NE8FBH-M-Gb

etherCON Magnetics are horizontal PCB etherCON chassis connectors with integrated magnetics providing galvanic isolation and overvoltage protection.

These features save PCB space within the device design and provide improved frequency response when compared to standard designs.

Attention: this product is strictly not intended for use in PoE systems. Use in PoE systems may damage the connector.

Features & Benefits

- Integrated magnetics circuitry within the chassis connector
- Space-saving design, as it removes the need for HF part otherwise required on the customer motherboard.
- Components used: transformers, ferrite core and Bob Smith termination for the automatic termination in case of no cable connection
- Saving costs on PCB (~20 parts)
- Support voltage mode applications
- In case of overvoltage harm, the connector can be exchanged, and the main board is still safe.

- Cat 5e (100Mbits and 1Gbits) transmission performance according to IEEE 802.3, 802.3b, and 802.3ab standards
- Lowest crosstalk attenuation with the use of machined-designed transformer
- Overvoltage protection up to 2 kV.
- Accepts etherCON NE8MC*, NE8MX* or any standard RJ45 plug
- Overvoltage protection >2 kV for 1Gb/s available via optional customer-installed capacitor
- Ground-panel connection

Note: not compatible with etherCON Cat 6 NE8MC6-MO

Technical Information

Product	
Title	NE8FBH-M-Gb
Gender	Female

Electrical	
Dieletric strength	1 kVdc
Insulation resistance	> 0.5 GΩ
Number of electronical contacts	9
Rated current per contact	1.5 A
Rated voltage	< 50 V
Transmission performance	CAT5e, acc. TIA/EIA 586C.2, IEC11801
Frequency range	1-100 MHz
PoE	This product is strictly not intended for use in PoE systems.

Mechanical	
Insertion force	≤ 20 N
Withdraw force	≤ 20 N
Lifetime	> 1000 mating cycles
Panel thickness	Maximum 4 mm (0.16’)
Wiring	Horizontal PCB mount
Locking device	Latch lock
Chassis shape	B

Material	
Contact plating	Gold (Au)
Contacts	Bronze
Insert	PBTP
Shell	Zinc diecast
Shell Plating	Nickel (Ni)
Locking element plating	Nickel

Environmental	
Flammability according to UL 94	V-0
Protection class according to IEC 60529	IP 40
Pollution degree according to IEC 60664-1	Pollution Degree 2
Solderability	Complies with IEC 60068-2-20
Explosion environment	Not intended to be used within explosive environments
Temperature range	-30 °C to +80 °C
Maximum Operating Temperature	+80 °C