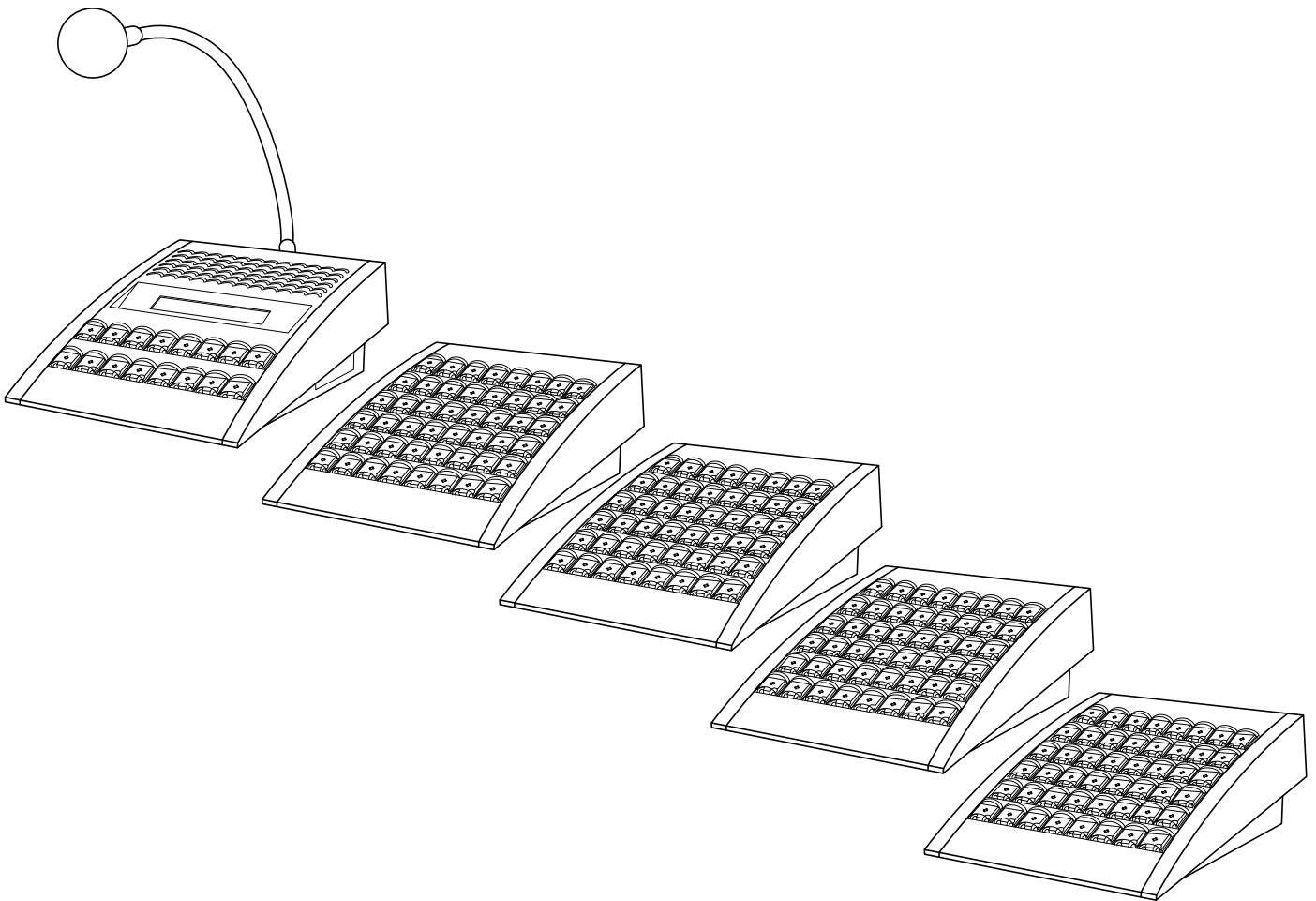
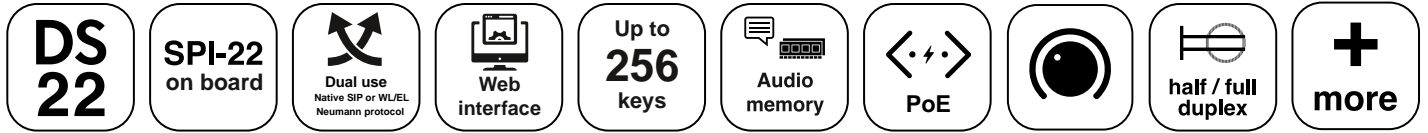


