2N

Emergency communication for elevators

IP, digital & analogue systems by 2N

2N.com

2N

Michal Kratochvíl
CEO, 2N Telekomunikace a.s.

"For the last 24 years, our elevator division has been in the vanguard of innovation and applies 2N's expertise in IP technology to solve our elevator customers' most pressing problems. Worldwide, we have made more than 500,000 elevators safer, smarter and more reliable."

Martin Andersen
Vice President New Business, Axis Communications

"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."

About the company

Four challenges in the emergency communication

Reliable communication between an elevator cabin and call center is mandatory in most of the countries. Usually, it is the only way how to contact the outside world and get help when you are trapped in the elevator. But many changes and exciting new challenges are coming in the field of elevator emergency communication. Get ready for them.

Transition to 4G (LTE) networks

Soon, the whole elevator industry will face a technological change due to the too expensive PSTN network and shutdown of 2G (GSM) and 3G (UMTS) mobile networks. As a result, vast majority of installed gateways are going to stop working, so elevators will lose connectivity to call centers with all legal consequences. In reaction to that a transition to 4G (LTE) networks will be necessary.

Reliable transmission of dtmf codes

DTMF is essential for identification of the elevator devices and for their configuration. However, PSTN, 2G, 3G and even 4G (VoLTE) networks frequently distort the DTMF signal and its error-free transmission is not guaranteed. This is a crucial problem for elevator signalling protocols (CPC, P100). Therefore, the only future-proof option is to use SIP-enabled VoIP gateways that guarantee reliable transmission of DTMF.

Request for online monitoring

Elevator market is very competitive, and price is one of the crucial factors. However, significant part of the cost represents mainly post-warranty services, specifically human labor and site visits. That's why elevator companies are increasingly demanding to transform a regular elevator into a smart, connected IP solution allowing remote maintenance and monitoring.

Internet connectivity to elevators

Lower costs and make elevator installations easier by using a 2N solution! Our IP technology allows you to bring internet connectivity easily to elevators with up to 8 IP devices using only one pair of plain wires in the travelling cables. It's suitable for one installation over 2 elevator cabins that share a maximum of 100mb/s.

DTMF distortion

2N® EasyGate IP

Fixed lines unavailability

2N® Elevator Center

GSM & UMTS shutdown

2N® LiftIP 2.0

Technicians IT skills

2N® LiftGate

Internet connectivity

2N® Lift8 LTE

IP solution

When people talk about a "smart building", they usually think of modern technologies, remote 24/7 monitoring, and unified applications to control lights, doors, heating, etc. But they often forget about the elevator, which is an integral part of a smart living. With our solution, you only need one IoT gateway and two wires in the travelling cable to connect an IP communicator, camera, access reader and advertising panel in the elevator cabin.

2N® LiftGate

2N® LiftGate is an IoT gateway that combines the functions of an LTE router, a backup power supply, a converter (2-wire to IP) and a switch. Using just 2 conductors in the traveling cable you get the IP connectivity right to the cabin. Then, you can connect and even power IP communicator, IP camera or IP access control directly from it.

A single SIM card provides you with both call and data connectivity, for example for an IP controller or access control system. This gateway also supports SIP protocol and ensures reliable transmission of DTMF codes to the dispatching center. Management is done locally or via 2N® Elevator Center.

Order numbers
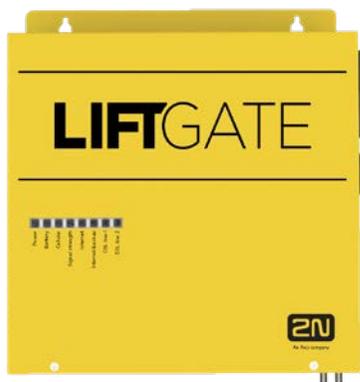
Order No.	5024101E
Name	2N® LiftGate
Desc.	For 1 or 2 shafts

Order No.	502460E
Name	2N® LiftGate Cabin switch
Desc.	-

Key features

- Auto configuration
- IP to the cabin via 2 wires in travelling cable
- One SIM card for calling and data connectivity

Installation
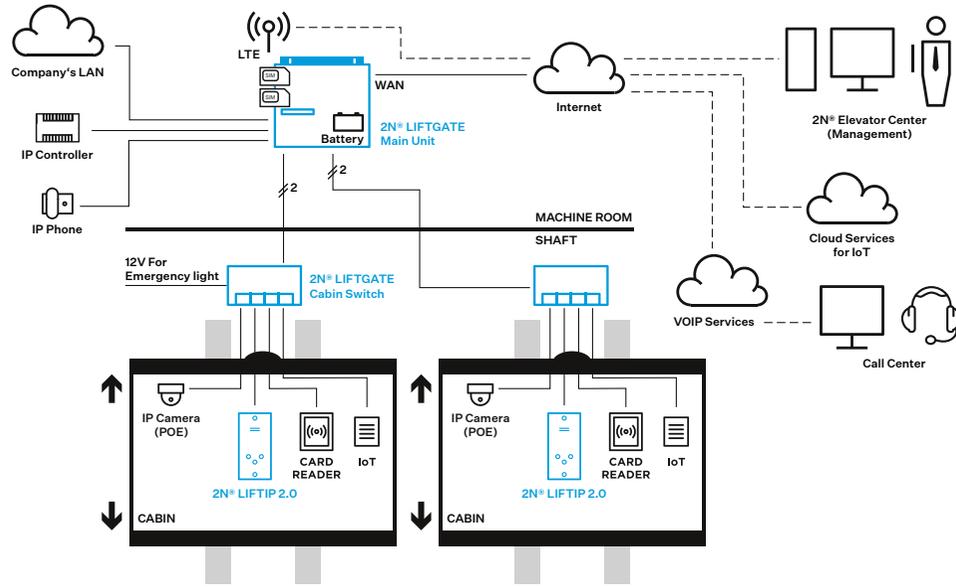
Technical Specifications

Cabin Switch

Connection to the main unit: 2 wires

Interface

Ethernet	4× RJ-45 port, 100 Mbps
PoE	2× PoE 802.3af Class 0 (max 12.95 W) via LAN1 and LAN2 ports
Output	12 V DC, 100 mA (for emergency lighting)
Protocols	IPV4, IPV6, ICMP, DNS, DHCP, NAT, HTTP, HTTPS, WS, NTP, OPENVPN, SYSLOG

