

Baaske network isolator

MI 1005

10/100/1000 MBit/s



Gigabit network isolator for the galvanic isolation of electrical devices.

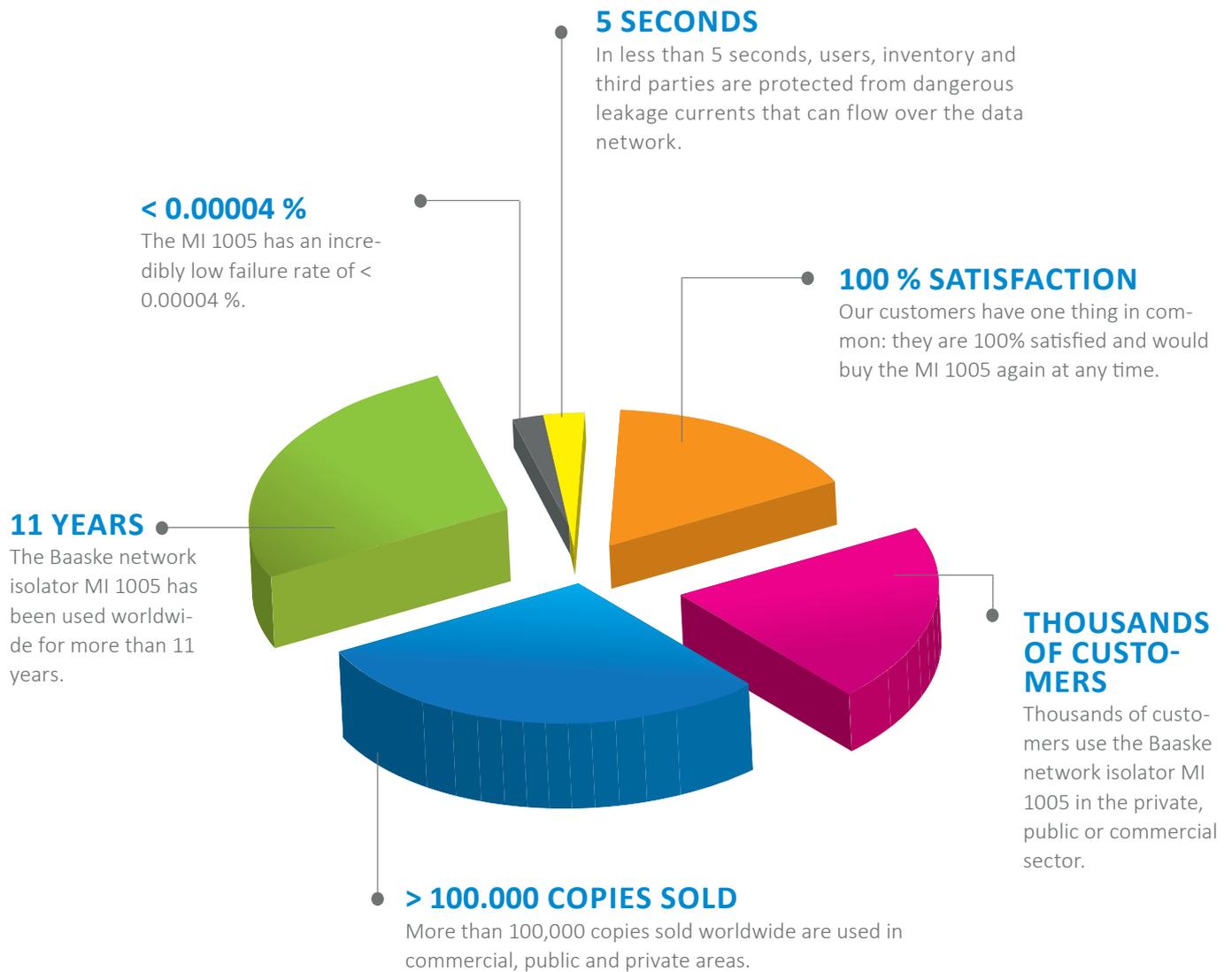
With the network isolator MI 1005 a flexible and simple possibility is available to galvanically isolate the network interface between devices immediately. In less than 5 seconds, users, inventory and third parties are protected from dangerous leakage currents that can flow over the data network. The network isolator MI 1005 reliably prevents potential equalization currents and protects against overvoltages that can occur due to installation errors, environmental influences such as lightning or humidity, inrush currents or electrostatic discharges. In addition, the 5 kV RJ-45 network isolator offers outstanding attenuation and operates almost lossfree in the data network over a distance of 100 m.

