

Open the door to innovation

www.2nusa.com

2N is Member of the Axis group

Introduction



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





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



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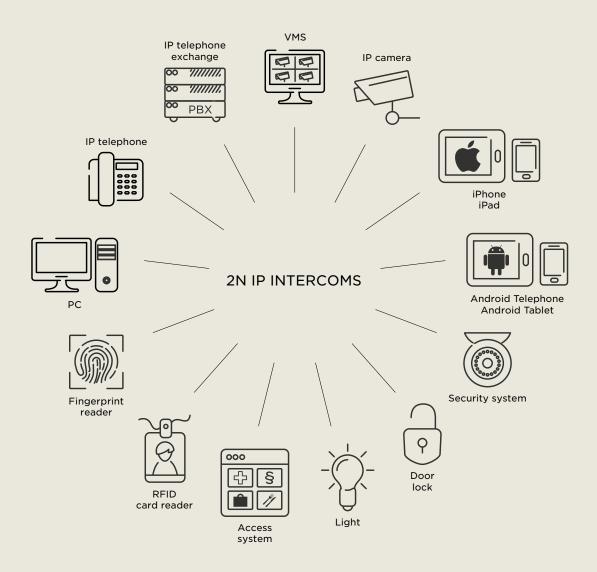
OVERVIEW OF INTERCOMS

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

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

CONNECTIVITY IN IP ENVIRONMENT

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



For information about Licencing Policy visit please our website.







IP ENVIRONMENT

2N® IP Verso



















KEY FEATURES

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



reddot design award winner 2017

RECOMMENDED USE

Main entrance of residential complex

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

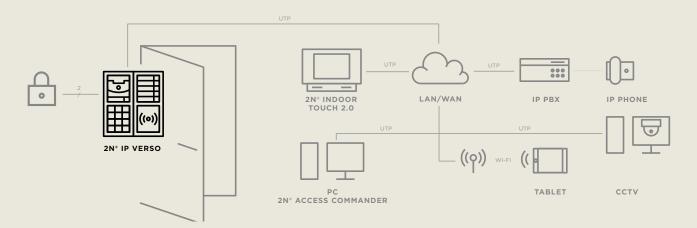
Secured office building

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

Single villa with home automation

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

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



SIP (UDP, TCP, TLS)

Technical parameters

Signalling protocol

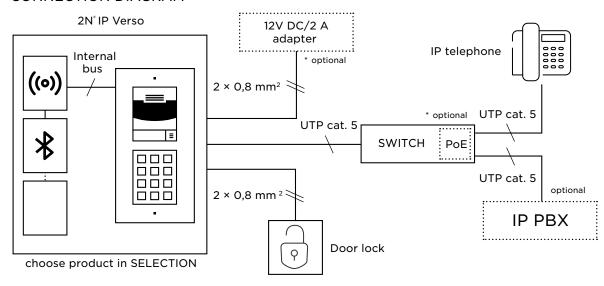
2N® IP Verso

	SIP (UDP, TCP, TLS)	
Buttons		
Button design	White-backlit transparent buttons with replaceable nametags	
Button count	1 and increments of 5 (max 146)	
Button extenders	Up to 30 modules, limited by power supply	
Numeric keypad	optional	
Audio		
Microphone	1 integrated microphone	
Amplifier	2 W (class D) amplifier	
Speaker	2 W/8 Ω	
Output LINE OUT	1 VRMS/600 Ω	
Volume control	Adjustable with automatic adaptive mode	
Full duplex	Yes (AEC)	
Audio stream		
Protocols	RTP/RTSP	
Codecs	G.711, G.722, G.729, L16/16kHz	
Camera		
Sensor	1/3" colour CMOS	
JPEG resolution	Up to 1280 (H) × 960 (V)	
Video resolution	640 (H) × 480 (V)	
Frame rate	Up to 30 snapshots/s	
Sensitivity	5.6 V/lux-sec (550 nm)	
View angle	120° (H), 90° (V), 145° (D)	
Infrared light		
.		
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	
8 up to 12 V DC depending on power supply Active switch output (PoE: 10 V; adaptor: power supply voltage minus 2 V), max 400 mA		



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

CONNECTION DIAGRAM



Order numbers

Main unit and modules



Order No.	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.	01266-001
Name	Bluetooth Reader module
Desc.	module for 2N® IP Verso, Bluetooth 4.0



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.	01255-001
Name	RFID Card Reader module 125kHz
Desc.	module for 2N® IP Verso
Order No.	01262-001/ 01712-001
Order No.	01262-001/ 01712-001 RFID Card Reader with NFC 13,56MHz (xx40) / 13,56MHz secured (xx42)



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



Orde	r No.	01263-001
Name	9	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.	01252-001
Name	Infopanel module
Desc.	module for 2N® IP Verso, backlit



Or	der No.	01257-001
Na	me	I/O module
De	esc.	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

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



01282-001/ 01283-001
3 module flush frame nickel / black
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



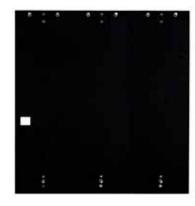
Order No.	01294-001
Name	2 modules backplate
Desc.	backplate for installation on glass or uneven surface, 2 modules



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.	01299-001
Name	3 (w) x3 (h) modules backplate
Desc.	backplate for installation on glass or uneven surface, 3x3 modules

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ACCESS CONTROL



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



Order No.	01297-001
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.	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



Order No.	01524-001
Name	Gang Plate - 1 module
Desc.	backplate for surface installation on a 2-gang backbox



Order No.	01525-001
Name	Gang Plate - 2 modules
Desc.	backplate for surface installation on a 2-gang backbox

Other



Order No.	01267-001
Name	Extension cable- 1m long
Desc.	connection of modules in greater distance from the main unit



Order No.	01268-001
Name	Extension cable- 3m long
Desc.	connection of modules in greater distance from the main unit

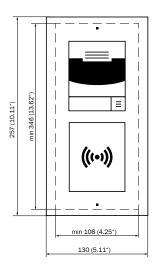


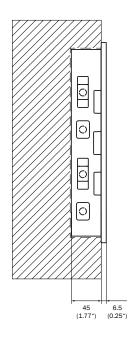
Order No.	01269-001
Name	Extension cable- 5m long
Desc.	connection of modules in greater distance from the main unit

Dimensions and fitting

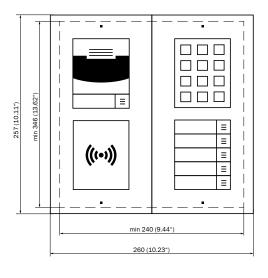
2N® IP Verso

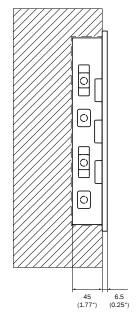
IN-WALL 2 MODULES



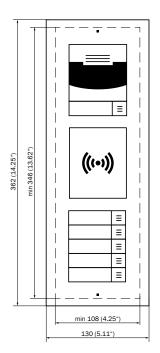


2× IN-WALL 2 MODULES

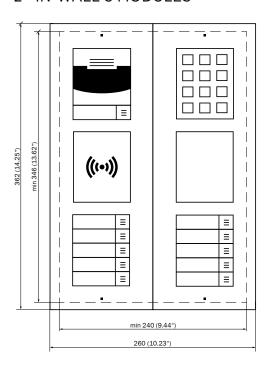


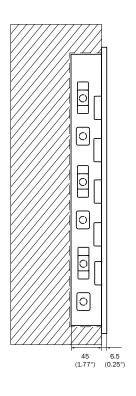


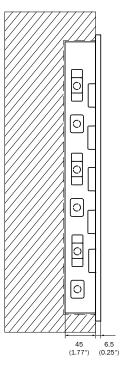
IN-WALL 3 MODULES

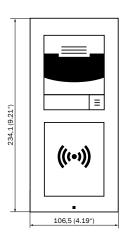


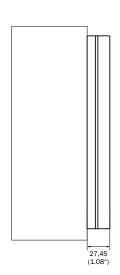
2× IN-WALL 3 MODULES



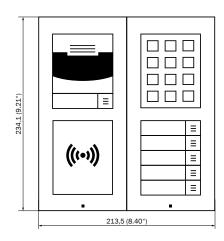


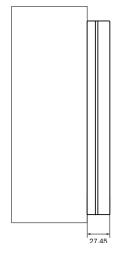




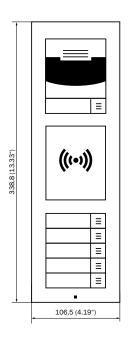


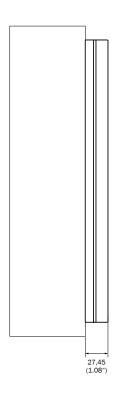
2× WALL-MOUNTED 2 MODULES



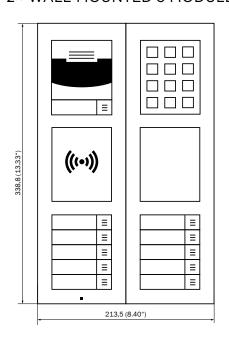


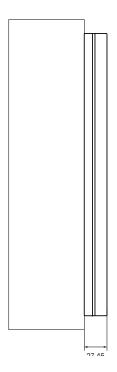
WALL-MOUNTED 3 MODULES



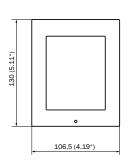


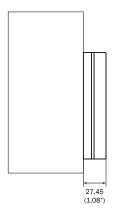
2× WALL-MOUNTED 3 MODULES



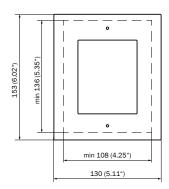


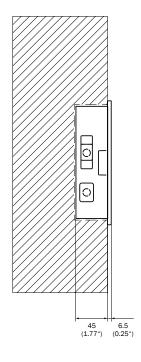
WALL-MOUNTED 1 MODULE





IN-WALL 1 MODULE





2N® IP Force

A door guard for extreme conditions

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



IP ENVIRONMENT

2N® IP Force



















KEY FEATURES

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

RECOMMENDED USE

School door communication

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

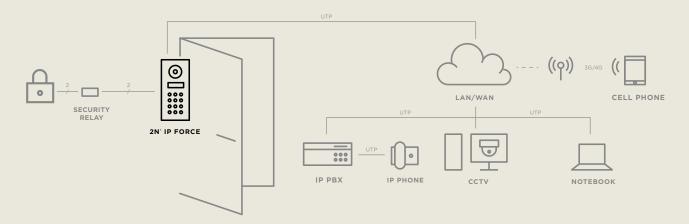
Security in detention centres

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

Parking communication

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

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



Technical parameters

Signalling protocol

2N® IP Force

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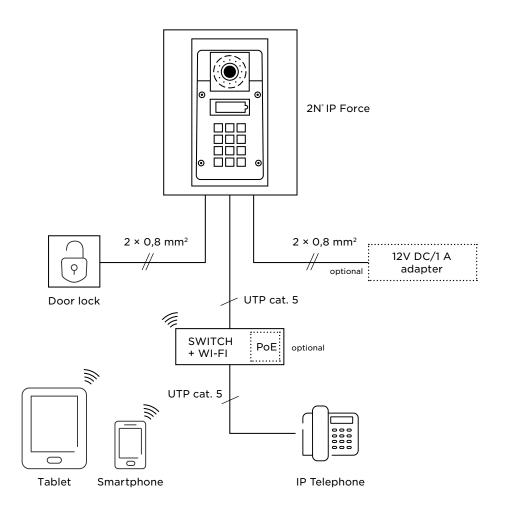
Buttons	
Button design	Transparent buttons with white backlighting and nameplate which can be easily replaced
Button count	1, 2 or 4
Numerical keypad	Optional
Audio	
Microphone	2 integrated microphones
Amplifier	10 W (class D)
Speaker	1 W (10 W optional)
Volume control	Adjustable with automatic adaptive mode
Full duplex	Yes (AEC)
Audio stream	
Protocols	RTP/RTSP
Codecs	G.711, G.722, G.729, L 16/16kHz
Camera HD / SD	
Sensor	1/3" colour CMOS / 1/4" colour CMOS
JPEG resolution	1280 (H) x 960 (V) / 640 (H) × 480 (V)
Video resolution	640 (H) × 480 (V)
Frame rate	Up to 30 snapshots/s
Sensor sensitivity	5.6 V/lux-sec (550 nm) / 1.9 V/lux-sec (550 nm)
View angle	135° (H), 109° (V)
Infrared light	Yes
Video stream	
Protocols	RTP/RTSP/HTTP
Codecs	H.263, H.263+, H.264, MPEG-4, M-JPEG
IP camera function	Yes, ONVIF v2.4 profile S compatible
Tr carriera ranccion	res, ottvii vz.4 prome s compansie
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
DEID coud woodou	
RFID card reader Supported	
frequencies	125kHz and 13.56MHz
	125 kHz: EM4100, EM4102, HID Proximity
	13.56 MHz: ISO14443A, ISO14443B, ISO15693, NFC support
	; reads UID (CSN)
	reads PACs ID (iCLASS SIO-enabled cards)