Mechanical properties

Operating temperature	-20°C to +50°C
Dimensions	143 × 95 × 32 mm
IP protection	IP30
Installation	Surface mounted on a wall or DIN rail
Weight	0.2 kg

Main unit

Telephone network

GSM band	EU (EGSM 900 MHz, GSM 1800 MHz) AU (EGSM 850/900 MHz, GSM 1800/1900 MHz)
UMTS band	EU (850/900/2100 MHz) US (850/1700/1900 MHz) AU (850/900/1900/2100 MHz)
LTE band	EU (B1, B3, B5, B7, B8, B20) US (B2/B4/B5/B12/B13/B14/B66/B71) AU (B1, B3, B5, B7, B28, B40)
SIM cards	2 slots; (U)SIM, 1.8 / 3.0 V

Antenna

Number	Two inputs (Main and Diversity)
Impedance	50 Ω
Connector type	F-SMA

Ethernet

Interface	4× RJ-45, 1 Gbps (1x WAN, 3x LAN)
PoE	1× PoE 802.3af Class 2 (max 6.49 W) via the LAN1 port
Protocols	IPV4, IPV6, ICMP, DNS, DHCP, NAT, HTTP, HTTPS, WS, NTP, OPENVPN, SYSLOG

Inputs and outputs

Inputs	2 0 - 24 V (low level 0-2 V, high 4-24 V)
Outputs	2× relay (NO, NC, COM terminal block) max. 30 V / 1 A DC, 125 V / 0.3 A AC
Number of lines	2

Power supply

Voltage	100 – 230 V AC
Frequency	50/60 Hz
Input power	65 W for 2× Cabin Switch
Backup power	built-in lead-acid battery, 12 V / 9 Ah (included)

Mechanical properties

Operating temperature	-20°C to +50°C
Dimensions	270 × 240 × 80 mm
IP protection	IP20
Weight	4.7 kg with battery, 2.2 kg without battery

2N® LiftIP 2.0

The 2N® LiftIP 2.0 is a unique product on the elevator communication systems market. This IP-based emergency communicator uses VoIP technology for transmitting call from an elevator cabin to the alarm center. These calls can be tied to the video from the IP camera installed in the elevator cabin. This gives the operator an immediate overview of what's going on in the cabin and whether anyone is trapped.

Key features

- Full duplex audio
- Future proof, IP-based solution
- Online monitoring and remote management

Order numbers
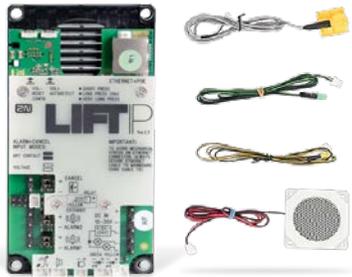
Order No.	921640E
Name	2N® LiftIP 2.0 COP UNIT
Desc.	COP version - fixed

Order No.	921640XE
Name	2N® LiftIP 2.0 COP UNIT
Desc.	COP version - wired

Order No.	921618BE
Name	2N® LiftIP 2.0 COP UNIT FLUSH MOUNT
Desc.	With button

Order No.	921618E
Name	2N® LiftIP 2.0 COP UNIT FLUSH MOUNT
Desc.	Without button

Order No.	921631E
Name	2N® LiftIP 2.0 TOC UNIT
Desc.	With Voice alarm station switch

Order No.	921630E
Name	2N® LiftIP 2.0 TOC UNIT
Desc.	Without Voice alarm station switch

Order No.	921001SET
Name	2N® LiftIP 2.0 VOICE ALARM STATION SET
Desc.	Intended for installation on top of and under an elevator cabin

Order No.	921623E
Name	2N® LiftIP 2.0 I/O EXTENDER
Desc.	Extends 2N® LiftIP 2.0 with 1 input and 2 outputs