DS-22 MTSD IP

Multifunctional desk call station



Proven Neumann Elektronik quality

- Full compatibility with DS-22 system / SPI-22 platform
- Remotely configurable and remotely monitorable
- Configuration via WEB interface
- Dual use - Native SIP protocol / terminal or WL/EL Neumann protocol selectable
- Half / full duplex compatibility
- Software PLC
- Direct voice connections via key-controlled line selection
- High speech intelligibility (up to 22kHz bandwidth - depending on codec selection)
- Low and high volume control (12dB level reduction)
- Integrated voice memory
- Free key assignment as WL target keys or for local functions
- Integrated Class-D 7W amplifier for horn loudspeakers for best speech intelligibility with wide frequency range
- Integrated Class-D 7W amplifier for on/off mode or monitoring loudspeaker in standard technology with 8Ω loudspeakers
- One Ethernet interface and one service interface
- Line keys can be freely assigned with destinations
- Indication of status messages, such as call and busy signalling, by means of LEDs

- **Cyclical acoustic self-test for loudspeaker and microphone monitoring**
- **Fault management via IoT MQTT interface**
- **Adjustable and monitored electret microphone with electronic noise compensation and dynamic compression**
- **Shock- and break-proof ABS plastic housing**
- **Dynamic 8Ω built-in loudspeaker**
- **Flexible gooseneck electret microphone 300mm length**
- **Basic microphone unit with 16 push-button line keys**
- **Expandable by up to 5 Add-on housings with 48 freely labelled line keys each - max. 256 keys**
- **Add-on housing with 48 buttons**
- **Optionally expandable with headset, foot switch or microphone**
- **Optional connection for monitoring or announcement loudspeaker**
- **Additional display of status messages and fault messages in the two-line illuminated display**
- **Dial keypad can be integrated in the Add-on housing by software via line keys**
- **Adjustment of loudspeaker volume via configured keys with key functions louder and softer**
- **Optional potential-free relay contact for connection of a flashing light for visual signalling or a signal horn for acoustic signalling**

- **PoE phantom or PoE spare pairs power supply**
- **Optional mains node supply or local supply DC 48V available**
- **DR-Intercom and crossing barrier station as integrated special functions for railway applications**
- **Optional setting of loudspeaker volume via configured keys with key functions louder and quieter for the second 7W amplifier**
- **Optional key cover to protect against unintentional triggering**
- **Optional retrofittable coloured keys**

The DS-22 MTSD IP multifunctional desk call station is used in the DS-22 decentralised communication system. It enables direct speech connections with other call stations, loudspeaker announcements and telephone operation.

The DS-22 MTSD IP Multifunctional Desk Call Station is intended for indoor use. Due to its versatility and great expandability, it finds its application in many areas of heavy industry and railway engineering by programming many special functions.

At the same time, the DS-22 MTSD IP multifunctional desk call station also offers programmable local functions. In addition to the destination keys for WL/EL, the DS-22 MTSD IP multifunctional desk call station has monitoring of the gooseneck electret microphone with electronic noise compensation and dynamic compression, volume control, an integrated voice memory for playback of customised announcement texts, tone sequences or audio files, which can be played back at the touch of a button, as well as a built-in display for status and fault indications and display options for these in plain text.

The DS-22 MTSD IP multifunctional desk call station has 16 line keys. By means of suitable supplementary housings with 48 additional line keys each, an extension up to a total of 256 line keys is possible.

The DS-22 MTSD IP multifunctional desk call station is powered via Power over Ethernet as standard. Optionally, however, a DC 48V mains node power supply or local power supply is also possible. For this purpose, the manufacturer supplies various DIN rail power supply units for mounting in the network node, as well as plug-in and desktop power supply units for local power supply.

Technical data		
Art. no.	1 175 4	1 177 6
Mechanical data		
Weight	Approx. 1.1kg	Approx. 0.8kg
Housing dimensions (HxWxD)	88mm x 183mm x 260mm	88mm x 183mm x 235mm
Housing colour	Pearl white (RAL 1013) top side / graphite black (RAL 9011) bottom side	
Material	Shock and break-proof ABS plastic housing	
Number of talk keys	16	48 per Add-on housing 48-96-144-192-240 depending on number of enclosures
Electrical data		
Nominal power consumption (without expansion stages)	20W	
Maximum power consumption (including all expansion stages)	90W	
Frequency range	100Hz to 22kHz (depending on the set codec)	
Connectivity		
PoE (without expansion stages)	PoE phantom call station power supply via the Ethernet interface two-pair with PoE Class 4 according to IEEE 802.3at during operation with a maximum of 2 Add-on housing	
PoE (including all expansion stages)	PoE spare pairs call station power supply via the Ethernet interface four-pair with PoE Class 8 according to IEEE 802.3bt for operation with more than 2 Add-on housing to full extension	
Mains node supply (without expansion stages)	For locations without PoE call station supply, optional DC 48V mains node supply via 60W trunking power supply unit	
Mains node supply (including all expansion stages)	For locations without PoE call station supply, optional DC 48V mains node supply via 150W rail power supply unit	
Local supply (without expansion stages)	For locations without PoE call station power supply, optional local power supply DC 48V by 60W plug-in or desktop power supply unit	
Local supply (including all expansion stages)	For locations without PoE call station power supply, optional local power supply DC 48V by 120W table power supply unit	
Mains supply		
Ethernet interfaces	1 (IEEE 802.3u)	
Service interfaces	1	
Transmission protocol	Neumann DS-22 IP	
Environmental conditions		
Temperature range	0°C to +50°C	
Protection class according to DIN 60529, resp. IEC 60529	IP20	

