

NRC 001

Robust IP Compact Intercom Station



Features and Functions

- Robust IP compact intercom station for indoor use
- 2 module openings for keypads and/or speaker
- 3 potential-free inputs and 3 outputs
- Network connection via Ethernet
- PoE or external power supply
- Monitoring of microphone function
- Intergrated web interface for setting and service functions

The robust IP compact intercom stations of the NRC series are used together with the INTRON-D *plus* communication and public address system from INDUSTRONIC. They are designed for indoor use in warehouses, workshops, or crane cabins, for example, and can be easily integrated into existing network environments. The compact housing makes the intercom station ideal for wall mounting.

The different modular user controls allow for customization according to customer and project-specific needs. The housing can be equipped with up to 2 key modules each with 16 keys and/or 10 momentary switches including labeling fields and signaling. In total, up to 32 keys or 20 momentary switches are possible. The speaker is then installed remotely in immediate vicinity of the IP intercom station. Alternatively, 16 keys or 10 momentary switches and one speaker module can be directly installed into the housing.

The integrated electret microphone is suitable for applications subject to strong mechanical stress. Together with the speaker module or a remote speaker excellent speech intelligibility in high ambient noise environments is ensured.

Three potential-free inputs and three outputs each as well as one audio output are available for further expandability. Thus you can connect a foot switch, trigger flashing warning beacons or control an external amplifier, for example. For use of the inputs an auxiliary voltage is available.

The integrated web interface simplifies commissioning and service work. It can be invoked and easily operated with a standard web browser via remote access.

Components

- Two-part housing made of flame-retardant, glass-fiber reinforced polyester
- Robust gooseneck microphone
- Speaker module or external speaker
- Keypad 16 NIFK with 16 keys or 10 NIFK with 10 momentary switches
- Electronics unit

Options

- Key cover to protect the keys against accidental actuation
- Remote speaker with 8 m cable

Mechanical Data

- | | |
|--------------------------|---|
| • Width x height x depth | 275 mm x 100 mm x 150 mm (10.8" x 3.9" x 5.9") |
| • Weight | Approx. 2.8 kg (approx. 6.2 lbs) |
| • Cable entries | 1 x M16 (up to 3 x M16 possible) |
| • Color | Red (RAL 3000) |

Electrical Data

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|--|--|
| • Power supply | PoE according to IEEE 802.3af, 15 W or external power supply (42 VDC to 57 VDC, 0.3 A at 48 V) |
| • Quiescent, max. current consumption | 60 mA, 270 mA |
| • Frequency range | 200 Hz to 16,000 Hz (+/-3 dB) |
| • Amplifier power | 0.75 W |
| • Speaker | 5 W / 8 Ohms |
| • AF output voltage for additional amplifier | 0.4 V _{SS} to 4.5 V _{SS} (adjustable) |
| • Output impedance | 50 Ohms |
| • Potential-free inputs | 3 |
| • Input voltage level of each input | Off: 0 VDC to 5 VDC On: 10 VDC to 72 VDC (current consumption max. 4 mA) |
| • Potential-free outputs | 3 |
| • Max. voltage and current value for each output | 72 VDC, 100 mA |
| • Auxiliary voltage output | 48 V, 50 mA (operating voltage potential) |

Interfaces

- 1 x RJ45 port 10/100 MBit/s (LAN + PoE)
- 1 x Mini USB service port
- Plug-in terminal with 1.5 mm² nominal cross-section

Network Requirements

- Power over Ethernet (PoE) recommended
- IPv4 network
- Support of UDP, SCTP, RTP and RTCP protocols
- Quality of Service (QoS)
 - Ideal latency < 20 ms (max. 50 ms)
 - Jitter max. 10 ms
- 10Base-T/100Base-TX Ethernet (IEEE 802.3), 100 MBit/s recommended
- 200 kBit/s basic bandwidth and 200 kBit/s per active audio channel

Environmental Requirements and Standards

- | | |
|--|---|
| • Ambient temperature during operation | -10 °C to +50 °C (+14 °C to +122 °F) |
| • Relative humidity (non-condensing) | Max. 95 % |
| • Degree of protection | IP40 |
| • EMC | IEC/EN 61000-6-2 IEC/EN 61000-6-4 |
| • Microphone monitoring acc. to | DIN EN 60849 |