Installation
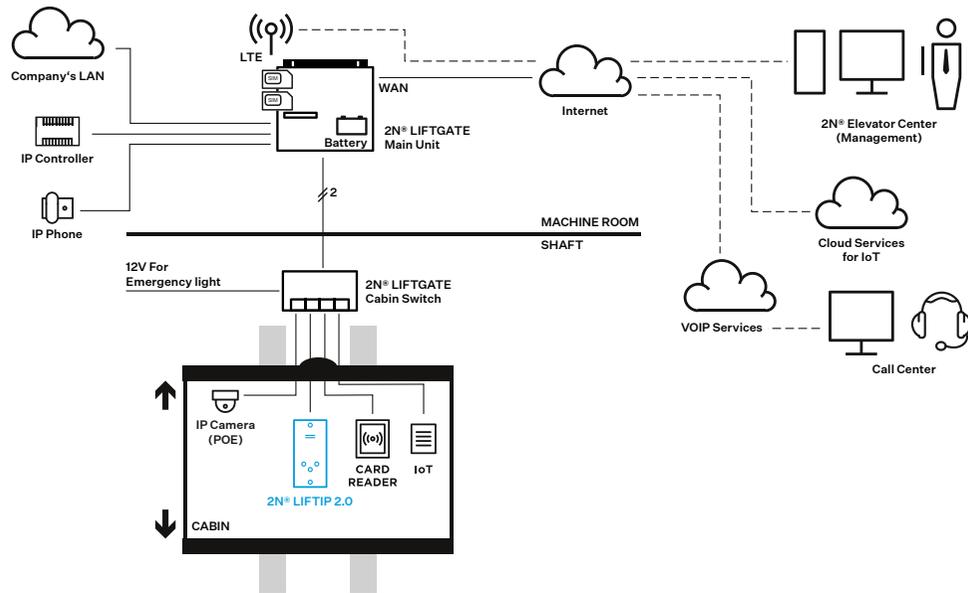
Technical Specifications

Power supply

Voltage	10 – 30V DC (keep polarity) or 48V PoE 802.3af
Consumption	maximum 3.5W max. 2 W with integrated speaker; max. 3.5 W with external 4 Ω speaker (not included)

ALARM and CANCEL voltage input

Inputs	5-48V DC (keep polarity) NC/NO contacts

Audio Parameters

Speaker	Integrated 16Ω / 1W (0.45 W output power), option to increase the output power to 2.3 W by connecting a speaker with 4 Ω impedance
Microphone	Integrated, option to connect an external electret microphone
Audio	Full duplex, G.711 (approx 90kbit/s)
Induction loop output	3.35V RMS / 100 Ω output impedance
Codecs	PCMU, PCMA, G.711 (approx. 90 kbps), L16, G.722 and G.729

Connection of External Indicators

Voltage	12 – 24V DC, external supply
Maximum current	200mA (100 mA if a bulb is used)

Other parameters

Operating temperature	- 20 °C – +50°C

Dimensions (W x H x D)

PCB version (hidden behind the COP)	65 × 130 × 24 mm
COP design version (flush mount)	100 × 220 × 26 mm
TOC long version (for installation on top of car with Voice alarm station switch)	82 × 257 × 33 mm
TOC short version (for installation on top of car w/o Voice alarm station switch)	82 × 186 × 33 mm

Digital
modular solution

Are you looking for a modular, future-proof solution for multiple shafts? Do you want an IP communication from the elevator but there is no ethernet cable to the cabin? Do you have a project that has to be compliant with strict standards such as EN 81-72? If you answered "yes" to any of these questions, then 2N® Lift8 is the right choice for you.

2N® Lift8

2N® Lift8 is highly modular elevator communication system using just two-wire bus. It is an ideal solution for demanding high rise installations, projects requiring modularity and buildings with multiple shafts. The seamless hardware upgrade without the need to change the whole system provides flexibility and reduces TCO. 2N® Lift8 meets all the applicable EU standards.

Key features

- Comprehensive, modular, expandable
- Wide range of communication interfaces
- Connection of up to 8 shafts management

Various types of audio units:
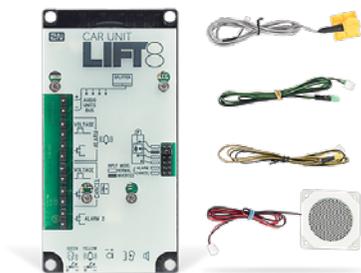
COP version of the cabin unit for installed behind the panel

Order No.	918610E
Name	2N® Lift8 AUDIO UNIT COP
Desc.	COP version

Order No.	918610XE
Name	2N® Lift8 AUDIO UNIT COP
Desc.	COP version with cables

Surface-mounted cabin unit

Order No.	918613E
Name	2N® Lift8 Audio Unit COMPACT
Desc.	With button

Order No.	918613WBE
Name	2N® Lift8 Audio Unit COMPACT
Desc.	Without button

Flush-mounted antivandal version of the cabin unit

Order No.	918618BE
Name	2N® Lift8 AUDIO UNIT FLUSH
Desc.	With button

Order No.	918618E
Name	2N® Lift8 AUDIO UNIT FLUSH
Desc.	Without button

2N® Lift8 Central Unit, the main component of the system, provides the battery backup for all connected audio units and ensures audio communication.

Order No.	918600E
Name	2N® Lift8 Central unit
Desc.	-

Monitoring interface to elevator controller

Interfaces for communication with the operator (outside calling)
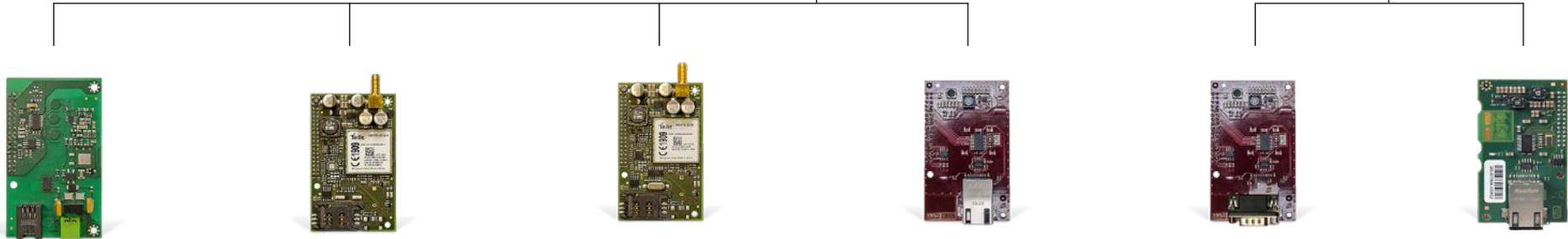
Order No.	918652E
Name	2N® Lift8 PSTN
Desc.	-