SIP (UDP, TCP, TLS)



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

CONNECTION DIAGRAM



Order numbers

2N® IP Force



Order No.	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

Card readers



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



Order No.	01346-001
Name	2N® IP Force, 13.56MHz RFID
Desc.	NFC ready, Wiegand interface



Order No.	01347-001
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

Mounting



0	rder No.	01348-001
N	ame	2N® IP Force, flush box
D	esc.	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

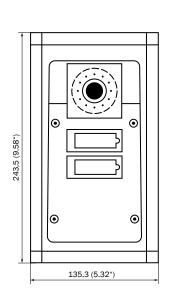


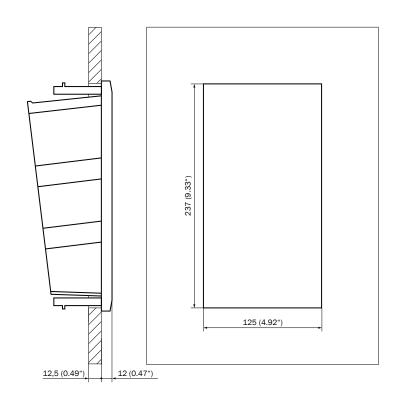
Order N	o. 01550-001
Name	2N® IP Force/Safety - Gooseneck stand double
Desc.	Gooseneck stand double, height 115cm/45in and 203cm/80in

Dimensions and fitting

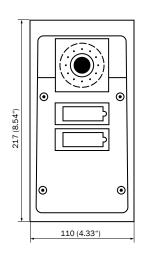
2N® IP Force

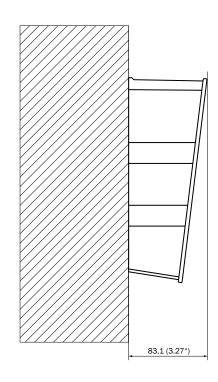
MOUNTING IN PLASTERBOARD



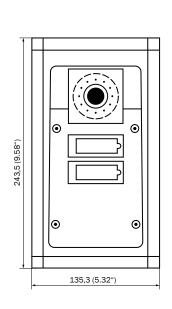


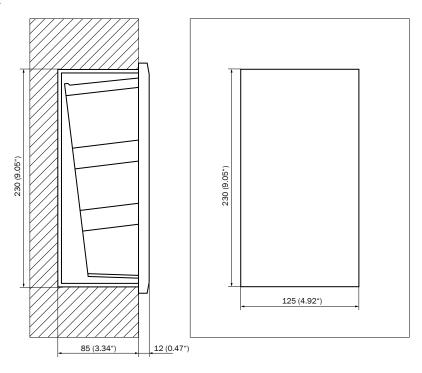
WALL-MOUNTED





FLUSH-MOUNTED WITH BOX





of any Smart Home

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



2N® IP Solo





















KEY FEATURES

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

RECOMMENDED USE

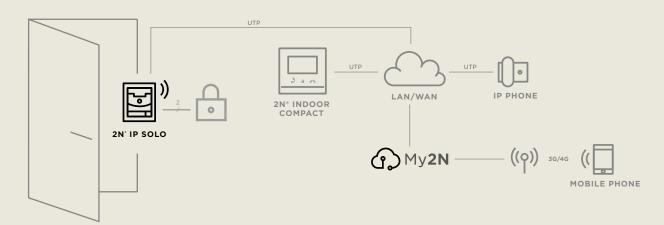
Doorbell for Smart Homes

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

Accessory for the villa entrance

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

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



Technical parameters

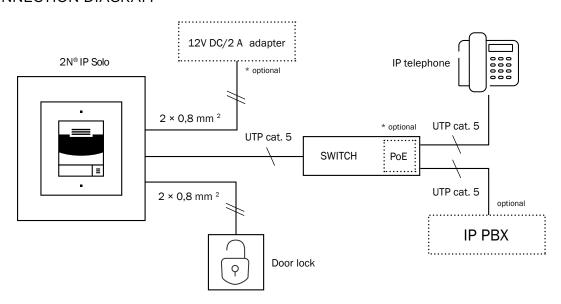
2N® IP Solo

Signalling protocol		
	SIP (UDP, TCP, TLS)	
Buttons		
Button design	White-backlit transparent button with replaceable nametag	
Button count	1	
Audio		
Microphone	1 integrated microphone	
Amplifier	2 W (class D)	
Speaker	2 W/8 Ω	
Output LINE OUT	1 VRMS/600 Ω	
Volume control	Adjustable with automatic adaptive mode	
Full duplex	Yes (AEC)	
Audio stream		
Protocols	RTP/RTSP	
Codecs	G.711, G.729, G.722, L16/16kHz	
Camera		
Sensor	1/3" colour CMOS	
JPEG resolution	7	
Video resolution	1280 (H) × 960 (V)	
Frame rate	640 (H) × 480 (V) 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	
8 up to 12 V DC depending on power supply Active switch output (PoE: 10 V; adaptor: power supply voltage minus 2 V), max 400 mA		



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

CONNECTION DIAGRAM



Order numbers

2N® IP Solo



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



Order No.	01301-001/ 01302-001
Name	2N® IP Solo, surface mount, 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

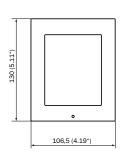


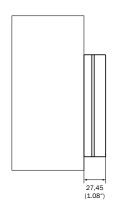
Order No.	01305-001
Name	2N® IP Solo, backplate
Desc.	backplate for easier surface installation