Use in medical technology: In accordance with the IEC EN 60601-1 standard for medical electrical devices and systems, the MI 1005 protects the network interface by two independent protective measures (2 MOPP) to the patient and the network connection is safely galvanically isolated.

Benefits

- ▶ Easy handling - no software installation required
- ▶ Compact and universally applicable
- ▶ In less than 5 seconds, the patient, user and inventory are protected from leakage currents.
- ▶ No permanently mounted cables - defective network cables do not require a new insulator
- ▶ Lightweight and rugged enclosure - suitable for any system with a network port
- ▶ Affordable to purchase and efficient to operate - does not require its own power supply

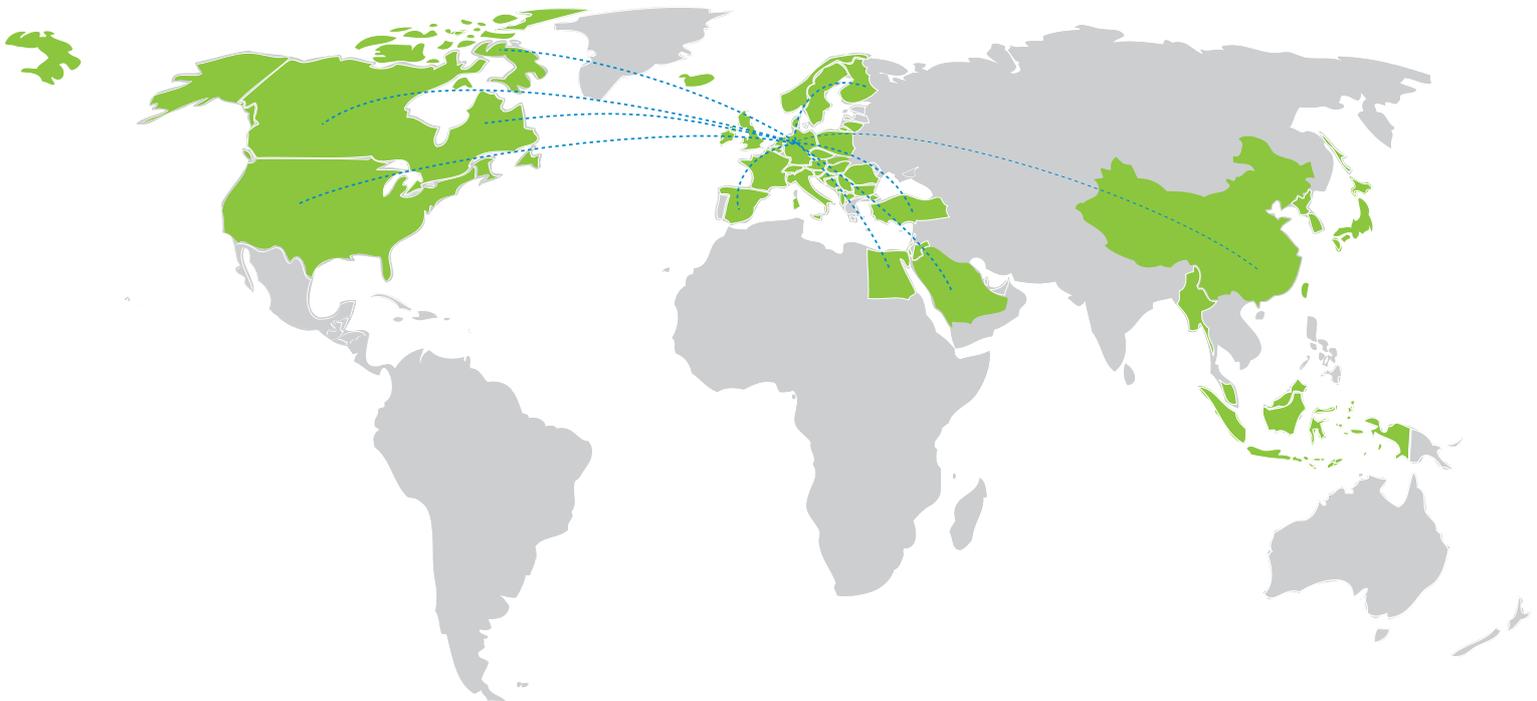
Datas and facts.



