MEDICAL COMPUTER HARDWARE

Baaske Medical

Baaske Medical Built In Isolator

MED MI 1005 E

10/100/1000 MBit/s

EN 60601-1 / 3.1

2 MOPP
MEANS OF
PROTECTION

5
YEARS
WARRANTY

5kV AC
10kV DC

RoHS
COMPLIANT

c**UL**us

CE

TÜV
SÜD

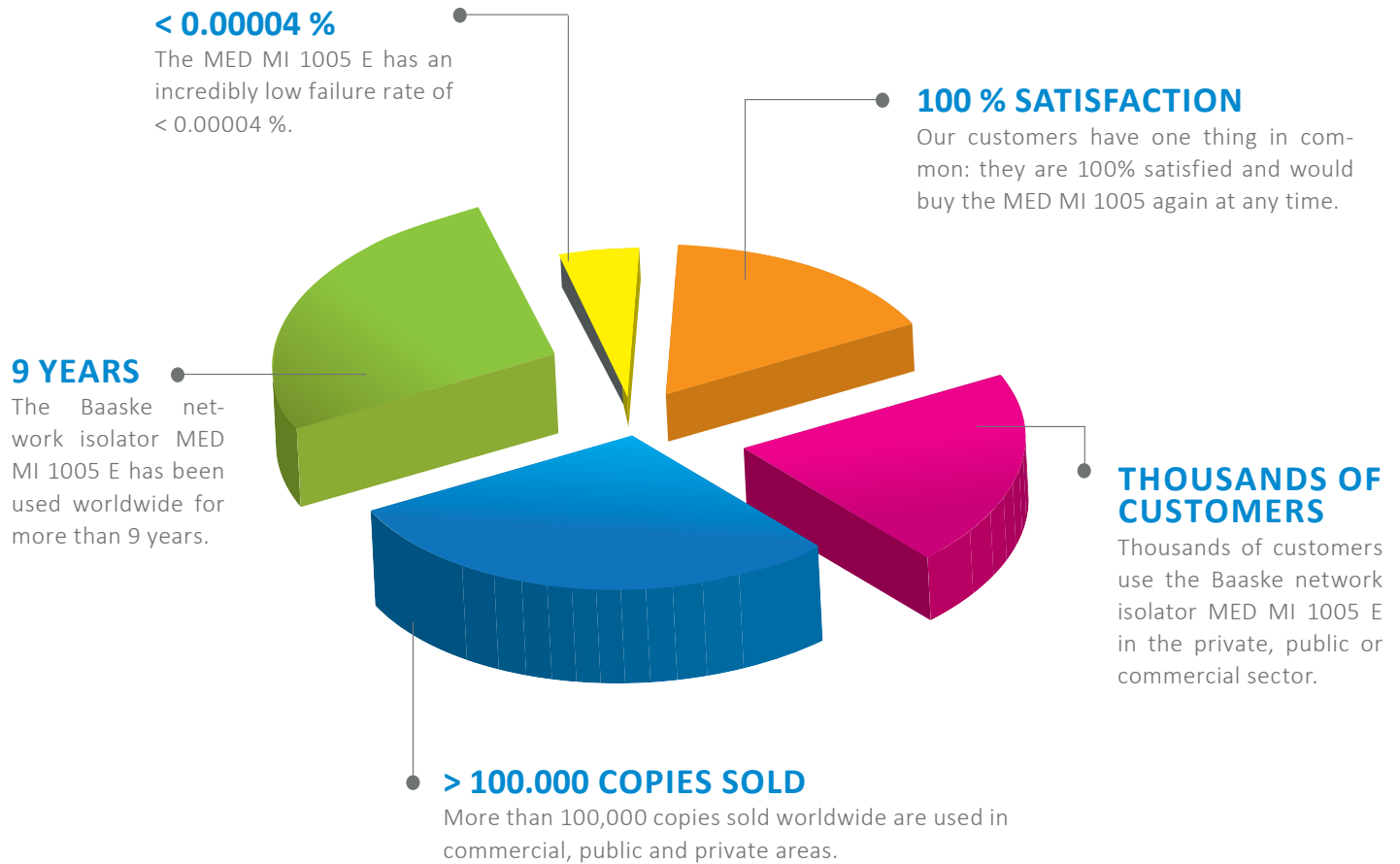## Built-in isolator for galvanic network isolation of electrical medical devices.