Dimensions and fitting

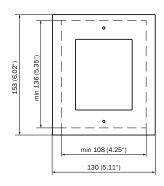
2N® IP Solo

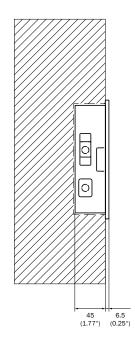
WALL-MOUNTED

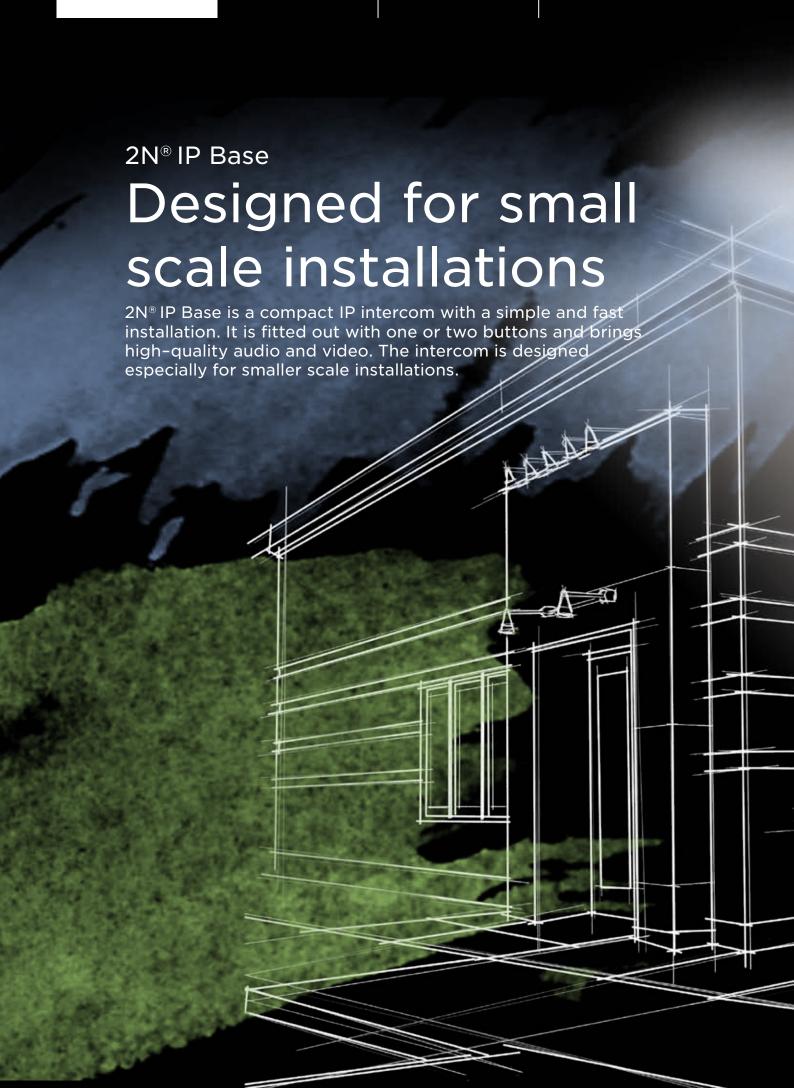




FLUSH-MOUNTED









IP ENVIRONMENT

2N® IP Base

















KEY FEATURES

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

RECOMMENDED USE

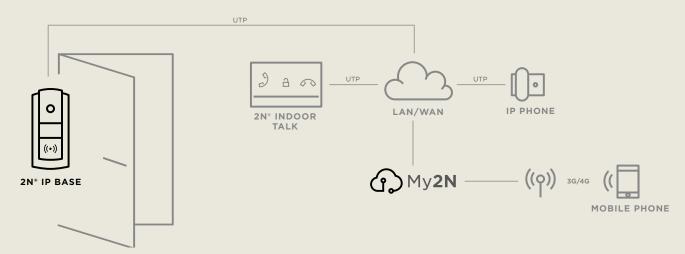
Door communication for small offices

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

Entry level intercom for residential market

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

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



Technical parameters

Signalling protocol

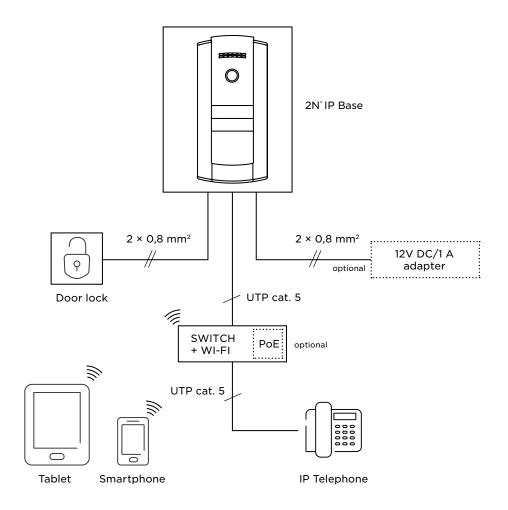
2N® IP Base

Signalling protocol			
	SIP (UDP, TO	CP, TLS)	
Duttana			
Buttons	White-back!	it transparent buttons	
Button design		able nametags	
Button count	1 or 2 (both options included in the package)		
Audio			
Microphone	1 integrated	microphone	
Amplifier	2 W (class D)	
Speaker	2 W / 8 Ω		
Volume control	Adjustable v	vith automatic adaptive mode	
Full duplex	Yes (AEC)		
Audio stream			
Protocols	RTP		
Codecs		G.722, L16/16 kHz	
	J., 11, J., 23,		
Camera			
Sensor	1/3" colour (CMOS	
JPEG resolution	-	H) x 960 (V)	
Video resolution	640 (H) x 48	30 (V)	
Frame rate	Up to 30 sna		
Sensor sensitivity	5.6 V/lux-sec (550 nm)		
Viewing angle	135 ° (H), 109 ° (V), 141 °(D)		
Infrared light	No		
Video stream			
Protocols	RTP/RTSP/H	HTTP	
Codecs	-	3+, H.264, MPEG-4, M-JPEG	
IP camera function	yes, ONVIF	v2.4 profile S compatible	
Interface			
Power supply	12 V +15 % /	2 A DC or PoE	
PoE		(Class 0-12.95 W)	
LAN		E-TX with Auto-MDIX, RJ-45	
Recommended cabling		Cat-5e or higher	
Supported protocols	SIP2.0. RTP	HTTP, HTTPS, Syslog	
Passive switch		act, 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			
		17 50.44	
Supported	40=11:	13 56MHz	
Supported frequencies	125kHz and		
• •	125kHz and 125 kHz:	EM4100, EM4102, HID Proximity	
• •			



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

CONNECTION DIAGRAM



Order numbers

2N® IP Base



Order No.	01357-001
Name	2N® IP Base
Desc.	main unit with 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

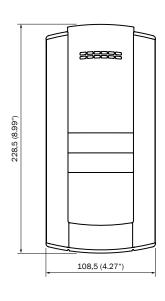


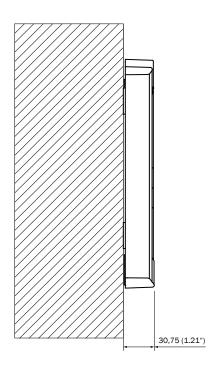
Order No.	01359-001
Name	2N® IP Base, 13.56MHz card reader
Desc.	13.56MHz RFID card reader, reads UID

Dimensions and fitting

2N® IP Base

WALL-MOUNTED









2N® IP Safety



















KEY FEATURES

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

RECOMMENDED USE

Safe city

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

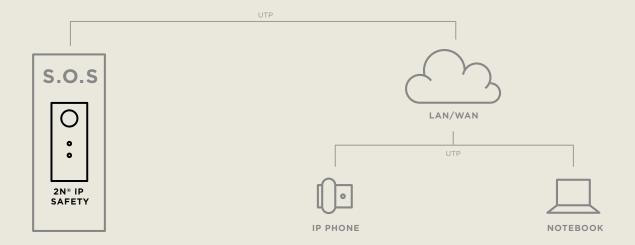
Transportation

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

Industrial environment

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

EXAMPLE OF CONNECTION OF 2N® IP SAFETY ON MOTORWAY



Technical parameters

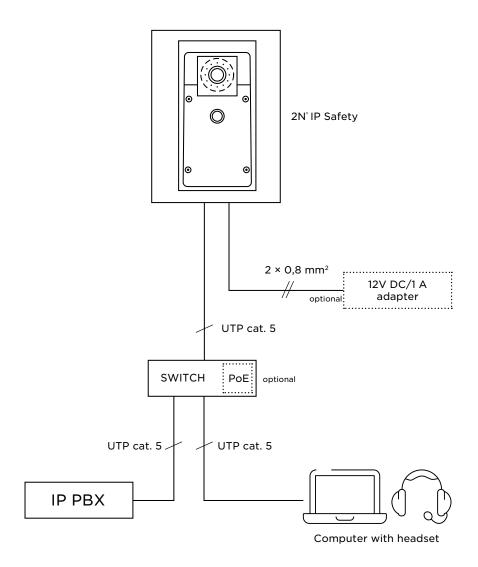
Signalling protocol

2N® IP Safety

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



CONNECTION DIAGRAM



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

Order numbers

2N® IP Safety



Order No.	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)



Order No.	01350-001
Name	2N® IP Force/Safety, Additional Switch
Desc.	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, plaster box
Desc.	plasterboard flush mounting box



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

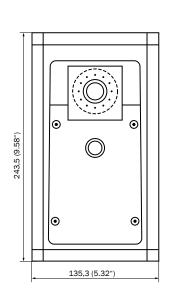


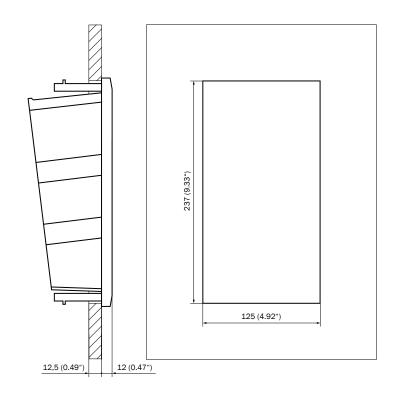
Order No.	01550-001
Name	2N® IP Force/Safety - Gooseneck stand double
Desc.	Gooseneck stand double, height 115cm/45in and 203cm/80in

Dimensions and fitting

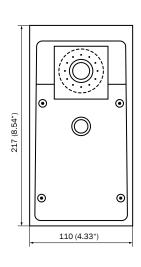
2N® IP Safety

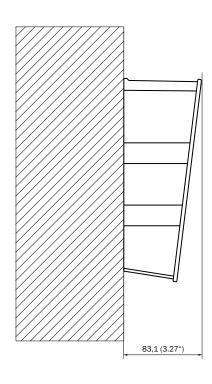
MOUNTING IN PLASTERBOARD



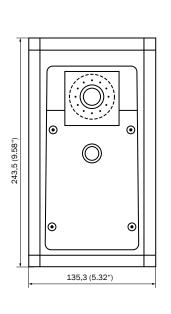


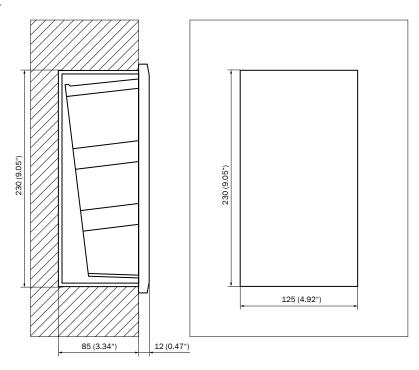
WALL-MOUNTED





FLUSH-MOUNTED WITH BOX





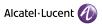


2N® IP Uni is an intercom, which is very easy to install and is suitable for communication in general. A simple operation and connection with the IP world ensures that you won't get lost on the premises. It can promptly connect you with a receptionist or a security guard and provide you a professional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



2N® IP Uni















KEY FEATURES

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

RECOMMENDED USE

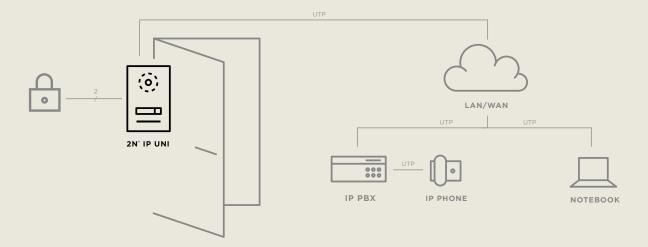
Public info point

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

Info point for retail

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

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



SIP (UDP, TCP)

Technical parameters

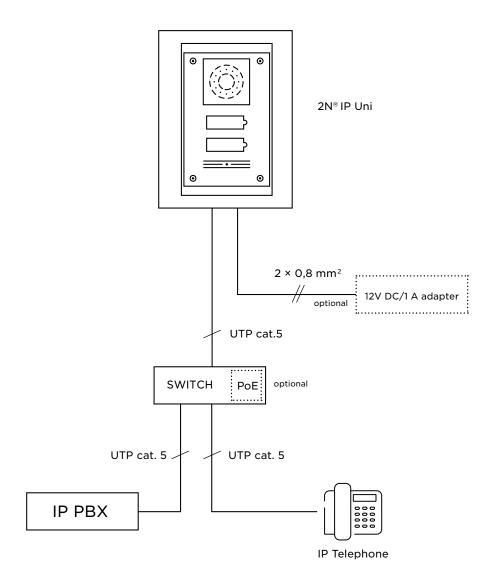
Signalling protocol

2N® IP Uni

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



CONNECTION DIAGRAM



Order numbers

2N® IP Uni



Order No.	01361-001
Name	2N® IP Uni, 1 button
Desc.	1 quick dial button



Order No.	01362-001
Name	2N® IP Uni, 2 button
Desc.	2 quick dial buttons



Order No.	01363-001
Name	2N® IP Uni, 1 button, pictograms
Desc.	1 button, visual status signalling

Mounting



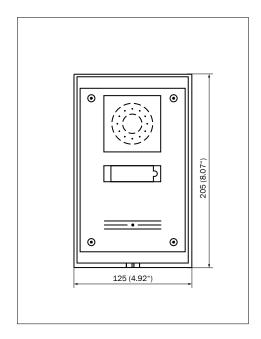
Order No.	01364-001
Name	2N® IP Uni,
	surface mount box
Desc.	box for wall mounting