Order No.	918650E
Name	2N® Lift8 GSM
Desc.	2G

Order No.	918651E
Name	2N® Lift8 UMTS
Desc.	2G, 3G

Order No.	918658G
Name	2N® Lift8 LTE
Desc.	2G, 3G, VoLTE

Order No.	9186531E
Name	2N® Lift8 VOIP
Desc.	RJ-45 port (WAN); SIP communication

Order No.	918654E
Name	2N® Lift8 RS232
Desc.	-

Order No.	918657E
Name	2N®Lift8 IP
Desc.	RJ-45 port (LAN)

Order numbers

Order No.	**918611E**
Name	2N® Lift8 MACHINE ROOM UNIT
Desc.	MR unit + programming

Order No.	**918623E**
Name	2N® Lift8 MACHINE ROOM UNIT
Desc.	PCB version

Order No.	**918622E**
Name	2N® Lift8 CAMERA MODULE
Desc.	For visual alarm confirmation

Order No.	**918620E**
Name	2N® Lift8 SPLITTER
Desc.	Shaft extender

Order No.	**918621E**
Name	2N® Lift8 I/O MODUL
Desc.	For easy lift monitoring

Order No.	918615E
Name	2N® Lift8 Audio Unit FIREMAN
Desc.	For fire fighter elevators

Order No.	918619E
Name	2N® Lift8 Audio Unit FIREMAN
Desc.	PCB version

Order No.	918617E
Name	2N® Lift8 SHAFT UNIT ANTIVANDAL
Desc.	For heavy duty environment

Order No.	918612E
Name	2N® Lift8 SHAFT UNIT
Desc.	Top of, under cabin or pit

Order No.	918655E
Name	2N® Lift8 PICTOGRAM CONTROLLER
Desc.	External pictogram driver

Installation
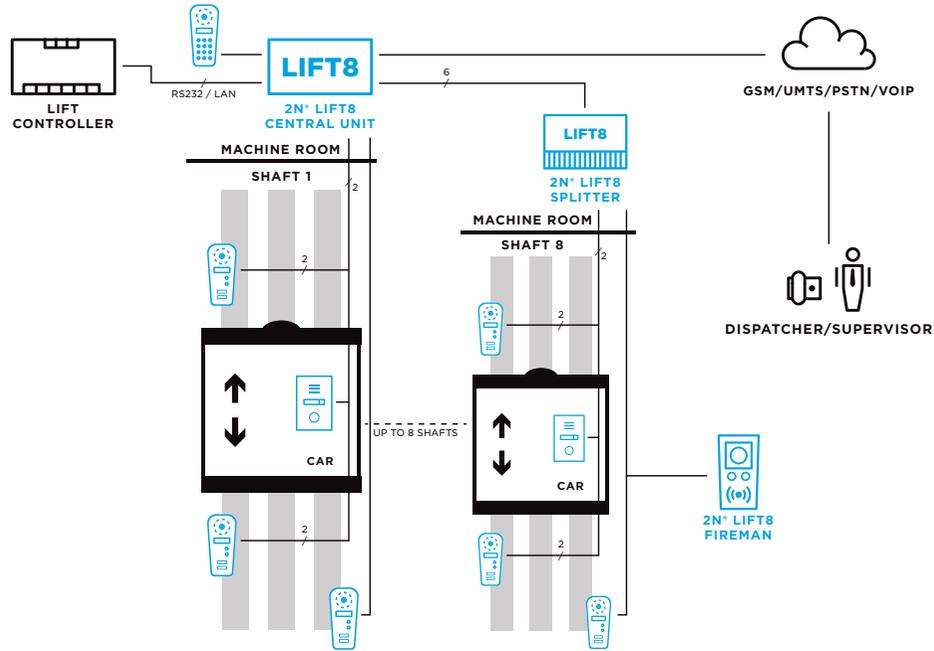
Technical Specifications

Central unit

Power supply (max.)	100-240V; 50/60Hz; 0,75A; 60W
Backup power supply	Internal Lead Acid Battery (1,3 Ah / 3 Ah)
Maximum distance between splitters	100 m (with cable cross-section 2,5 mm^2)
Connection options	7 reporting units +7 splitters + 8 I/O modules
Interface for connection with lift service centre	Choice of PSTN/GSM/UMTS/LTE/VoIP
Configuration and monitoring	Voice menu/USB/remote
Indicators	5x LED, three-colour
Dimensions and weight	300 × 170 × 72 mm; 2,7 kg
Operating temperature	0 - 40℃

Cellular network

Bands	GSM 850/900/1800/1900 MHz UMTS 800/850/900/2100 MHz **LTE module (EG25-G):** LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B12/B13/B18/B19/B20/B25/B26/B28; LTE-TDD: B38/B39/B40/B41; WCDMA: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8
SIM card	mini, plug-in 3V
Antenna	one external with SMA connector

Camera module

Power supply	12 – 18V DC, max. 0,2A
Camera Interface	RS232/RS485 and RJ-45
Dimensions	142 × 98 × 34 mm
Memory card	microSD up to 32GB

Splitter

Power supply	24V from Central Unit or local
Capacity	7 audio units and Camera module
Max. overall length	600 m
Lift block impulse	Relay, both NO and NC contacts
Dimensions	142 × 98 × 34 mm

Fireman unit & audio unit shaft (antivandal)

Cover	robust aluminum casting
Operating temperature	−25℃ - 55℃
Operating relative humidity	10% - 95% (non-condensing)
Storage temperature	−40℃ - 70℃
Dimensions	217 × 109 × 83 mm, (242 × 136 × 83 mm including the frame)
Weight	netto: max. 2 kg, brutto: max 2,5 kg
IP coverage	IP65

I/O module

Power supply	24V from central unit or local
Capacity	4 inputs + 4 outputs
Inputs	Galvanized insulation, 12 - 24V AC or DC
Outputs	Relay, NO contacts, max. 250V, 5A
Dimensions	142 × 98 × 34 mm

Analogue solution

PSTN lines are nearing their end or are extremely expensive. Connect an analogue communicator to a modern 2N analogue gateway and voice and data (VoIP) communication will take place over a mobile network. You will also be able to keep an eye on the elevator.

