnidirectional, outdoor

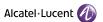












#### TECHNICAL PARAMETERS

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
Mark at a large at	
Mechanical properties	
Dimensions (h/w/d)	9.161 (diameter) x 12.189 (length) inch
Weight	5 lb
Color	Grey (RAL 7035)
Operating temperature	-22°F - 140°F
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



# 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 USES

#### At schools classroom

2N® SIP Speaker meets the requirements of every school, 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.

#### At 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 usually monitored, can sometimes face unwelcome intruders.. 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.

#### **ORDER NUMBERS**



Order No.	01431-001
Name	2N® SIP Speaker, wall mounted, black
Desc.	loudspeaker set, wall mounted, SIP based active speaker



Order No.	01432-001
Name	2N® SIP Speaker, wall mounted, white
Desc.	loudspeaker set, wall mounted, SIP based active speaker

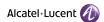












#### TECHNICAL PARAMETERS

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)	9.843 x 6.929 x 5.630 inch	
Weight	5 lb	
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	



### 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 USES

#### For public announcements 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. What's more, at a simple press of a button, they can also listen to what's happening in certain areas.

#### As a 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.

#### **ORDER NUMBERS**



Order No.	01208-001
Name	2N® SIP Mic
Desc.	microphone console, inbuilt speaker, server-less paging















#### 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		
	8.228 x 2.559 x 5.63 inch	
Operating temperature		
	temperature range 32°F - 104°F	
Buttons and labels		
Double button	1.102 inch x 0.551 inch	
Large button	0.551 inch x 0.551 inch	
Small button	0.354 inch x 0.354 inch	



#### IP ENVIRONMENT

# Other Accessories

IP videophones	
IP Telephone Grandstream GXV3370	01695-001
IP Telephone Grandstream GXV3350	02240-001
RFID tags (for Verso and Force)	
Card EMarine RFID 125 kHz	01395-001
Key EMarine RFID 125 kHz	01396-001
Card Mifare RFID 13.56 MHz	01384-001
Key Mifare RFID 13.56 MHz	01385-001
External card reader RFID	
External RFID card reader 125 kHz EMarine	01400-001
External RFID card reader 125 kHz + 13.56 MHz (USB)	01527-001
External card reader Wiegand 125 kHz EMarine RFID	01389-001
External card reader Wiegand 13.56 MHz Mifare RFID	01390-001
External Bluetooth reader (USB interface)	01402-001
External fingerprint reader (USB interface)	01401-001
External RFID card reader secured 125kHz + 13.56MHz (USB)	
Licences	
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#### Other

Other	
2N® IP Verso connection cable length 9 ft	01268-001
2N® IP Verso connection cable length 15 ft	01269-001
2N° IP Verso Blind button	01270-001 (nickel) / 01523-001 (black)
2N® IP Security Relay	01386-001
Wiegand Isolator	01387-001
2N® Induction Loop	01391-001
External antenna	
Power supply 12V/1A	01393-001
2N® 2Wire (plug US)	01404-001
Exit button	
IP relay - 1 output	01397-001
IP relay - 4 output	01398-001
Magnetic contact	01388-001
Power supply 12V/2A	
Transformer	
PoE Injector (EU/US plug)	02445-001

Version: 6.0 Issued: July 2022

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