In addition to network isolators with fixed cables, the MI 1005 E offers a simple and cost-effective way to isolate medical devices, starting at the wall of the housing. This makes the isolator particularly well-suited for medical device manufactures. Using standard Harting PushPull technology, the MI 1005 E Medical Built In insulator can be installed quickly and easily into existing devices. Long-term availability also offers planning certainty necessary for new product development.

Use in medical technology: In accordance with the IEC EN 60601-1 standard for medical electrical devices and systems, the MI1005 protects the network interface by two independent protective measures (2 MOPP) to the patient and the network connection is safely galvanically isolated.

Benefits

› Ideal for medical device makers
› Isolation starting at the wall of the device housing
› Easy installation due to standardized Harting PushPull technology
› Allows for planning reliability and long-term availability
› Small and lightweight at just 20 g (approx.)
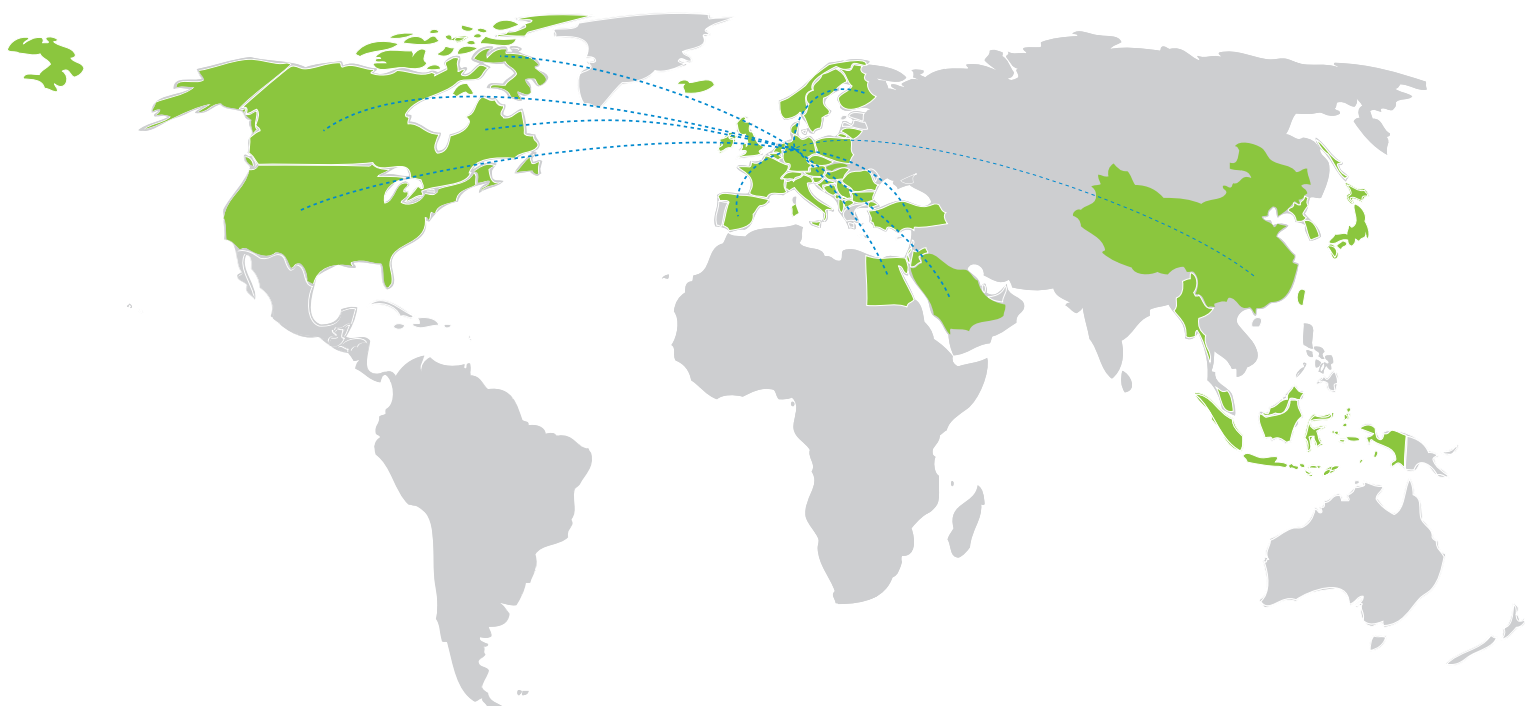› No fixed cables, easy to replace
› Harting PushPull technology, up to IP68

Datas and facts.