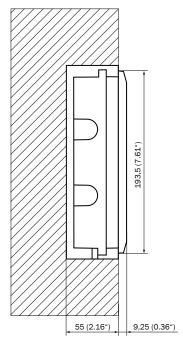
Dimensions and fitting

2N® IP Uni

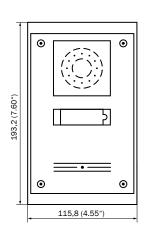
72

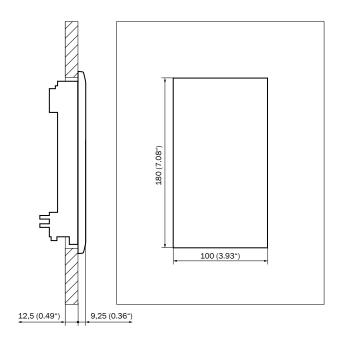
FLUSH-MOUNTED



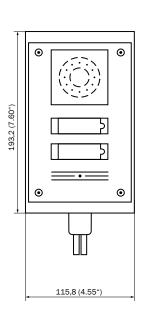


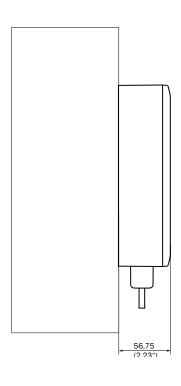
MOUNTING IN PLASTERBOARD

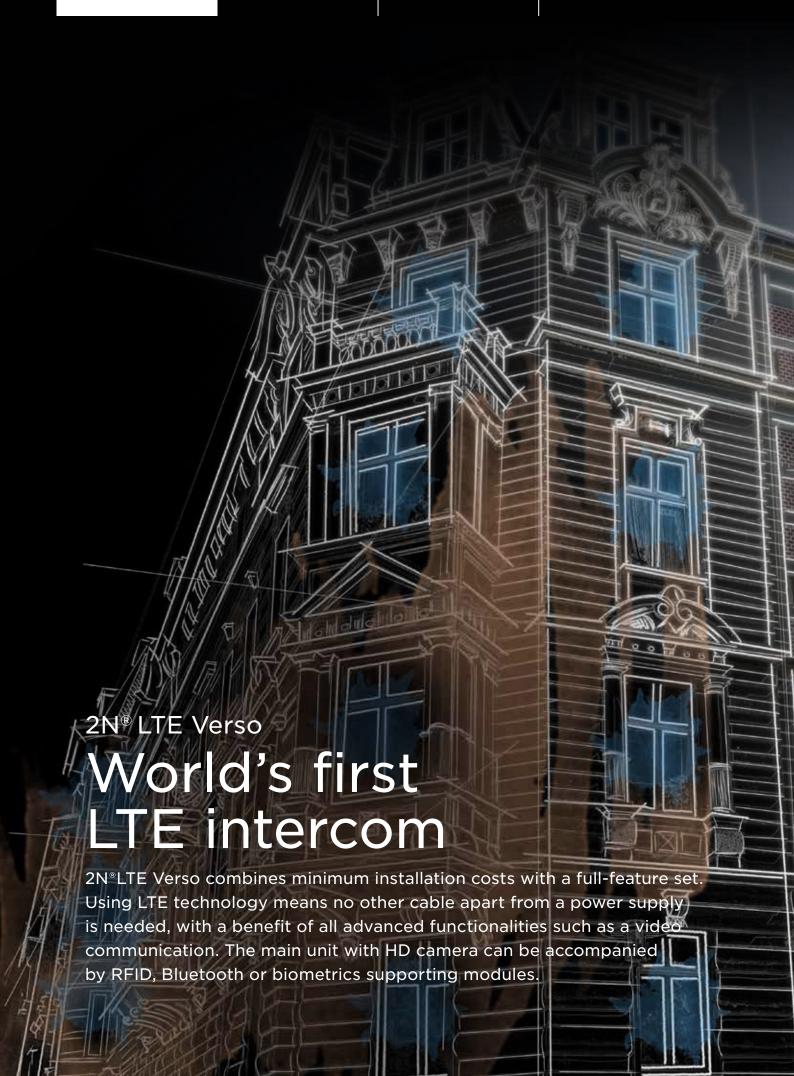




WALL-MOUNTED









2N® LTE Verso

















KEY FEATURES

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

RECOMMENDED USE

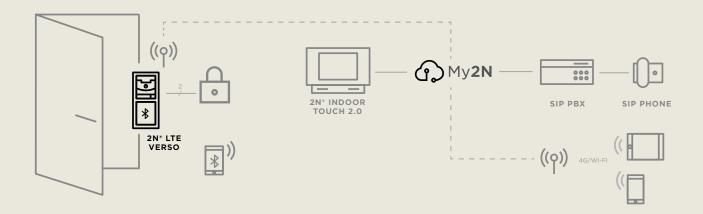
Upgrade to video intercom effectively

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

Communication for remote sites

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

EXAMPLE OF CONNECTION OF THE 2N® LTE VERSO



SIP (UDP, TCP, TLS)

Technical parameters

Signalling protocol

Buttons

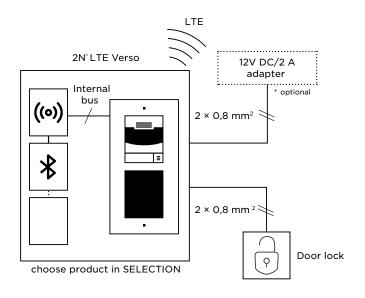
2N® LTE Verso

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
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	1/7"
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
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
Ti camera function	1es, ONVII V2.4 prome 5 compatible
Interface	
Power supply	12 V ±15 % / 2 A DC
LTE FDD	Cat.1, 3GPP release 9 compliant
LTE bands (9155401C-E and 9155401CB-E)	B2(1900), B4(AWS1700), B5(850), B12/B13(700)
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
F	
External LTE Antenna	41 dD
Gain	4.1 dB
Power handling	25 W
Operating temperature	-40 °C to +85°C
Dimensions	14 (W) x 6 (H) x 122 (L) mm
Mounting Cable length	Adhesive Mount
	2 m



RFID card reader		
Supported frequencies	125kHz and	13.56MHz
	125 kHz:	EM4100, EM4102, HID Proximity
	13.56 MHz:	ISO14443A, ISO14443B, ISO15693, NFC support
	:	reads UID (CSN)
	:	reads PACs ID (iCLASS SIO-enabled cards) - only secured cards
Mechanical propertie	S	
Cover	robust zinc	casting with surface finish
Operating temperature	-40 °C - 60	°C
Operating relative humidity	10 % - 95 %	(non-condensing)
Storing temperature	-40 °C - 70	°C
Weight	max net we	ight: From 2kg, based on configuration
Covering level	IP54	
Resistance level	IK08	
Dimensions		
Surface mounting fra	me	
1 module	107 (W) x 13	30 (H) x 28 (D) mm
2 modules	107 (W) x 2	34 (H) x 28 (D) mm
3 modules	107 (W) x 3	39 (H) x 28 (D) mm
Flush mounting frame	9	
1 module	130 (W) x 15	53 (H) x 5 (D) mm
2 modules	130 (W) x 2	57 (H) x 5 (D) mm
3 modules	130 (W) x 3	61 (H) x 5 (D) mm
Flush mounting box (minimum hol	le dimensions)
1 module	108 (W) x 13	31 (H) x 45 (D) mm
2 modules	108 (W) x 2	38 (H) x 45 (D) mm
3 modules	108 (W) x 3	43 (H) x 45 (D) mm
Module internal cutor	ut	
72 (W) x 89.3 (H) mm	2.83 (W) x	3.51 (H) inches

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.	01266-001
Name	Bluetooth Reader module
Desc.	module for 2N® LTE Verso, Bluetooth 4.0



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.	01255-001
Name	RFID Card Reader module 125kHz
Desc.	module for 2N® IP Verso
Order No.	01262-001/ 01712-001
Order No.	01262-001/ 01712-001 RFID Card Reader with NFC 13,56MHz (xx40) / 13,56MHz secured (xx42)



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.	01252-001
Name	Infopanel module
Desc.	module for 2N° IP Verso, backlit



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

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 surface installation, 1 module



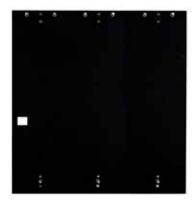
Order No.	01294-001
Name	2 modules backplate
Desc.	backplate for surface installation, 2 modules



Order No.	01295-001
Name	3 modules backplate
Desc.	backplate for surface installation, 3 modules



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



Order No.	01299-001
Name	3 (w) x3 (h) modules backplate
Desc.	backplate for surface installation, 3x3 modules

ACCESS CONTROL

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



Order No.	01297-001
Name	3 (w) x2 (h) modules backplate
Desc.	backplate for surface



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



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



Order No.	01524-001
Name	Gang Plate - 1 module
Desc.	backplate for surface installation on a 2-gang backbox



Order No.	01525-001
Name	Gang Plate - 2 modules
Desc.	backplate for surface installation on a 2-gang backbox

Other



Order No.	01267-001
Name	Extension cable- 1m long
Desc.	connection of modules in greater distance from the main unit



Order No.	01268-001
Name	Extension cable- 3m long
Desc.	connection of modules in greater distance from the main unit



Order No.	01269-001
Name	Extension cable- 5m long
Desc.	connection of modules in greater distance from the main unit

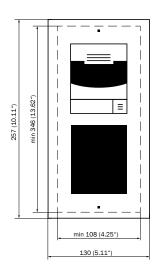


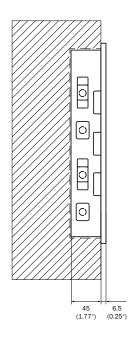
Order No.	01943-001
Name	External LTE antenna
Desc.	2m long cable

Dimensions and fitting

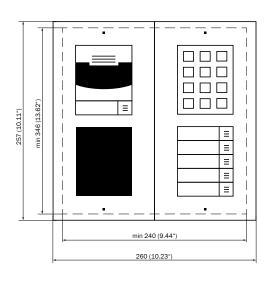
2N® LTE Verso

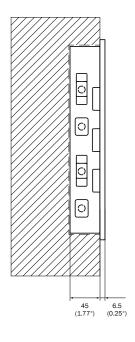
IN-WALL 2 MODULES



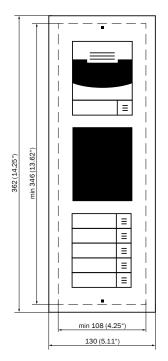


2× IN-WALL 2 MODULES

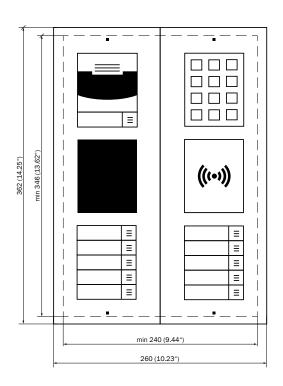


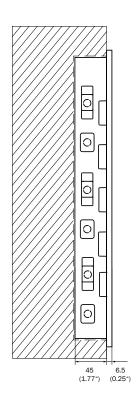


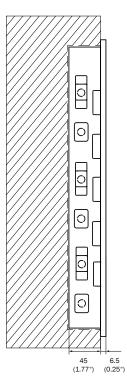
IN-WALL 3 MODULES

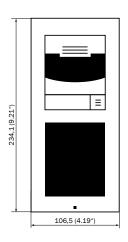


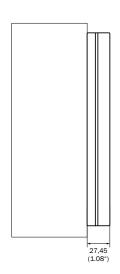
2× IN-WALL 3 MODULES



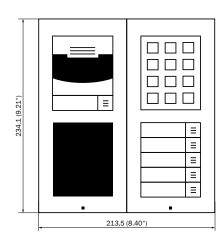


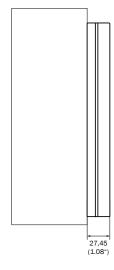




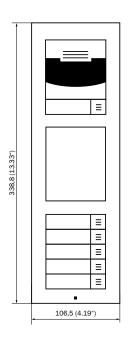


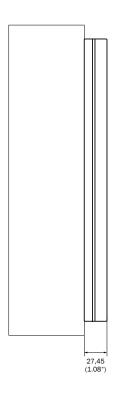
2× WALL-MOUNTED 2 MODULES



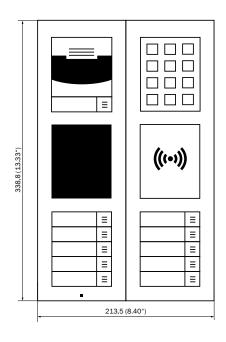


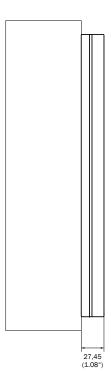
WALL-MOUNTED 3 MODULES

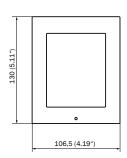


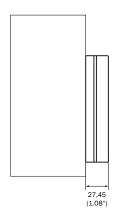


2× WALL-MOUNTED 3 MODULES

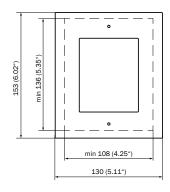


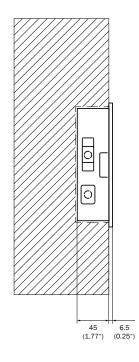






IN-WALL 1 MODULE





2N® IP Audio Kit

Create your own IP intercom

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



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IP ENVIRONMENT

2N® IP Audio Kit

KEY FEATURES

· VoIP solution you don't have to develop

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

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

Remote administration and control

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

Adaptive volume

Both the $2N^*$ IP Audio Kit automatically adjusts speaker volume based on ambient noise level.