Accessories	
229 8001 175 5	Plug-in power supply AC 230V / DC 48V 60W for the european market
229 8101 175 6	Table power supply AC 230V / DC 48V 60W for international applications, equipped with an IEC320-C14 plug, for adaptation of country-specific connection cables
229 8201 175 7	Table power supply AC 230V / DC 48V 120W for international applications, equipped with an IEC320-C14 plug, for adapting country-specific connection cables
999 1980 002 7	Connection cable for table power supply. IEC320 connection cable with socket C14 for the european market
949 1412 172 0	Carrier rail power supply AC 230V / DC 48V 60W for mains node supply
949 1412 173 1	Carrier rail power supply AC 230V / DC 48V 150W for mains node supply
229 8601 666 6	External power supply module in weatherproof housing AC 230V / DC 48V 60W for local power supply of DS-22 units
229 8701 666 7	External power supply module in weatherproof housing AC 230V / DC 48V 150W for local power supply of DS-22 units
919 1116 097 4	PoE injector according to IEEE802.3at (30W) for rail mounting in the mains node (Attention! Power supply unit 949 1412 172 0 required for power supply)
919 1116 098 5	PoE injector according to IEEE802.3bt (90W) for rail mounting in the mains node (Attention! Power supply unit 949 1412 173 1 required for power supply)
919 1116 724 1	24-port switch Class 4 with 600W and 4 additional SFP ports for fibre optic modules for 19" mounting in the network node For this purpose: 919 1116 726 3 licences per unit 919 1116 725 2 SFP module fibre optic multimode
919 1116 759 9	8-port switch with 4 ports PoE Class 8 for rail mounting in the network node
229 0601 850 3	Keys cover with fixing screws (5 pieces)
229 0701 850 4	Mounting kit for key cover, including drilling template, drill and mounting instructions
213 1831 155 0	Key cap, ABS plastic, colour: sky blue (RAL 5015)
213 1831 156 1	Key cap, ABS plastic, colour: rape yellow (RAL 1021)
213 1831 157 2	Key cap, ABS plastic, colour: fire red (RAL 3000)
213 1831 158 3	Key cap, ABS plastic, colour: yellow-green (RAL 6018)
213 1831 159 4	Key cap, ABS plastic, colour: turquoise blue (RAL 5018)
213 1831 160 6	Key cap, ABS plastic, colour: signal black (RAL 9004)
212 1831 121 2	Plexi cover for key cap, PC plastic, colour: crystal clear
214 1516 014 5	Labelling sheet DIN A4 for MTSD
223 7001 175 8	Retrofit kit for additional devices headset, microphone and foot switch with 8-pin M12 round connector, consisting of exchangeable back panel, printed circuit board assemblies with connection cable
223 7101 175 9	Retrofit kit for auxiliary devices monitoring loudspeaker, relay contact with auxiliary component supply DC 24V/15W with 8-pole M12 round plug connector, consisting of exchangeable back panel, and connection cable
641 0116 033 5	Active monitoring loudspeaker with integrated 25W amplifier for wall, table or ceiling mounting.
641 0116 034 6	Monitoring loudspeaker 7W for wall, table or ceiling mounting
629 1116 033 2	Swivel/tilt bracket with fixing material for wall or ceiling mounting of monitoring loudspeakers
999 1980 088 1	T-piece for connecting 2 additional devices to an 8-pole M12 round connector
223 7201 175 0	Headset with PTT button integrated in the line and 8-pin M12 circular connector
223 7301 175 1	External handheld microphone with PTT button and 8-pin M12 circular connector
223 7401 175 2	External foot switch with 8-pin M12 round connector
223 6101 177 0	Flat ribbon cable for connecting the first Add-on housing
223 6201 177 1	Flat ribbon cable for connecting the second Add-on housing
223 6301 177 2	Flat ribbon cable for connecting the third add-on housing
223 6401 177 3	Flat ribbon cable for connecting the fourth Add-on housing
223 6501 177 4	Flat ribbon cable for connecting the fifth add-on housing
999 1980 278 2	CAT.6 S/FTP patch cable, halogen-free, 5m
229 0501 045 8	Wall bracket for DS-22 MTSD IP without Add-on housing
3 300 6	Desk mounting frame for DS-22 MTSD IP without Add-on housing
3 301 7	Desk mounting frame for DS-22 MTSD IP with one add-on housing
919 1250 011 9	Replacement battery

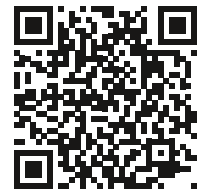
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Neumann Elektronik system overview



<https://neumann-elektronik.com/system-overview>



Neumann Elektronik GmbH

Lahnstrasse 31-33
45478 Mülheim an der Ruhr
Germany

info@neumann-elektronik.com
www.neumann-elektronik.com

Tel: +49 208 40 944 0
Fax: +49 208 40 944 260