2N® EasyGate IP

2N® EasyGate IP turns your analogue communicators into a VoIP-enabled devices without making a single change to hardware in the cabin. This new generation of GSM/UMTS/VoLTE/LTE gateway supports SIP protocol to provide reliable transmission of DTMF codes to the dispatching centre. Device management can be done either locally, or via cloud-based 2N® Elevator Center portal. Monitored in-built battery backup fully complies with the latest elevator norms for emergency communication.

Key features

• Supporting VoIP (SIP over LTE)

• Auto configuration and online monitoring

• Durable industrial mechanics (IP43)

Order No.	5023001E
Name	2N® EasyGate IP
Desc.	2G, 3G, VoLTE, VoIP

Order No.	5025001E
Name	2N® EasyGate IP+
Desc.	2G, 3G, VoLTE, VoIP, WAN, LAN

Installation
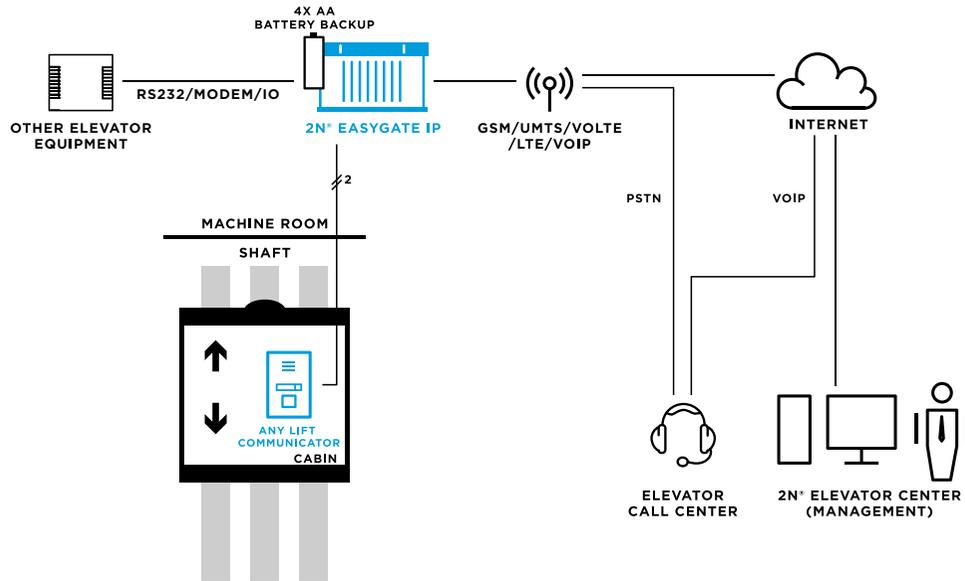
Technical Specifications

Voice

GSM networks	850/900/1800/1900 Mhz
UMTS networks	900/2100 MHz (EU)
	850/1900 MHz (US)
	850/2100 MHz (JPN)
LTE networks (EU/NA/AU)	LTE FDD: B1/B3/B5/B7/B8/B20
	WCDMA: B1/B5/B8
	GSM: B3/B8
	LTE FDD: B2/B4/B12
	WCDMA: B2/B4/B5
	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B28
	LTE TDD: B40
	WCDMA: B1/B2/B5/B8
	GSM: B2/B3/B5/B8

Data

LTE	LTE FDD: Max 10Mbps (DL)/Max 5Mbps (UL)
	LTE TDD: Max 8.96Mbps (DL)/Max 3.1Mbps (UL)
UMTS	DC-HSDPA: Max 42Mbps (DL)
	HSUPA: Max 5.76Mbps (UL)
	WCDMA: Max 384Kbps (DL)/Max 384Kbps (UL)
GSM	EDGE: Max 296Kbps (DL)/Max 236.8Kbps (UL)
	GPRS: Max 107Kbps (DL)/Max 85.6Kbps (UL)
Serial Interface	RS232
SIM cards	3 V and 1.8 V

Antenna

Connector type	SMA
Impedance	50 Ohms

Line interface

Interface type	Two-wire, FXS for phone or external PBX line
Connector type	Terminal
Supported modes	DTMF

Power source

Power unit supplied with the gateway	(12 V/1 A), Option to connect an external 10 to 16 V DC power source
Backup power using 4×AA batteries	16/12 kHz
USB Interface	
Configuration and upgrade	Web GUI, or My2N for elevators cloud

Other

Dimensions	195 × 119 × 61 mm
IP coverage	IP43
Operating temperature	-40°C to +85°C
Operational status signalling	4×LED (ON, GSM network, line, data), LED indicator – signal strength/battery status

2N® EasyGate PRO

2N® EasyGate PRO is a full featured land-line replacement. An analogue GSM/UMTS/VoLTE gateway suited for an elevator environment. Connect to it any elevator emergency communication system, or use it as an instant replacement of fixed lines via mobile (cellular) solution. In addition, the gateway can make a call for transferring data and SMS messages. Also available as dual SIM.