Order Data

| Type | Type Number |
|---|-------------|
| 10 NRC 001 with 10 momentary switches, microphone and speaker module | 302-054-000 |
| 16 NRC 001 with 16 keys, microphone and speaker module | 302-054-100 |
| 20 NRC 001 with 20 momentary switches, microphone and external loudspeaker | 302-054-200 |
| 26 NRC 001 with 16 keys, 10 momentary switches, microphone and external loudspeaker | 302-054-300 |
| 32 NRC 001 with 32 keys, microphone and external loudspeaker | 302-054-400 |

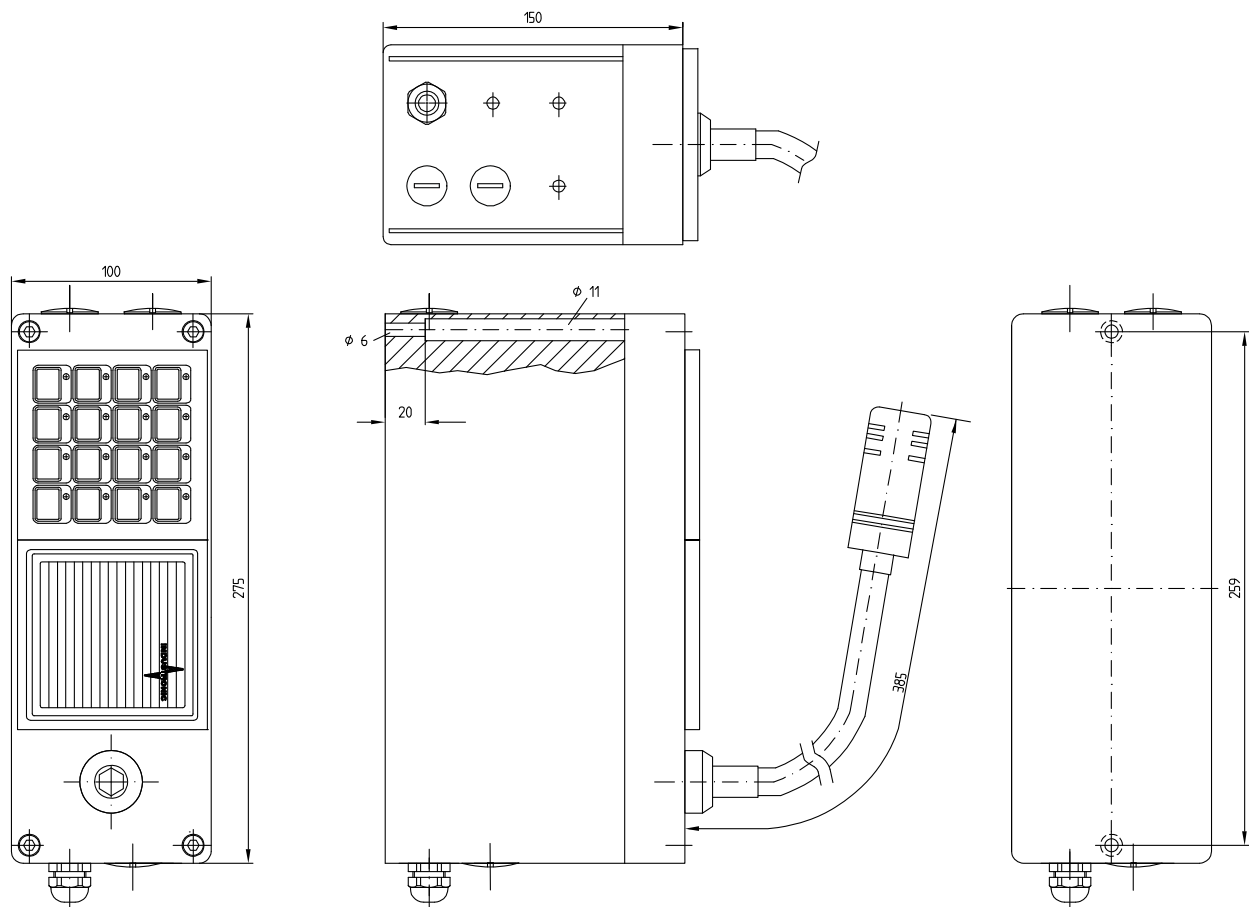


Fig. 1: Dimensional drawing 16 NRC 001

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Subject to technical modifications