TECHNICAL PARAMETERS

Signalling protocol	
	SIP 2.0 (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: 4Ω
Line output	Max. 755mV RMS, Rout = 600Ω
Full duplex	Yes (AEC)
Protocols	RTP/RTSP
Codecs	G.711, G.722*, G.729*, L16/16kHz*
Interface	
Power Supply	9 to 36 V \pm 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°C - 55°C
Working relative humidity	10% - 95% (non-condensing)
Storing temperature	-40°C - 70°C
Dimensions	142 x 98 x 34 mm
Weight	Up to 280g
Protection class	IP20

Order numbers

2N® Audio Kit



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



IP ENVIRONMENT

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2N Access Unit



KEY FEATURES

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

RECOMMENDED USE

Villa secured by a fingerprint reader

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

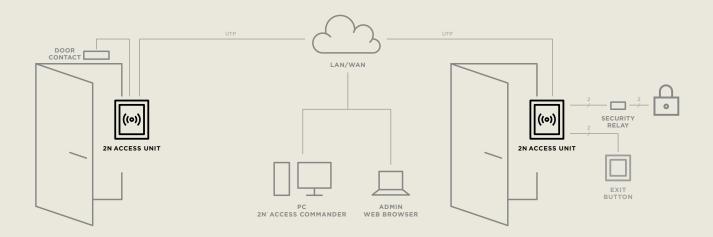
Enter your garage using Bluetooth

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

Communal spaces in apartment buildings

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

EXAMPLE OF CONNECTION OF THE 2N ACCESS UNIT



Technical parameters

ACCESS CONTROL

Audio

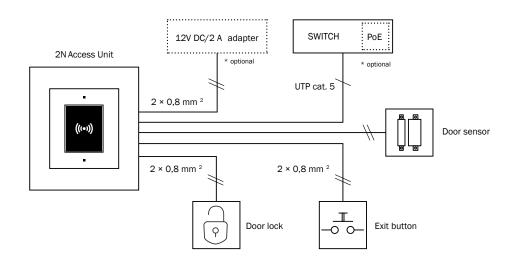
2N Access Unit

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



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

CONNECTION DIAGRAM



Order numbers

2N Access Unit



Order No.	01365-001
Name	2N® Access Unit RFID
Desc.	125kHz, door controller and RFID reader, outdoor and indoor use



Order No.	01366-001
Name	2N® Access Unit RFID
Desc.	13.56MHz, door controller and RFID reader, NFC technology support



Order No.	01368-001
Name	2N® Access Unit Bluetooth
Desc.	adjustable communication distance, two-factor authentication, simple pairing process



Order No.	01367-001
Name	2N® Access Unit Fingerprint Reader
Desc.	optical technology, acoustic and visual signalling, weatherproof



1	Order No.	01370-001
	Name	2N® Access Unit Touch Keypad
	Desc.	capacitive touch technology, regular automatic calibration, backlit symbols

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	RJ45 connector cable
Desc.	cable for interconnecting the Access Units



Order No.	01524-001
Name	Gang Plate - 1 module
Desc.	backplate for surface installation on a 2-gang backbox



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



Order No.	01369-001
Name	NFC license
Desc.	NFC license for 13.56MHz card reader



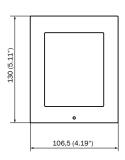
Order No.	
Name	2N® Mobile Key
Desc.	a free application that turns your mobile phone into an access card
	É

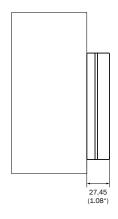
Dimensions and fitting

2N Access Unit

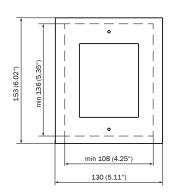
106

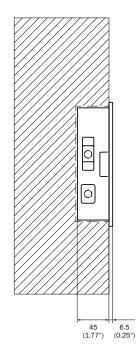
WALL-MOUNTED 1 MODULE





IN-WALL 1 MODULE

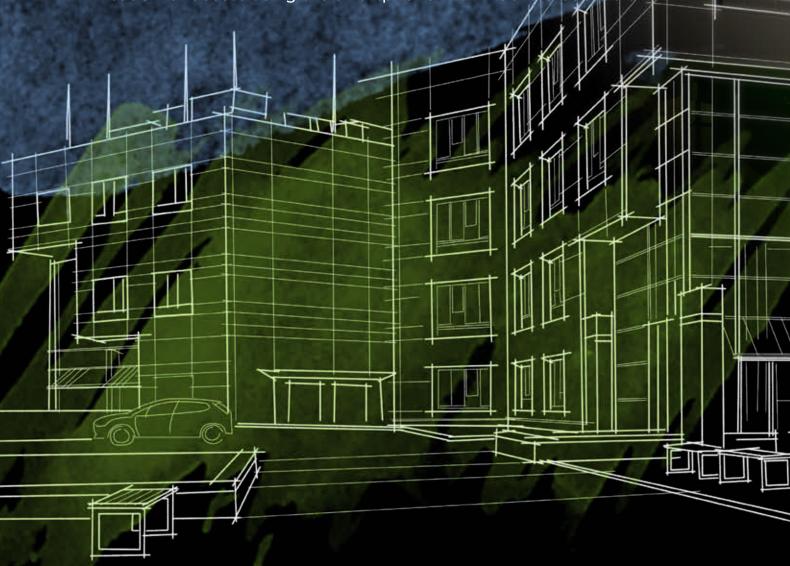




2N Access Unit 2.0

Multi-technology readers

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





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2N Access Unit 2.0



KEY FEATURES

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

RECOMMENDED USE

Highly protected areas

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

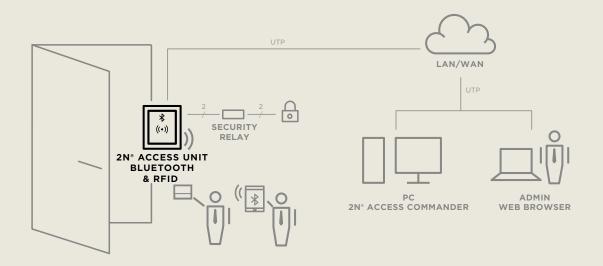
Office complex transiting to secured cards

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

Convenient way of accessing a common space

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

EXAMPLE OF CONNECTION OF THE 2N ACCESS UNIT 2.0



Technical parameters

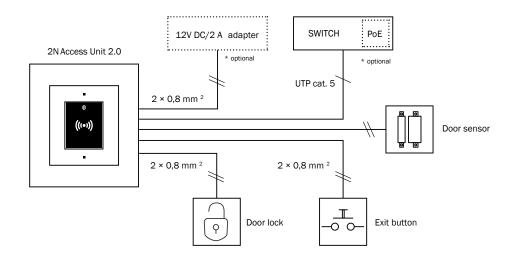
2N Access Unit 2.0

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



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

CONNECTION DIAGRAM



Order numbers

2N Access Unit 2.0



Order No.	01850-001
Name	2N® Access Unit 2.0 RFID
Desc.	125kHz, secured 13.56MHz, NFC



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

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	RJ45 connector cable
Desc.	cable for interconnecting the Access Units



Order No.	01524-001
Name	Gang Plate – 1 module
Desc.	backplate for surface installation on a 2-gang backbox



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



Order No.	01369-001
Name	NFC license
Desc.	NFC license for 13.56MHz card reader



Order No.	
Name	2N® Mobile Key
Desc.	a free application that turns your mobile phone into an access card
	n é

2N Access Unit M

Access control readers in mullion design

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





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2N Access Unit M



KEY FEATURES

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

RECOMMENDED USE

High level of protection for server room

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

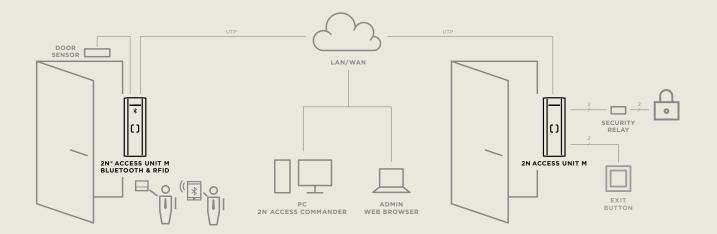
Meeting rooms under the control

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

Most common access control for office buildings

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

EXAMPLE OF CONNECTION OF THE 2N® ACCESS UNIT M



Audio

Technical parameters

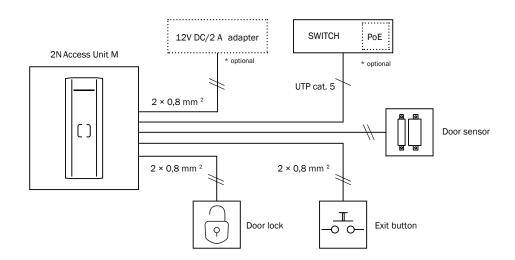
2N Access Unit M

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



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

CONNECTION DIAGRAM



Order numbers

2N Access Unit M



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



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



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



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



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



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

Accessories



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



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



Order No.	01369-001
Name	NFC license
Desc.	NFC license for 13.56MHz card reader



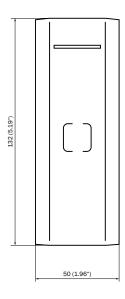
Order No.	
Name	2N® Mobile Key
Desc.	free application that turns your mobile phone into an access card
	▶ ★

