



- **Tolerant of extreme environments**
- **Shock, impact and vibration proof**
- **Vandal proof**
- **Weather resistant: IP65**
- **Remote diagnostics and control**
- **Excellent Sound Quality (STI = 0,9)**
- **Illuminated display**
- **Built in high intensity beacon**
- **Available without Keypad**



When Performance Counts

The Norphonc VoIP telephone provides reliable performance in extreme environments.

The heavy duty aluminium telephone is dust and water-proof to IP65. It is also impact, vibration and shock-proof. The Norphonc telephone is otherwise built to withstand exposure to extreme temperatures, humidity and corrosion. It comes with an illuminated display and a flashing light beacon for use in dark tunnels or in noisy areas where a ring may not be heard. The robust handset, armored cord and cable-cover ensures excellent protection against vandalism.

The Norphonc telephone features advanced VoIP capabilities, including an intuitive remote management function, saving both installation time and maintenance costs. Telephone start-up, firmware updates and system checks can be done remotely via any standard web browser.

Norphonc telephones are built on open standards and thus ensures seamless connectivity with related technology such as PABX, gateways, switches and SCADA systems.

Applications

Norphonc Heavy Duty VoIP Telephones are sold as standard products, but can also be tailored to user needs. Our telephones therefore represents a perfect fit for many different applications. The telephone unit has specific approvals for Marine and Railway applications, and can also be used roadside traffic applications (ERT), tunnelling, mining, and other industries, including:

- Transport (roadside, railway stations, airports)
- Offshore wind power
- Commercial (Stadias, Banking, Retail)
- Educational & government facilities
- Power Production and Utilities
- Underground mining
- Manufacturing and construction

Technical Specifications

Weather Resistance: Dust and waterproof to IP65

Heavy Duty Performance: Impact, shock, fall and vibration proof, able to perform in difficult environments

Operating Temperatures: -25° C to + 65° C

Relative humidity high: 93% R.H at 40° C (non condensing)

Casing Material: Heavy Duty aluminium (salt & corrosion resistant)

Illuminated LCD Display: for status notifications and instructions

Flashing Light: ideal for noisy areas where a ring may not be heard, or for easy location inside dark tunnels etc

Handset: Robust handset with armored stainless steel cord IP65

Hook-switch: Magnetic with no mechanical moving parts

Microphone: Noise cancelling dynamic mic, proven in noisy areas

Keypad: 0-9, *, # plus two configurable function keys (14 keys total)

Volume control: Adjustment keys for speaker volume

Excellent Sound Quality: STI approved to 0.9 (Excellent Sound)

Ringling volume: 80 dB(A) in 1m distance

Color: Yellow with coated Aluminum back/ sides - or special order

Weight: 3 kg approx.

Power Supply: 24V DC input, or Power over Ethernet (PoE).

Connection: RJ45 Ethernet socket through IP67 plug connector.

Quality of Service (QoS): ensuring optimal delivery of voice

Type of Service (ToS): high throughput and reliability (RFC3168)

ISDN gateway compliance: connect any SIP compliant VoIP/ ISDN gateway to call to - and receive - calls from ISDN

Virtual LAN: Telephone support 802.1Q VLAN on all network ports, which enables sharing of same physical infrastructure for several logically isolated networks.

SIP (Session Initiation Protocol) RFC3261

Inbuilt redundancy: able to make diversion calls to 2nd PBX

Self-Monitoring and Fault Check Functions: automatic health-check and fault sensing for increased performance. Status can be read by all major SCADA and associated control systems.

Modbus UDP and Modbus TCP protocols: enabling remote access for status monitoring and control (link status, handset on/off, condition of telephone components, etc).

SNMP (Simple Network Management Protocol): for advanced status monitoring and control

Configuration: web interface or server based configuration file. Static IP address provisioning or DHCP. Mass configuration available.

Keypad Option: available without a keypad (autodial-on-handset-lift), used to initiate a PABX Hotline or wait for reply.