< 0.00004 %
The MED MI 1005 E has an incredibly low failure rate of < 0.00004 %.

100 % SATISFACTION
Our customers have one thing in common: they are 100% satisfied and would buy the MED MI 1005 again at any time.

9 YEARS
The Baaske network isolator MED MI 1005 E has been used worldwide for more than 9 years.

THOUSANDS OF CUSTOMERS
Thousands of customers use the Baaske network isolator MED MI 1005 E in the private, public or commercial sector.

> 100.000 COPIES SOLD
More than 100,000 copies sold worldwide are used in commercial, public and private areas.

Standards and certificates

Description	
UL Recognized Component	✓
IEC 60601-1	:2005 + A1:2012 Ed. 3.1 (gutted section 17 - EMV)
IEC 60601-1-2	:2014 Ed. 4
EN 60601-1	:2006 + A1:2013 Ed. 3.1 (gutted section 17 - EMV)
EN 60601-1-2	:2015 Ed. 4
Low-voltage directive	2014/35/EU
EMC directive	14/30/EU
RoHS	✓
SVHC / REACH	✓
Lead-free	✓

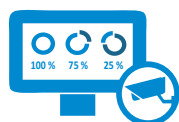We will gladly send you the corresponding EU declarations of conformity on request.

Applications

The Baaske network isolator MED MI 1005 E is used in more than 30 countries in the private, public or commercial sector. It reliably protects electrical devices against excessive voltages, ground loops and signal noise from the network cable. The usual areas of application are:
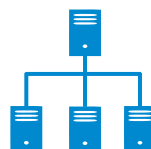
Application areas

In medicine: The MED MI 1005 network isolators protect patients, medical devices and users from excessive leakage currents that can flow over the data network in accordance with standards.