Key features

• Land-line replacement

• Trouble-free installation

• Elevator monitoring by SMS report

Order No.	5013321LE
Name	2N® EasyGate GSM
Desc.	1x UMTS, FXS port, Aku+, EU plug

Order No.	5013391LAU
Name	2N® EasyGate LTE
Desc.	1x LTE, FXS port, Aku+

Order No.	5013391LUS
Name	2N® EasyGate IP+
Desc.	1x LTE, FXS port, Aku+

Installation
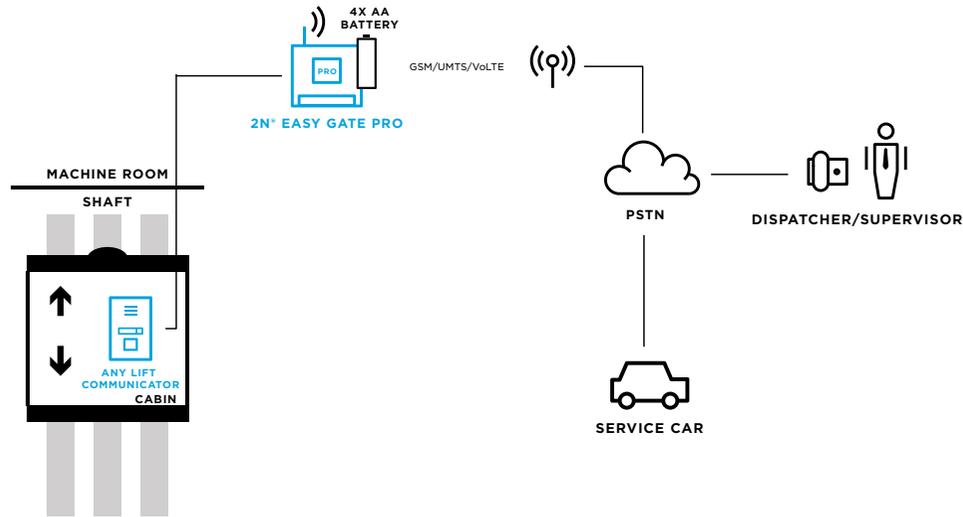
Technical Specifications

GSM model

GSM networks	850/900/1800/1900 Mhz
GSM modules	Cinterion MC55i-w
Data	CSD (up to 14.4 kbit/s), GPRS Class 10
SIM card	3 V and 1.8 V

GSM/LTE model

GSM networks	850/900/1800/1900 Mhz
LTE networks	700/1700/1900 MHz (US version), 700/850/900/1700/1800/2100/2300/2600 MHz (AU+MZ version)
Data	HSDPA 3.6 Mbps, WCDMA, EDGE, GPRS
SIM card	3 V and 1.8 V

Antenna

Connector type	SMA
Impedance	50 Ohms

Line interface

Interface type	Two-wire, FXS for phone or external PBX line
Connector type	RJ12, 6/2, or terminal
Supported modes	DTMF and pulse

Power source

Power unit supplied with the gateway	(12 V/1 A)
Option to connect an external 10 to 16 V DC power source	DTMF and pulse
Backup power using 4×AA batteries	16/12 kHz

USB Interface

Configuration and upgrade using 2N® PC Manager UNI	200 mA

Other

Dimensions	163×157×38 mm
Operating temperature	0°C – 45°C
Operational status signalling	4×LED (on, GSM network, line, data), LED indicator – signal strength/battery status
Operational status signalling	4xLED (on, GSM network, line, data)
LED indicator	signal strength/battery status

2N® Lift1

The 2N® Lift1 is a cost-effective analog solution designed for two-way emergency communication in the elevators. Its typical use is for the communication between the cabin and the control centre or machine room. Configuration can be done locally using the software, via voice menu (in call) or using SMS service.

Key features

- A comprehensive solution for single elevator
- Fully powered over phone line
- Supports CPC and P100 protocols

Order numbers
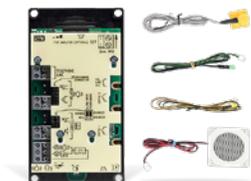
Order No.	919640E
Name	2N® Lift1 CABIN UNIT COP
Desc.	COP version - fixed

Order No.	919640XE
Name	2N® Lift1 CABIN UNIT COP
Desc.	COP version - wired

Order No.	919645E
Name	2N® Lift1 CABIN UNIT SURFACE MOUNT
Desc.	With button

Order No.	919645WBE
Name	2N® Lift1 CABIN UNIT SURFACE MOUNT
Desc.	Without button

Order No.	919618BE
Name	2N® Lift1 CABIN UNIT FLUSH MOUNT
Desc.	With button

Order No.	919618E
Name	2N® Lift1 CABIN UNIT FLUSH MOUNT
Desc.	Without button

Order No.	919631E
Name	2N® Lift1 CABIN UNIT TOC
Desc.	With Voice alarm station switch

Order No.	919630E
Name	2N® Lift1 CABIN UNIT TOC
Desc.	Without Voice alarm station switch

Order No.	913661ESET
Name	2N® Lift1 VOICE ALARM STATION SET
Desc.	Intended for installation on top of and under an elevator cabin

Order No.	919654ESET
Name	2N® Lift1 MACHINE ROOM STATION SET
Desc.	Ensures communication to the elevator cabin

Order No.	919680E
Name	2N® Lift1 USB PROGRAMMING TOOL
Desc.	Mandatory USB tool for Lift1 configuration from PC