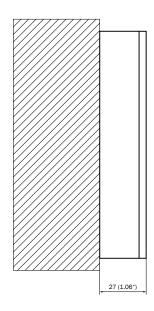
Dimensions and fitting

2N Access Unit M

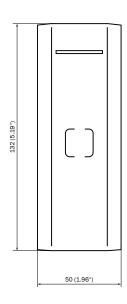
WALL-MOUNTED

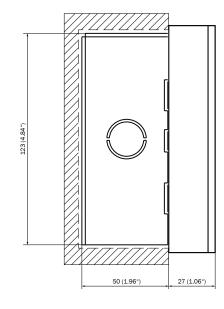
124



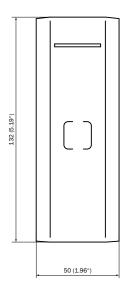


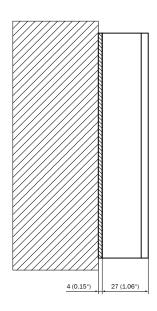
IN-WALL





GLASS-MOUNTED

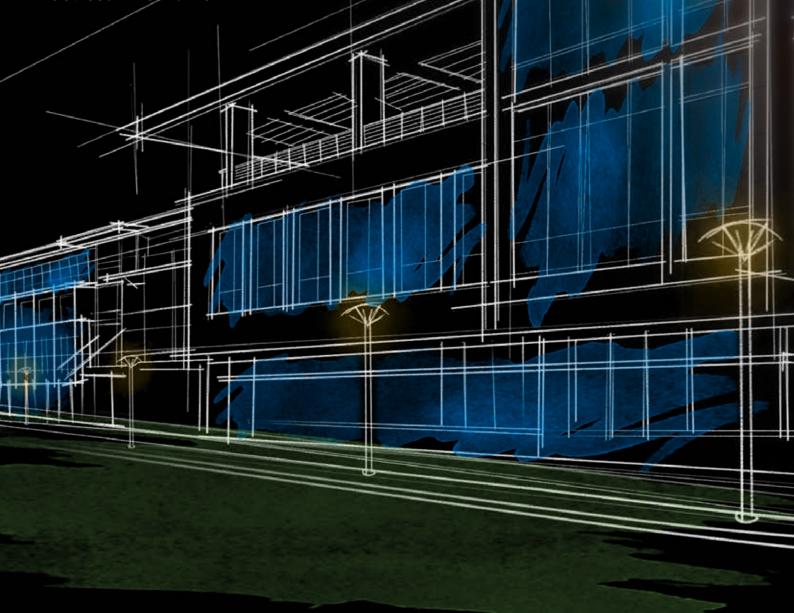






Software for access control and bulk management

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





IP ENVIRONMENT

2N® Access Commander

KEY FEATURES

· Software for access control and bulk management

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

Device monitoring and notification

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

Easy to install solution

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

Visitor management

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

Multiple site control

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

Open for integration

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

TECHNICAL PARAMETERS

General

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

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

Order numbers

2N® Access Commander



Order No.	01672-001
Name	2N® Access Commander Box
Desc.	Access Control software pre-installed on mini-PC (56.1 x 107.6 x 114.4mm)



Order No.	01372-001
Name	2N® Access Commander, Licence +5 devices
Desc.	license for adding devices



Order No.	01373-001
Name	License +25 users for T&A
Desc.	license for adding users - used only for attendance tracking!

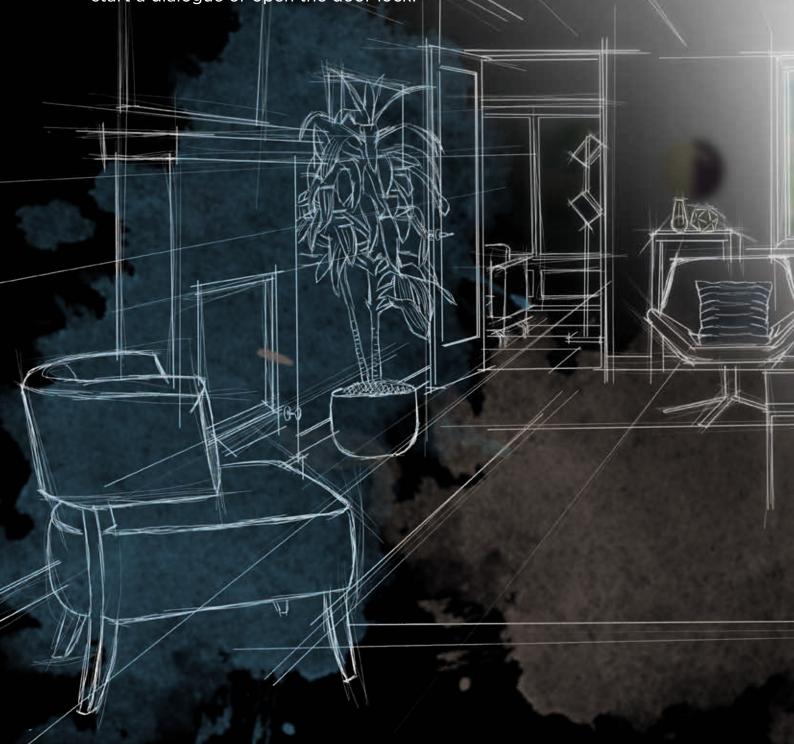


Order No.	01374-001
Name	2N® Access Commander, Integration License
Desc.	license for data synchronization with data stored in third-party databases. Active Directory and CSV import

2N® Indoor Touch 2.0

Luxury designed for your interior

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





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2N® Indoor Touch 2.0



KEY FEATURES

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



red<mark>dot</mark> design award winner 2017

RECOMMENDED USE

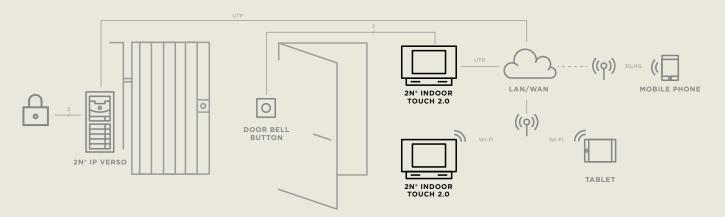
Home entrance monitoring

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

Integration into home automation systems

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

EXAMPLE OF CONNECTION OF THE 2N® INDOOR TOUCH 2.0



Technical parameters

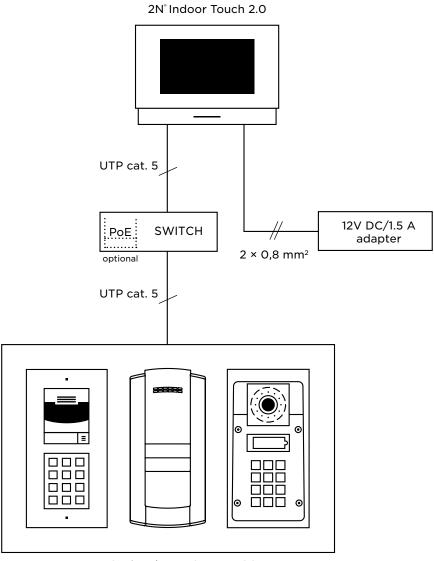
ACCESS CONTROL

2N® Indoor Touch 2.0

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



CONNECTION DIAGRAM



Optional VIDEO INTERCOM

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Order numbers

2N® Indoor Touch 2.0



Order No.	01668-001
Name	2N® Indoor Touch 2.0, PoE, black
Desc.	7" touchscreen, 4mm glass, capacitive touch, license for installation of 3 rd party applications for Android



Order No.	01669-001
Name	2N® Indoor Touch 2.0, PoE, white
Desc.	7" touchscreen, 4mm glass, capacitive touch, license for installation of 3 rd party applications for Android



Order No.	01670-001
Name	2N [®] Indoor Touch 2.0, PoE, WiFi, black
Desc.	7" touchscreen, capacitive touch, Wi-Fi, license for installation of 3 rd party applications for Android



Order No.	01671-001
Name	2N® Indoor Touch 2.0, PoE, WiFi, white
Desc.	7" touchscreen, capacitive touch, Wi-Fi, license for installation of 3 rd party



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



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

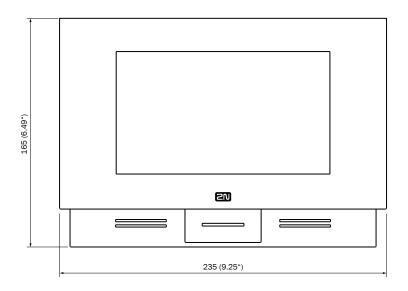


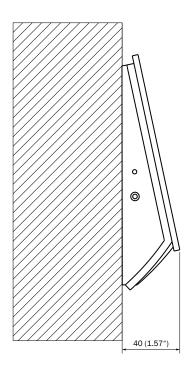
Order No.	01426-001
Name	2N® Indoor Touch 2.0, desk stand white
Desc.	Desk stand white

Dimensions and fitting

2N® Indoor Touch 2.0

WALL-MOUNTED









IP ENVIRONMENT

2N® Indoor Compact



KEY FEATURES

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

RECOMMENDED USE

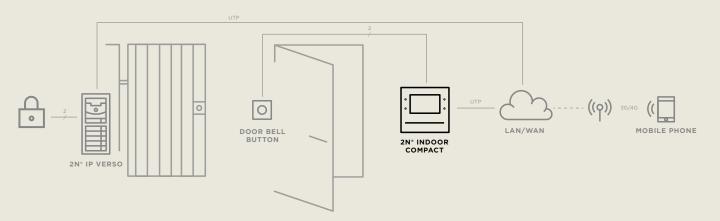
Video door communication for an apartment

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

Video from internal and external cameras

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

EXAMPLE OF CONNECTION OF THE 2N® INDOOR COMPACT



Technical parameters

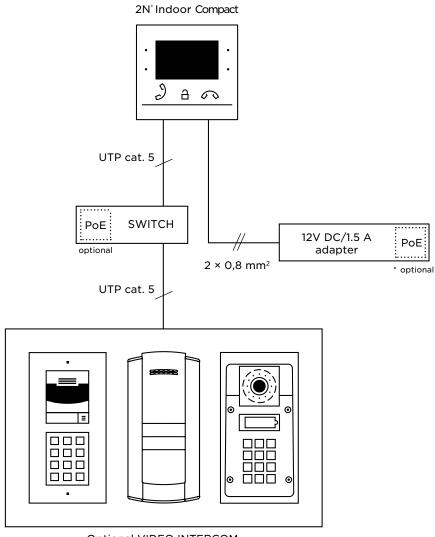
ACCESS CONTROL

2N® Indoor Compact

Signalling protocol	
	SIP
User interface	
Control	7 capacitive buttons with white and RGB LED backlight
Display	4,3" display, resolution 480 x 272 pixels
Service	RESET button with long press option for factory reset, 3 status LEDs
Power supply	12VDC +/-10% adapter or PoE 802.3af injector Phihong PSA16U-480 (POE)
Recommended power supply	12V / 1A
Reverse polarity protection	Yes
Audio	
Microphone	Integrated microphone
Speaker	Integrated 2W
Induction loop output	600 mV _{RMS}
Codecs	G.711, G.729, G.722, L16/16kHz
Video	
Video	4.7" diambry recolution 400 y 272 mixels
Display	4.3" display, resolution 480 x 272 pixels
Codecs	H.264, MJPEG
Interface	
LAN	10/100BaseT, RJ-45
Recommended cabling	Cat5e or higher
Doorbell Input	
Input type	Switching contact (button/relay)
Contact type	Normally open (NO)
Contact parameters	Up to 50 V / 5 mA, DC
Mechanical Parameters	
Operating temperature	0 to 50°C
Relative humidity	10 to 90% non-condensing
Storing temperature	-20 to 70°C
Recommended altitude	0 - 2000m
Weight	387g
Dimensions (w x h x d)	152 x 153 x 50



CONNECTION DIAGRAM



Optional VIDEO INTERCOM

Order numbers

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

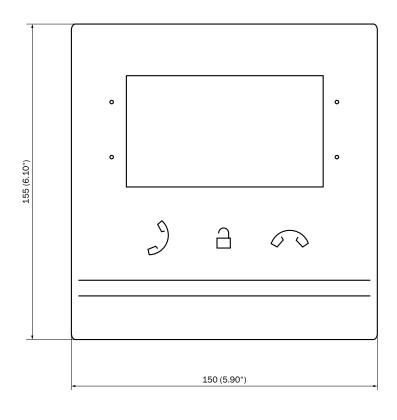


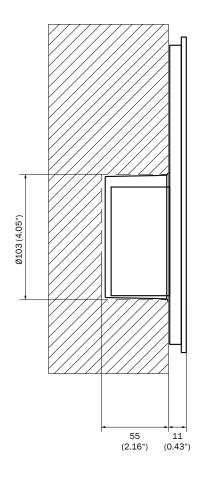
Order No.	01700-001
Name	2N Indoor Flush Box
Desc.	box for installation in the wall

Dimensions and fitting

2N® Indoor Compact

FLUSH-MOUNTED







The 2N® Indoor Talk answering unit will suit every flat or home.