Measuring and monitoring equipment: Protects sensitive measuring and monitoring equipment that is connected to a control station via Ethernet interfaces from interference voltages and potential differences.
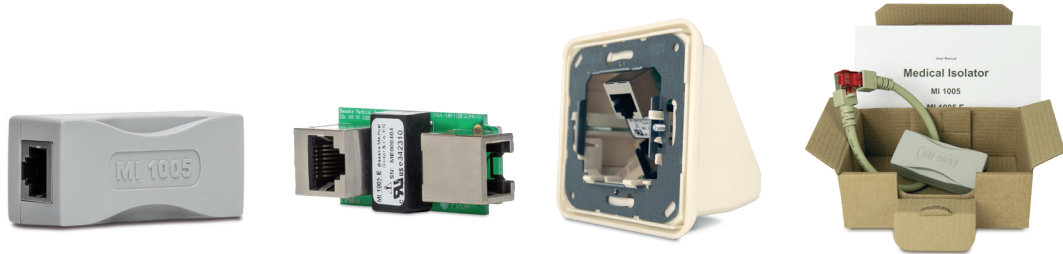
Server systems / building services engineering: To avoid failures or potential equalization currents, network insulators protect server systems that are connected over long distances using copper cabling.
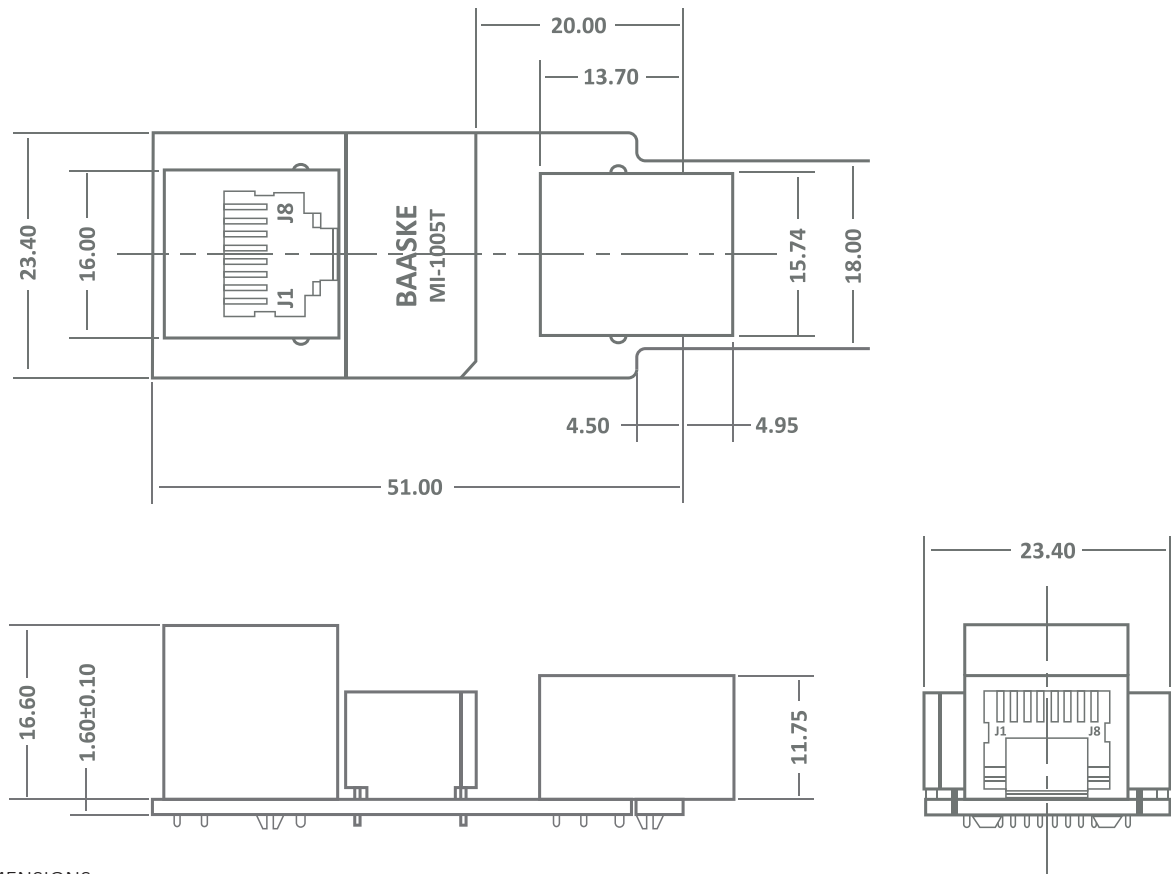
Audio applications: Network insulators reliably protect against overvoltages, low-frequency alternating voltages (mains hum) and eliminate noise in the sound.