Order No.	913648E
Name	2N® Lift1 Switch module
Desc.	DTMF remote controlled universal switch

Order No.	913649E
Name	2N® Lift1 Blocking module
Desc.	Blocks the elevator in case of telephone line failure

Order No.	913650E
Name	2N® Lift1 Amplifier module
Desc.	Speaker amplifier for noisy environment

Installation

4X AA BATTERY BACKUP

MR PHONE

2N° EASYGATE IP

GSM/UMTS/VoLTE / LTE

MACHINE ROOM

SHAFT

2N° LIFT1

CABIN

PSTN

DISPATCHER/SUPERVISOR

SERVICE CAR
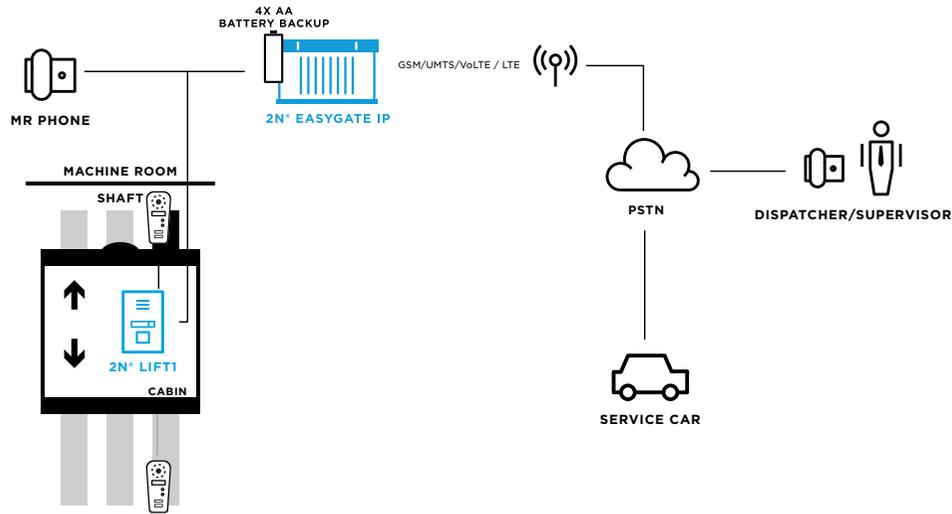
Technical Specifications

Electrical parameters

Minimum line current	15 mA, off the hook
Minimum line voltage	22 V, on the hook
DC voltage drop in the off the hook state	< 9 V, I = 20 mA, < 12 V, I = 50 mA
Resistance on the hook	1 MΩ >, U = 25..100 V
Impedance off the hook	220 Ω + 820 Ω paral. 115 nF, 15 to 60 mA
Attenuation	> 14 dB, 15 to 60 mA
Bandwidth	300 to 3500 Hz, 15 to 60 mA
Impedance while ringing	> 2 kΩC = 0.47 µF, 25 to 50 Hz
Ringtone detection sensitivity	10 to 20 V, 25 to 50 Hz
Pulse dialling	40 / 60 ms
Tone-dial levels	-9.0 +2.0/-2.5 dB and -11.0 dB +2.5/-2.0 dB, 15 to 60 mA
Power surge protection – differential between A, B leads	1000 V (8 / 20 µs)
Note Any ringing sequence is acceptable	

Switch parameters

|	
Minimum voltage	9 V AC or DC
Minimum voltage	24 V AC or DC
Maximum current	1 A AC or DC
Resistance – open	min 400 kΩ
Resistance – closed	approx. 0.5 Ω
Fuse	resettable
Connection of external indicator elements	
Power supply voltage	12-24 V DC, external source
Maximum switching current	200 mA
Other parameters	
Dimensions of the Universal implementation	65×130×24 mm
Dimensions of the Compact implementation	100×185×16 mm
Operating temperature range	-20°C to 70°C

Elevator software

Keep track of all your installations, save time and respond to problems before the customer even finds out. 2N's tools allow you to configure, manage and monitor emergency communication products remotely. You can also use the application to manage control and alarm calls.

2N® Elevator Center

The 2N® Elevator Center gives you non-stop control over all installed elevator devices. Manage and monitor your IP communicators, gateways and routers from your office. You don't need any IT skills. A technician will install the device and it will automatically connect to the portal in just a few seconds. 2N® Elevator Center will safely and reliably usher you to the world of smart elevators with modern functions.

All connected 2N IP devices provide operational data like signal strength, battery status, network registration, error states and outages immediately to the portal. System administrators also have a possibility to access connected devices remotely which reduces maintenance cost and simplifies troubleshooting, implementation of new features or configuration changes.

You can rest assured that all data transfers are absolutely secure. The 2N® Elevator Center is part of the My2N platform, which has been operating without interruption since 2016, is regularly audited and as a company we are also ISO 27001 certified

Key characteristics:

- Device status monitoring
- Remote management
- Auto configuration
- Reliable DTMF transmission
- Trusted and verified platform
- Partner API for easy integration

Key features

- Central device management
- Remote monitoring
- Fully reliable and secure platform

RELIABLE DTMF TRANSMISSION
CLOUD PBX
CYBER SECURITY
1-CLICK INSTALLATION & AUTO CONFIGURATION
ONLINE MONITORING & REMOTE UPGRADE