Standards and certificates

Description	
UL Recognized Component	✓
IEC 60601-1	:2005/AMD1:2012/AMD2:2020 Edition 3.2 (guttet section 17 - EMV)
EN 60601-1-2	:2015 (Fourth Edition)
Low-voltage directive	2014/35/EU
EMC directive	2014/30/EU
RoHS	✓
SVHC / REACH	✓
Lead-free	✓
SVHC / REACH	✓
Lead-free	✓

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



The Baaske **network isolator MI 1005** 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:

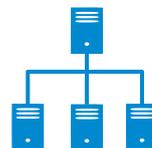
Application areas



In medicine: The 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 isolators protect server systems that are connected over long distances using copper cabling.



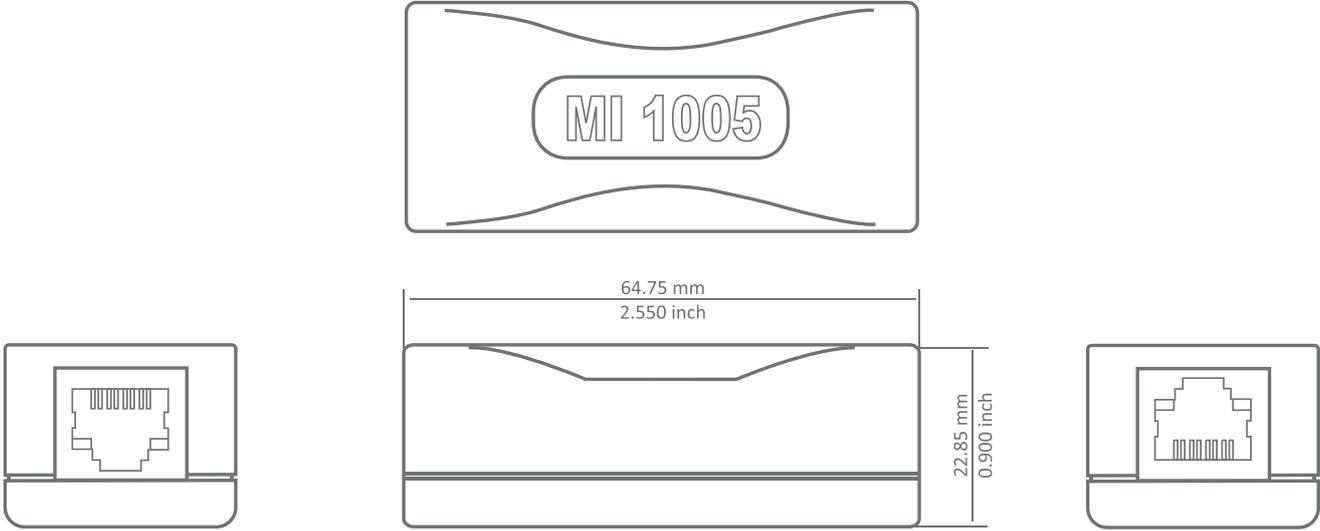
Audio applications: Network isolators reliably protect against overvoltages, low-frequency alternating voltages (mains hum) and eliminate noise in the sound.