Types of construction and technical details

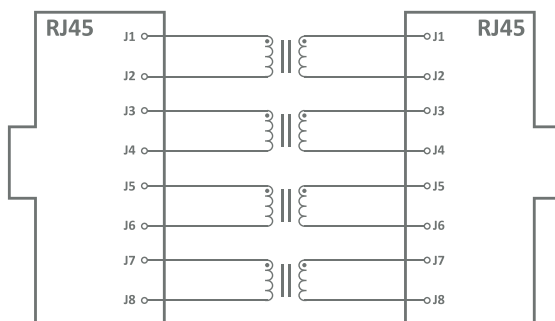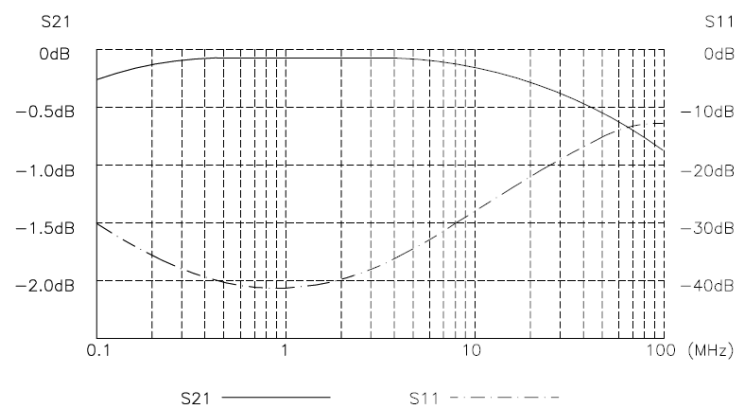| Technical Data	Flexible	Build In Isolator	Wall mounting	Complete set
Name	Netzwork Isolator MED MI 1005	MI 1005 E Medical Build In Isolator	Netzwerk Isolator MED MI 1005 MB	Network Isolator MED MI 1005 Retail
Color case	light grey	without housing	creamy	light grey
Dimensions (DWH)	65x29x23 mm	51x23,4x18.2 mm	81x81x57 mm	65x29x23 mm
Weight approx	50 g	20 g	106 g	50 g
Operating mode	continuous operation	continuous operation	continuous operation	continuous operation
Dielectric strength Signal and shielding	5000 V 50/60 Hz for 1 Min. 10000 V 50/60 Hz for 10 s.			
Data throughput	10/100/1000 MBit/s			
Ports	2x RJ45 IN/OUT			
DC Stress Test (10 Sec)	10 kV			
Network Specifications	IEEE 802.3ab 10/100/1000-BaseT; Twisted-Pair; auto-conf (behaves completely transparent in the network)			
Material	UL94V-0 / RoHS conform / REACH			
Produkt Rating (UL)	passive, electronic components, insulation DI (250 V AC / 300 V DC) tested at 5 kV AC			
Operating time between failures	0,21 x 10 ^ 8 (1 failures in 21 000 000 h)			
Return loss	min. 10 dB			
Insertion loss	max. 1,1 dB			
Standards	IEC 60601-1 (3rd Edition); IEC 60601-1-2; UL 60601 (UL Listed E504923-D1000); IEEE 802.3ab			
Temperature	-10 °C up to +70 °C (operation/ storage/ transport)			
Relative air humidity	10 % up to 90 % (non-condensing (operation/ storage/ transport)			
Air pressure	700 hPa up to 1060 hPa (operation/ storage/ transport)			
Warranty	5 years			
Scope of delivery	Netzwork Isolator MED MI 1005	MI 1005 E Medical Build In Isolator	1x mounting plate; 1x cover; 1x frame; 1x MI 1005 E Medical Built In Isolator; 1x retaining plate; 1x Harting PushPull; 2x screws; 2x nut; 1x assembly instructions; 1x manual	Netzwork Isolator MED MI 1005 , Patch Cable 25 cm, Manual, Package and serial number
Item No.	2005674	2006633	2007704	2006484

Dimensions

DIMENSIONS: mm

TOLERANCES: ± 0.25 mm (unless specified)

Circuit
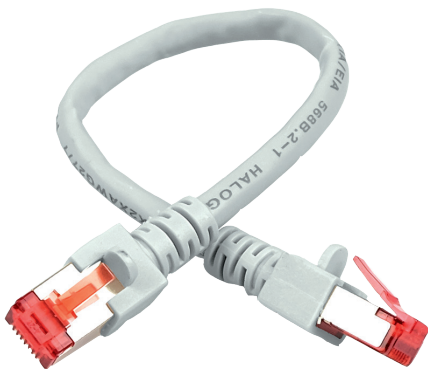

Frequency range MED MI 1005

Harting PushPull Einbauzubehör
für den MI 1005 E

Mounting housing Flat

Black plastic angled, with integrated seal +
retaining clip; mounting holes for M2, 5, IP 65/67

Item No. 2007020

CAT6 patch cable 0.25 m grey PIMF, RoHs

Category 6 S / FTP patch cable ❯ twisted foil-shielded with braided shield
(UTP) ❯ halogen-free jacket ❯ shielded, molded RJ45 connector ❯ colored,
molded kink protection grommet ❯ length on sleeve ❯ protection of the
snap-in nose sleeve ❯ EIA / TIA B.2-1, EN ❯ 50173 ISO / IEC 11801 Class E

0.25 m	**Item No. 2005670**
0.50 m	**Item No.2006294**
2.00 m	**Item No. 2006296**
5.00 m	**Item No. 2006298**