LTE | WAN
VOIP
2N® PARTNER API

CABIN
IP CAMERA
IP/ANALOGUE AUDIO UNIT
OTHER IP DEVICES

CALL CENTRE
3RD PARTY SYSTEMS
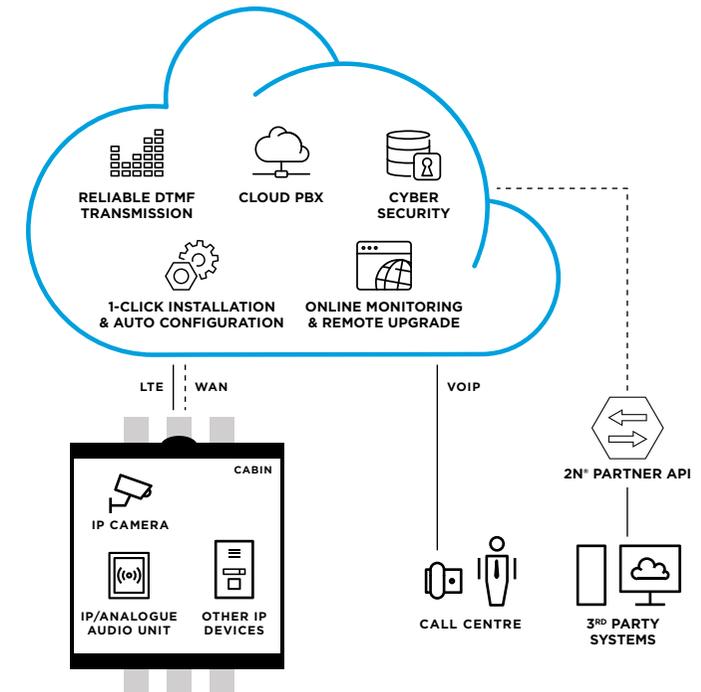
2N® Call Center

Call Center for Elevators is a software solution for the comprehensive management of emergency elevator communicators. The software will even allow you to handle alarms and control calls. You get not only a detailed overview of all your calls from the elevator, but the option to archive them or export the data e.g. for customer reports preparation.

Key features

• Management of control and alarm calls

• No extra hardware required

• Support for CPC and P100 protocols

Order No.	918700E
Name	2N® CALL CENTER for Elevators
Desc.	-

2N Elevator software

2N® Lift8 SERVICE TOOL

The 2N® Lift8 Service Tool is software used for local (USB) or remote (IP) configuration of one complete 2N® Lift8 communication system (audio messages, additional modules, splitters and I/O modules).

2N® Lift1 SERVICE TOOL

With the aid of 2N® Lift1 Service Tool software, you will be able to completely set up the 2N® Lift1 communicator. In addition to this, the softwareapplication can, apart from configuration, also be used to perform an upgrade and to change the language version.

Elevator accessories

2N® 2Wire – Ethernet 2 wire convertor	9159014E
2N® Emergency button under/or top of the cabin	918690E
2N® Floor annunciator	913305E
2N® External microphone 1 m	913627E
2N® External microphone 3 m	9136273E
2N® External speaker 1 m	913625E
2N® External speaker 3 m	9136253E
2N® External LED's 1 m	913620E
2N® External LED's 3 m	9136203E
2N® High gain 9dB antenna 10m for GSM or UMTS	22041567
2N® High gain 9dB antenna 10m for LTE	22041579
2N® Induction Loop Amplifier with Antenna	919622E
2N® EnergyBank	501398E

TÜV SÜD Certified

All emergency communication products are certified by TÜV SÜD Czech. The TÜV certifficates confirm compliance with EN81-28, EN 81-70, EN81-72 and EN81-80.

NGN Ready

The world is switching from analog lines to IP technologies, particularly among fixed-line operators, who are upgrading their original analog lines. Always striving to provide the most reliable services, our 2N® Lift1, 2N® Lift8 and 2N® LiftIP 2.0 elevator communicators comply with this trend. We tested the 2N® Lift1, 2N® Lift8 a 2N® LiftIP 2.0 on these new connections in a special Deutsche Telekom laboratory in Bonn.

ELEVATOR NORMS

EN 81-28

EN 81-28 – Emergency calls. The purpose of this standard is to improve communication in emergency situations in elevators. It eliminates the risk of passengers being entrapped due to malfunctions in elevator installation. This is accomplished by fitting all elevators with an emergency call system, which connects elevator cabin with remote emergency service.

EN 81-70

EN 81-70 – Barrier free elevators. This standard allows people with reduced mobility (pushchairs, wheelchairs, walking aids, etc.) or other disabilities (mental disability, sight and hearing impairment, etc.) to enter elevator cabins easily and operate elevators without limitations.

EN 81-72

EN 81-72 – Firefighting elevator. The standard deals with the significant hazards, hazardous situations and events relevant to firefighter elevators installed mostly in new buildings. They are primarily intended for use by passengers and thus may be used for firefighting and evacuation purposes under direct control of firefighters.

EN 81-20

EN 81-20 – Requirements for construction. This standard replaces the EN 81-1 standard and specifies the emergency call system requirements in greater detail. Elevators must now be equipped with additional communication units that must be installed with the ALARM system under the EN 81-28 standard to allow a person trapped in the shaft to place an emergency call.

EN 81-71

EN 81-71 – Vandal resistant elevators. The EN 81-71 standard defines the testing methodology and classification of elevators according to their vandal resistance. Furthermore, this standard provides guidance to building designers, customers, etc., and requirements for design in projects requiring additional security in order to protect against the risk of vandalism.

EN 81-80

EN 81-80 – Elevator modernization / hazard analysis. EN81-80 SNEL (Safety Norm for Existing Elevators) improves the security of existing passenger and goods passenger elevators. This standard defines rules for improving safety of existing elevators based on risk assessment and categorises various hazards and hazardous situations.

2N.com