

OPEN THE DOOR TO INNOVATION

2N ELEVATOR SYSTEMS - Emergency communication devices for any lift.







"For 25 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 growing number of key players in elevator market becoming our customers." "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."



OLDŘICH STEJSKAL Chief Executive Officer, Chairman of the Board, 2N



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CABIN UNIT COP

COP version - fixed

COP version - wired

ord. 920640E

ord. 920640XE

The 2N[®] LiftIP is a unique product on the lift communication systems market. It is using VoIP technology for transmitting call from a lift cabin. Therefore, you can install it anywhere where an IP infrastructure is available. What's more, installation requires no additional converters or other hardware. The 2N[®] LiftIP provides high quality transmission of sound and continuous online monitoring.

2N° LiftIP 2N° LiftIP 2N° LiftIP

CABIN UNIT FLUSH MOUNT

With button ord. 920618BE

Without button ord. 920618E

Quick installation

Full duplex audio

Future proof solution

With Voice alarm station switch ord. 920631E Without Voice alarm station switch ord. 920630E

CABIN UNIT TOC

Installation

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Technical Specifications



/oltage	10 - 30V DC, PoE (48V)
Consumption	Maximum 6 W
larm/Cancel input	5-48 V DC
Speaker	Integrated 16 Ω / 0.25W
1icrophone	Integrated
Audio	Full duplex
nduction loop output	0,5V RMS / 75 Ω
Pictograms	12 - 24 V DC / 200mA
Dimensions	65x130x24 mm
Operating temperature	- 20 °C - +50°C

The 2N[®] Lift1 communication solution is designed for two-way emergency communication in the lift. Its typical use is in elevators where communication is required between the cabin and the control centre or machine room.

A comprehensive solution for single lift

Fully powered over phone line

Supports CPC and P100 protocols









2N[®] Lift1 VOICE ALARM STATION SET

2N[®] Lift1 MACHINE ROOM STATION SET

2N[®] Lift1 USB PROGRAMMING TOOL

For easy PC programming ord. 919680E

2N[®] Lift1 Switch module ord. 913648E

2N[®] Lift1 Blocking module ord. 913649E

2N[®] Lift1 Ampflier module ord. 913648E

For top and under cabin ord. 913661ESET

Machine room unit ord. 919654ESET

Installation



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 = 25100 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	1000 V (8 / 20 μs)
between A, B leads	
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 Kempelet implementation	100×10E×16 mm

Dimensions of the Kompakt implementation 100×185×16 mm Operating temperature range -20°C - 70°C



A highly modular lift communication system, where the two-wire bus makes the 2N[®] Lift8 readily installable in any lift context. This means that when it comes to providing for emergency lift communications you won't have to trouble with putting in new cabling. 2N[®] Lift8 meets all the applicable EU standards. 2 wire bus in shaft including power

Comprehensive, modular, expandable

Wide range of communication interfaces





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2N° Lift8 CAMERA MODULE	2N [®] Lift8 FIREMAN	2N [®] Lift8 PICTOGRAM CONTROLLER	2N [®] Lift8 VOICE ALARM STATION SET
For visual alarm confirmation ord. 918622E	For fire fighter elevators ord. 918615E	External pictogram driver ord. 918655E	For top and under cabin ord. 913662ESET





Technical Specifications

Central unit

Power	100 - 240 V; 50/60 Hz; 0.75 A; 60 W max.
Backup power supply	Built-in lead acid battery
Connection options	4 reporting units + 7 splitters + 8 I/O modules
Maximum distance between the splitters	100 m
Control-room connection interface	Optional PSTN / GSM / UMTS / VoIP
Configuration and monitoring	Voice menu / USB / remote
Status indicators	5× LED, three-colour
Dimensions and weight	300×170×72 mm, 2.7 kg
Splitter	10 to 20 V, 25 to 50 Hz
Power	24 V from a central or local unit
Capacity	4 reporting units + camera module
Maximum total shaft cable length	600 m
Lift blocker output	Relay, NO and NC contacts
Dimensions	142×98×34 mm
Reporting units	9V AC or DC
Link to splitter	2 wires for power, voice and data
nputs for buttons and signals	ALARM1, ALARM2, CANCEL
LED signalling	Connecting, Connection confirmed
Option to hook up an external microphone, speaker and LED	Yes, on the cabin reporting unit
Numeric keypad, system configuration option	Yes, on the machine room reporting unit
Option to connect an earpiece in noisy	Yes, in the machine room and shaft reporting
circumstances	units
n-shaft visibility	Yes, backlit buttons
/O Module	200 mA
Power	24 V from a central or local unit
Capacity	4 inputs + 4 outputs
nputs	Galvanically isolated, 12 - 24 V AC or DC
Outputs	Relay, contacts Normally-Open (NO),
	max. 250 V, 5 A
Dimensions	142×98×34 mm