The aesthetic appearance of this product was achieved by using a glass surface and striking backlighting of its icons. However, an emphasis was placed on selecting the highest-quality audio components in order to achieve a high-quality sound.



IP ENVIRONMENT

2N® Indoor Talk

ACCESS CONTROL



KEY FEATURES

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



RECOMMENDED USE

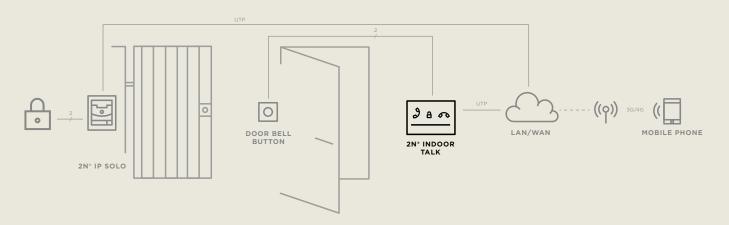
Intuitive unit for the whole family

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

Complementary answering unit

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

EXAMPLE OF CONNECTION OF THE 2N® INDOOR TALK



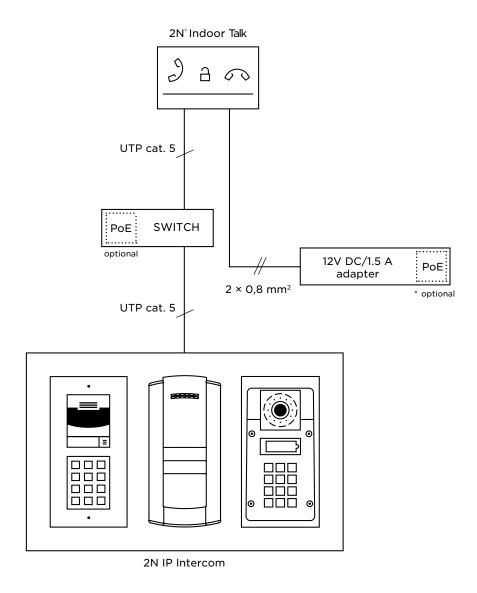
Technical parameters

2N® Indoor Talk

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



CONNECTION DIAGRAM



Order numbers

2N® Indoor Talk



Order No.	01698-001
Name	2N® Indoor Talk, black
Desc.	HD sound, slim design



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

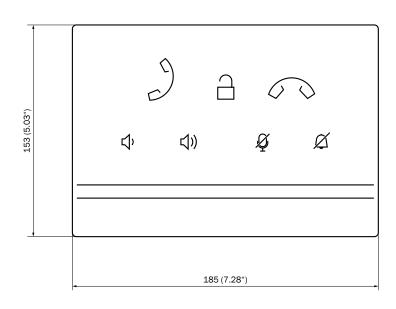


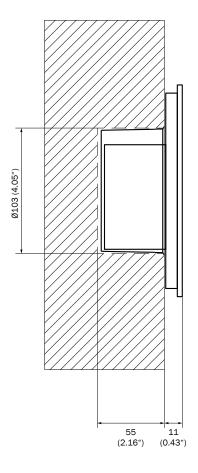
Order No.	01700-001
Name	2N Indoor Flush Box
Desc.	box for installation in the wall

Dimensions and fitting

2N® Indoor Talk

FLUSH-MOUNTED



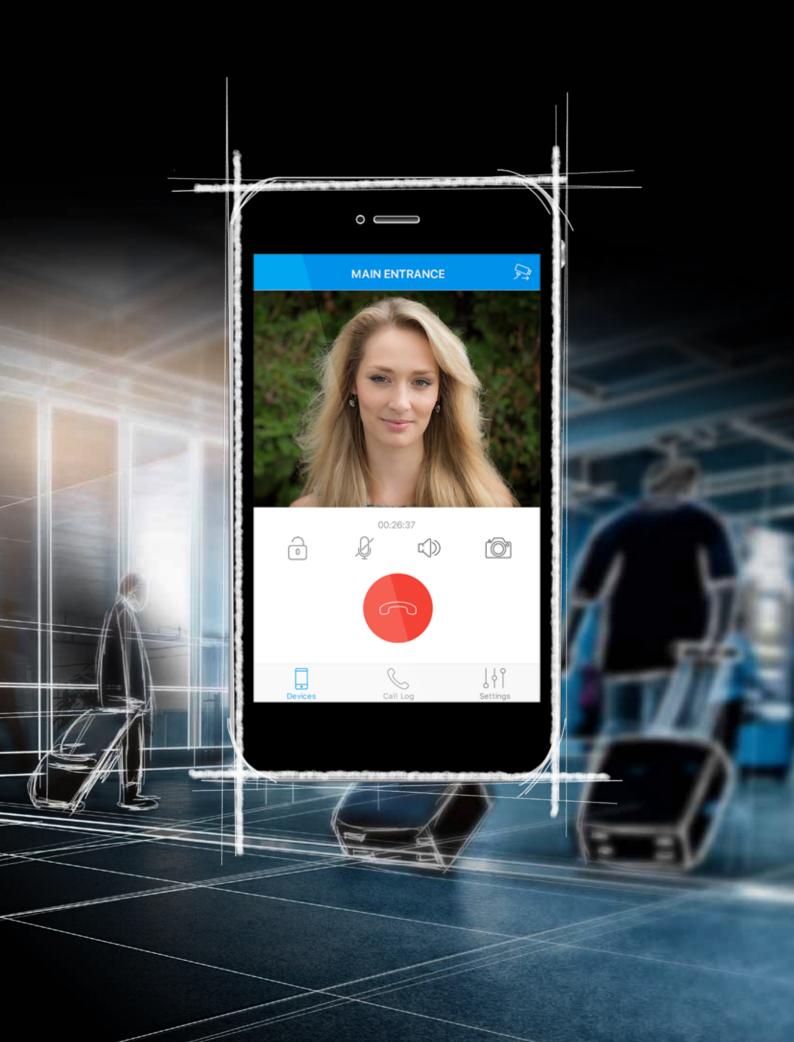


2N® Mobile Video

See who's ringing at your door

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





KEY FEATURES

• See who's ringing at your door

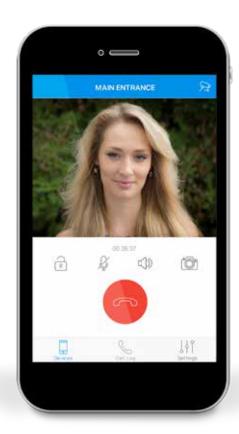
Receive video calls from the 2N intercom on your smartphone over the internet using the $2N^{\circ}$ Mobile Video application or just check the camera of your intercom to see what is happening at your front door.

• Open the door remotely with one touch

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

• Tailored for multi-tentant building needs

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







TECHNICAL PARAMETERS

General

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

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

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

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

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

Order numbers

2N® Mobile Video



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



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





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2N® Remote Configuration

KEY FEATURES

· Save on travel costs

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

FREE SERVICE

Offer instant help

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

No network setup needed

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

Comfortable access

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

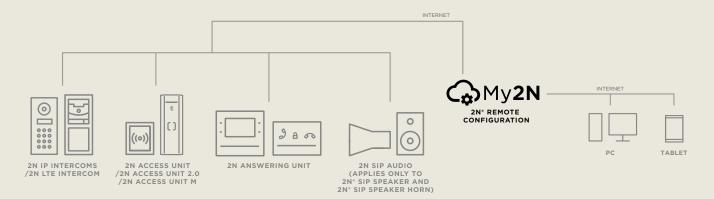
Secure connection

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

For more information, visit please www.my2n.com



SCHEME OF 2N® REMOTE CONFIGURATION



IP ENVIRONMENT

2N® Partner API

KEY FEATURES

Offer your own branded solution

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

Manage 2N devices online

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

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

Robust and secure REST API

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

Video calls from an intercom to your mobile phone

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

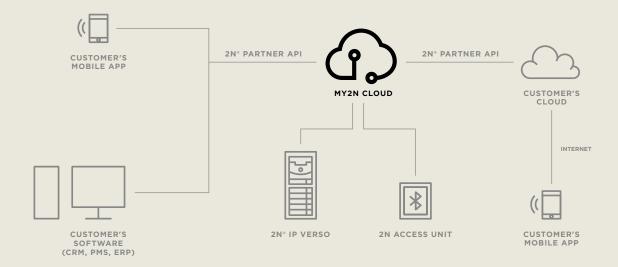
Access using a mobile phone

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

For more information, visit please www.my2n.com



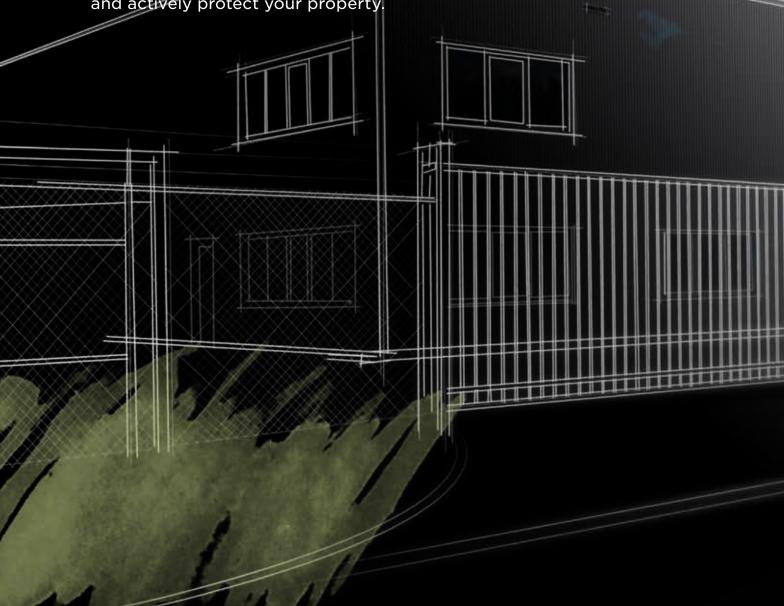
SCHEME OF 2N® PARTNER API



2N® SIP Speaker Horn

Loudest sound on the market

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





IP ENVIRONMENT

2N® SIP Speaker Horn















KEY FEATURES

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

RECOMMENDED USE

Warning for unwelcomed visitors

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

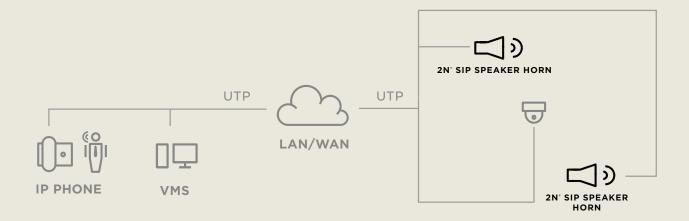
Public address in town

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

Assembly line emergency communication

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

EXAMPLE OF CONNECTION OF THE 2N® SIP SPEAKER HORN



Order numbers

2N® SIP Speaker Horn



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.	Coming soon
Name	SIP Audio external microphone Mono
Desc.	Audio surveillance, omnidirectional, outdoor