Types of construction and technical details

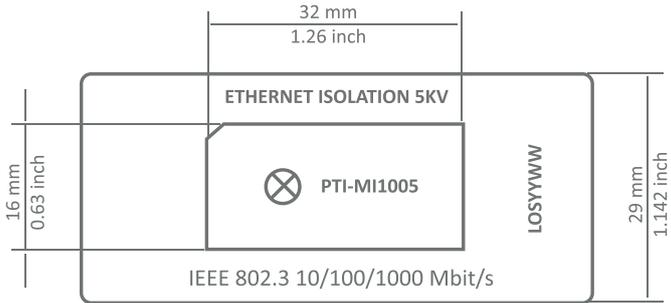


Technical Data	Flexible	Complete set	Build In Isolator	Wall mounting
Name	Network isolator MI 1005	Network isolator MI 1005 Retail	MI 1005 E Medical Build In isolator	Network isolator MI 1005 MB
Color case	light grey	light grey	without housing	creamy
Dimensions (DWH)	65x29x23 mm	65x29x23 mm	51x23,4x18.2 mm	81x81x57 mm
Weight approx	50 g	50 g	20 g	106 g
Operating mode	continuous operation	continuous operation	continuous operation	continuous operation
Dielectric strength	5000 V 50/60 Hz for 1 min.			
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			
Product Rating (UL)	passive, electronic components, insulation DI (300 V AC / 400 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 60601-1:2005/AMD1:2012/AMD2:2020 Edition 3.2; EN 60601-1-2 2015 (Fourth Edition); IEEE 802.3ab; UL 60601 (UL Listed E504923-D1000)			
Temperature	-10 °C up to +85 °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)			
Protection grade according EN 60529	IPX0			
Warranty	5 Years	Network isolator	MI 1005 E Medical Build In Isolator	1x mounting plate; 1x cover; 1x
Scope of delivery	Network isolator MI 1005	MI 1005 , Patch Cable 25 cm, Manual, Package and serial number		frame; 1x MI 1005 E Medical Build In Isolator; 1x retaining plate; 1x Harting PushPull; 2x screws; 2x nut; 1x assembly instructions; 1x manual
Item No.	2005674	2006484	2006633	2007704

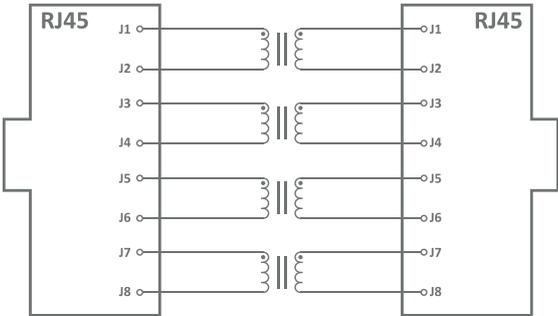
Dimensions



Network isolator MI 1005

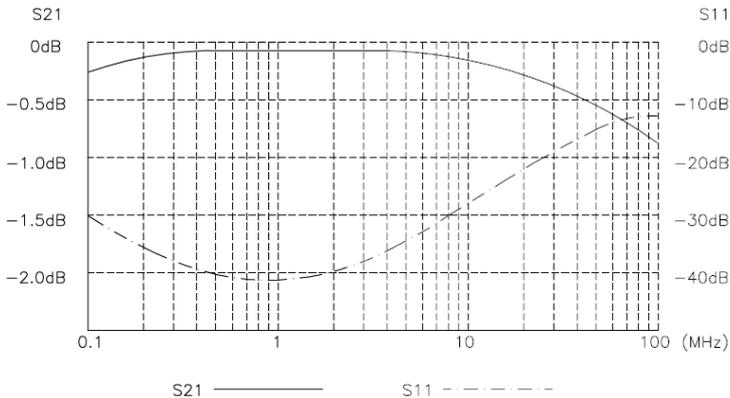


Circuit



Network isolator MI 1005

Frequency range MI 1005



Optional accessories

MI 1005 bracket incl. rail mount adapter

For mounting the MI 1005 on any flat surface or on a 35 mm DIN rail according to DIN EN 50022. The snap lock automatically positions the MI 1005 in the optimum holding position and prevents accidental slipping or loosening of the MI 1005. The holder is designed in such a way that it can also be mounted on unearthed metallic surfaces. The protective effect of the network insulator is not impaired by the bracket, as the insulation distance required for 2 MOPP to the mounting surface remains intact.

Item No. 2010656



2 in 1
DIN rail adapter /
wall mounting



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

Item No. 2005670

Tip:

The network isolator MI 1005 serves as accessory for devices without isolated network interface. In order not to impair the effect of the network isolator, make sure that the MI 1005 is put into operation as close as possible to the terminal device or that the patch cable leading to the terminal device cannot get near conductive parts. The use of the optional MI 1005 bracket allows the MI 1005 to be mounted even on conductive surfaces and prevents unintentional position changes of the isolator. The special construction allows you to attach the holder to a DIN rail or to any flat surface.