2N® Lift GATEWAY

2N[®] EasyGate PRO is a full featured land-line replacement. An analogue GSM/ UMTS/VoLTE gateway suited for a lift environment. Connect to it any lift 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. Land-line replacement

Trouble-free installation

Lift monitoring by SMS report





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/UMTS model	
GSM networks	850/900/1800/1900 Mhz
UMTS networks	900/2100 MHz (EU version), 850/1900 MHz (US version), 850/2100 MHz (Japanese 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
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 D power source	C 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)

2N Lift SOFTWARE

Call Centre for Lifts is a software solution for the comprehensive management of emergency lift 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 lift, but the option to archive them or export the data e.g. for customer reports preparation. Management of control and alarm calls

No extra hardware required

Support for CPC and P100 protocols



2N[®] CALL CENTRE FOR LIFTS

ord. 918700E

2N® Lift SOFTWARE



2N[®] Lift8 SERVICE TOOL

2N[®] Lift1 SERVICE TOOL

2N[®] LiftIP 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).

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 software application can, apart from configuration, also be used to perform an upgrade and to change the language version. With the 2N[®] LiftIP Service Tool, you will be able to fully configure the 2N[®] LiftIP lift communicator yourself. The tool will also help you update the software or switch between languages for audio announcements played back in the lift cabin or used during configuration.

INDUCTION LOOP FOR LIFTS

Emergency lift communication for the hearing-impaired. The 2N[®] Induction Loop is an inductive loop that delivers audio to the lift-cabin interior, where it transmits the sound to hearing aids with a built-in inductive sensor. The induction loop is an indispensable assistant in resolving emergency communications from inside the lift for hearing aid users.

Connect to any lift communicator

Take advantage of two independent audio inputs

Cover the lift space with a signal for the hearing-impaired



2N[®] INDUCTION LOOP AMPLIFIER WITH ANTENNA

ord. 919622E

Lift ACCESSORIES

2N® 2Wire - Ethernet 2 wire convertor	9159014E
$2N^{\scriptscriptstyle \otimes}$ 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 antenna 9dB 10 m	22041567



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.



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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 elevator communicators comply with this trend. We tested the 2N[®] Lift1, 2N[®] Lift8 a 2N[®] LiftIP on these new connections in a special Deutsche Telekom laboratory in Bonn.

ELEVATOR NORMS



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. This alarm system must be capable of establishing a two-way voice communication between people in an elevator cabin and a remote emergency (rescue) service. The EN 81-28 standard thus applies to all new and modernized elevators.



EN 81-70 – Barrier free elevators. EN 81-70 defines the minimum requirements for safe independent access and use of elevators by all passengers, including those with disabilities. It provides guidelines on how to best improve the accessibility on the approach to elevators, within elevator cars and while exiting 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 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. These elevators can only operate within a protected environment. They are designed with additional protection, controls and signals enabling rescue from inside or outside elevator cars in case of fire. EN 81-20 replaces the EN 81-1 standard and specifies the emergency call system requirements in greater detail. Lifts must now be equipped with additional communication units. Additional equipment 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. This must be accessible from locations where the risk of a person being trapped exists.

EN 81-71 - Vandal resistant elevators. The EN 81-71 standard defines the testing methodology and classification of elevators according to their vandal resistance. It entails special protective measures and security rules against acts that may result in damage to elevators or injury to passengers. 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 – Elevator modernization / hazard analysis. EN81-80 SNEL (Safety Norm for Existing Lifts) improves the security of existing passenger and goods passenger elevators. The aim is to match the level of safety achieved by newly installed elevators. This standard defines rules for improving safety of existing elevators based on risk assessment and categorises various hazards and hazardous situations. It also lists corrective actions that can be implemented to progressively improve safety.









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