Order No.	Coming soon
Name	SIP Audio external microphone Stereo
Desc.	Audio surveillance, omnidirectional, outdoor

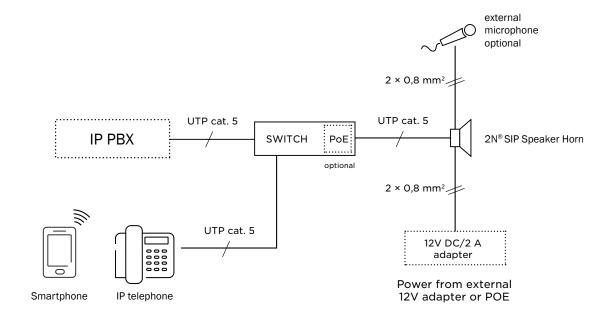
Technical parameters

2N® SIP Speaker Horn

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



CONNECTION DIAGRAM



2N® SIP Speaker

INTERCOMS

Live and pre-recorded announcements

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



IP ENVIRONMENT

2N® SIP Speaker



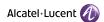












KEY FEATURES

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

RECOMMENDED USE

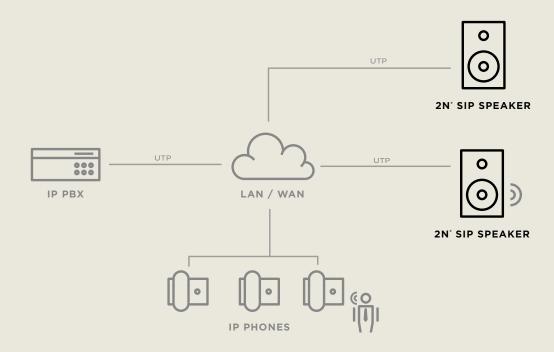
School classroom

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

Warehouses, waiting rooms, remote sites

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

EXAMPLE OF CONNECTION OF THE 2N® SIP SPEAKER



Order numbers

2N® SIP Speaker



Order No.	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

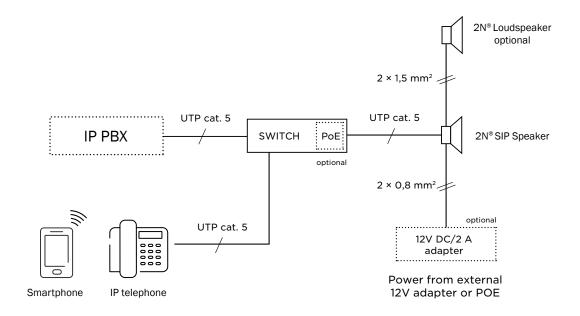
Technical parameters

2N® SIP Speaker

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



CONNECTION DIAGRAM



2N® SIP Mic

Server-less paging to up to 12 zones

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

2N® SIP Mic





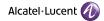












KEY FEATURES

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

RECOMMENDED USE

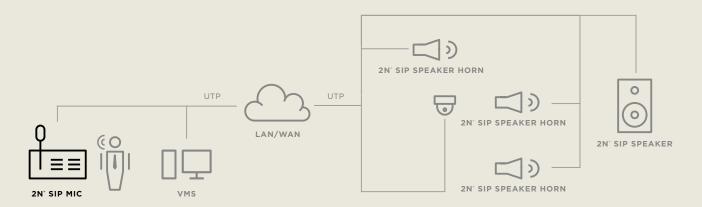
Public address in schools

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

Paging console for supervisory workplaces

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

EXAMPLE OF CONNECTION OF THE 2N® SIP MIC



2N® SIP Mic



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

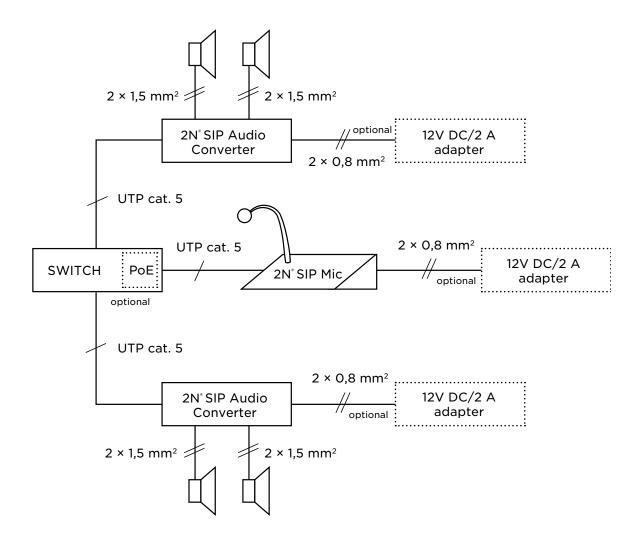
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TECHNICAL PARAMETERS

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



CONNECTION DIAGRAM



Upgrade for analog paging

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





2N® SIP Audio Converter















KEY FEATURES

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

RECOMMENDED USE

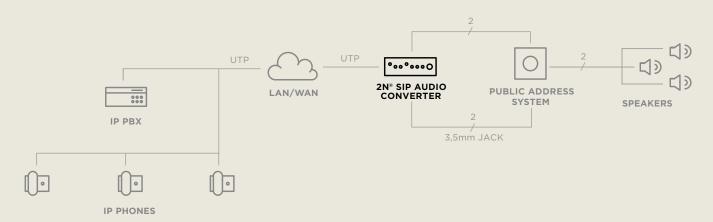
Doctor's waiting room

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

Two-way communication at schools

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

EXAMPLE OF CONNECTION OF THE 2N® SIP AUDIO CONVERTER



2N® SIP Audio Converter



Order No.	01429-001	
Name	2N® SIP Audio Converter	
Desc.	IP audio decoder, support for SIP protocol, built-in amplifier	



Order No.	01430-001	
Name	2N® SIP Audio Converter, set speaker & mic	
Desc.	package of 2N° SIP Audio Converte, small speaker and microphone	

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2N® SIP Audio Converter

TECHNICAL PARAMETERS

Interface			
Power from external source	12 V DC / 2 A		
Power from LAN	PoE IEEE 802.3af		
LAN connection	RJ-45 connector on rear panel 10/100BASE-TX with function Auto-MDIX		
Digital output	1× Relay output, 24V 1A AC/DC, galvanically insulated		
Digital input	1× Digital input, 5 to 24 V DC, galvanically uninsulated		
Earphone/line out	1× STEREO 3,5 mr	n jack on front pan	el
Microphone/Line in	1× STEREO 3,5 mr	n jack on front pan	el
Output of powerful amplifier	4× terminal on rear panel, STEREO/MONO with autodetection		
Control and signalling	7 DCD ED (
Signalling state	3× RGB LED on front panel		
Local control	3× button on front panel		
Remote control	1× Infrared detector on front panel		
Audio			
Speaker impedance	4 - 8 Ω	T .	T
Amplifier performance	Speaker	12 V/2 A	PoE
	2 × 4 Ω STEREO	2 × 10 W	2 × 5 W
	2 × 8 Ω STEREO	2 × 9 W	2 × 5 W
	4 Ω ΜΟΝΟ	1 × 18 W	1 × 10 W
	8 Ω ΜΟΝΟ	1 × 18 W	1 × 10 W
Frequency range	20 Hz - 20 kHz (±	0,5 dB)	
Harmonic distortion	0,05 % @ 1 kHz		
Signal-to-noise ratio	91 dB		
Audio compression	MPEG-1 Audio Layer II (MP2)		
Bandwidth	32-320 kbps		
Audiocodices	G.711 (PCMA, PCMU), G.729 (Annex A, B), L16, G.722		
Mechanical properties			
Dimensions	105 × 34 × 86 mm		
Dimensions (with L-profiles)	130 × 34 × 86 mm		
Weight	300 g		

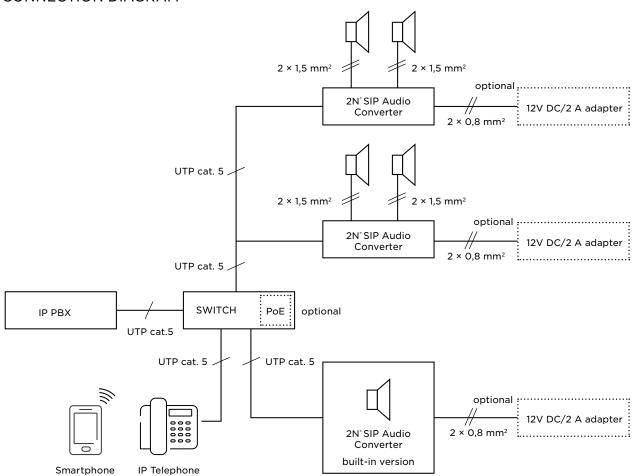


TECHNICAL PARAMETERS

2N® SIP Audio Converter built into speaker

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

CONNECTION DIAGRAM



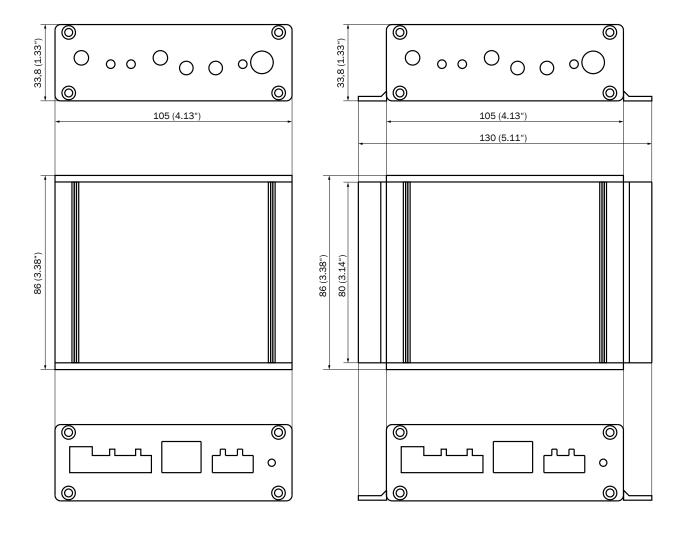
^{*} Power from external 12V adapter or POE

2N® SIP Audio Converter

WITHOUT LUGS

INTERCOMS

WITH LUGS



Other Accessories

Other Licences	
Enhanced Audio	01376-001
Enhanced Video	01377-001
Enhanced Integration	01378-001
Enhanced Security	01379-001
Gold	01380-001
Licence Informacast	01381-001
Licence NFC	01382-001
IP videophones	
IP telephone Yealink SIP T58A	01586-001
RFID tags (for Verso, Vario 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 card RFID 125 kHz EMarine (USB)	01399-001
External card RFID 13,56 MHz/125kHz (USB)	01400-001
External Secured RFID Card Reader 125kHz + 13.56MHz with NFC (USB)	01527-001
External card reader Wiegand 125 kHz EMarine RFID	01389-001
External card reader Wiegand 13,56 MHz Mifare RFID	01390-001

Other

External antenna for Induction Loop module	01265-001
2N® IP Security Relay	01386-001
2N® Wiegand Isolator	01387-001
2N® Induction Loop	01391-001
External antenna	01392-001
Power supply 12V/1A	01393-001
2N® 2Wire US	01404-001
IP relay - 1 output	01397-001
IP relay - 4 output	01398-001
Magnetic contact	01388-001
PoE Injector (EU/US plug)	01403-001

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