Accessories: optional mounting plate, cables and cable cover (coated aluminum) for improved vandal resistance.

Remote Management: Available with remote management software, to simplify installation and cut maintenance costs.

Order Codes

Norphonic Telephone - With Keypad N-K1

Norphonic Telephone - Without Keypad N-K0

Optional Accessories:

Back mounting plate - add "M" at the end of the order code

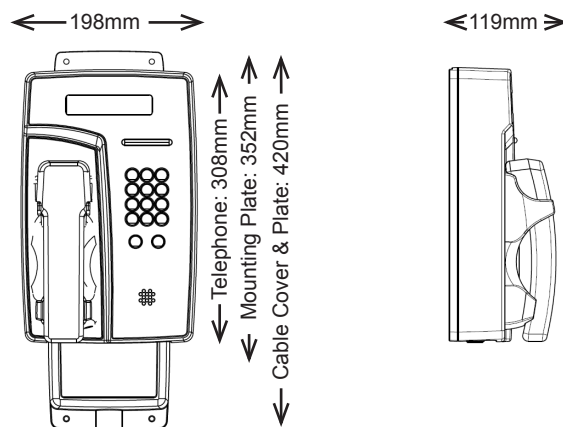
Cable Cover - add "C" at the end of the order code

Remote Management Software: NOR-RMsoft

Learn more about our Innovations at
www.norphonic.com

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Dimensions



Approvals

Degree of Protection: IP65 according to EN 60529 (2001), Ed.2.1

Speech Transmission Index (STI): 0.9 delivering Excellent sound.

Shock, vibration and impact immunity according to:

- o IEC 60068-2-27 (2008) Shock proof: 10Gn
- o IEC 60068-2-6 (2008), Ed.6.0 Vibration proof
- o IEC 60068-2-62 (1991) + A1 (1993) Mechanical impact: 10J
- o EN 50102 - IK 09 (1995) Impact proof

Temperature & humidity immunity according to:

- o IEC 60068-2-1 (2000), Ed.6.0 Low temperature -25° C
- o IEC 60068-2-2 (2000), Ed.5.0 High temperature +65° C
- o IEC 60068-2-78 (2001), Ed.1.0 High humidity 93% R.H. at +30° C

Industry-related approvals, according to:

- o EN 50121-4 (2000) Railway Applications
- o EN 60945 (2002). Maritime Applications

European EMC certification compliant with Directive 1999/5/EC:

- o EN 55022 (2010) Radiated Emissions
- o EN 55024 (2010) Immunity
- o EN 6000-4-2 (2009), Ed.2.0 Electrostatic discharge immunity
- o EN 61000-4-3 (2008), Ed.3.1 Radiated immunity
- o EN 61000-4-4 (2010), Ed.2.1 Electrical fast transient immunity
- o EN 61000-4-5 (2006), Ed.2.0 Surge immunity
- o EN 61000-4-6 (2009), Ed.3.0 Conducted disturbances immunity
- o EN 61000-4-8 (2010), Ed.2.0 Power magnetic field immunity
- o EN 61000-4-9 (2001), Ed.1.1 Pulse magnetic field immunity
- o EN 61000-4-11 (2004), Ed.2.0 Power supply failure
- o CISPR 16-1-4 (2007) Radiated disturbance immunity

CE This product has met EU + European Economic Area (EEA) consumer safety, health or environmental requirements.

RoHS compliant - this product does NOT contain lead, mercury, cadmium, hexavalent chromium, poly-brominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE).

USA - Federal Code Of Regulation (CFR):

- o FCC CFR 47 Part Part 15 (2013) Telecommunications equipment

Quality

All Norphonic equipment and components are produced under strict Quality Management Control and have been approved to ISO9001:2000 (General), ISO14001: 2004 Environmental.

For specific country approvals, please call **+47 55 62 75 20**



Heavy Duty VoIP Telephones

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