

EMOSAFE Network Isolator EN-50



EMOSAFE EN-50 - Reliable Technology for OEM Manufacturers

Built into your medical appliance, our new EMOSAFE Network Isolator EN-50 allows for safe appliance operation in the vicinity of a patient. The EN-50 meets the strictest requirements of the IEC 60601-1 (3rd edition), and with a 4kV isolation voltage, establishes two means of patient protection (2MOPP).

The EN-50 distinguishes itself from other network isolators through its gigabit rate capability, small dimensions, and low signal damping. Due to its accreditation by UL (Underwriters Laboratories Inc.), this Network Isolator is suitable for the US markets.

The EN-50 can be combined with different front covers. The front cover Z-EN50-FCI, with a safety interlock, prevents metallic parts of the unprotected cable head from directly or indirectly (e.g. via personnel) coming into contact with the patient. An accidental or inattentive insertion-withdrawal operation, which could harm the patient, is therefore impossible.

EN-50 is also available as EN-50HG with a Yamaichi Y-ConLock. In combination with the YCon-Plugs, it offers improved protection against contact, and a vibration stable strain relief. The EN-50 with Yamaichi Y-ConLock is especially suited for use in mobile appliances, which require frequent coupling processes. Alternatively, standard RJ45-Plugs can be inserted into the Y-ConLock.

The EN-50 currently has three connection options, as a horizontal or a vertical RJ45-Socket, or as an insulation displacement connector. Other options are possible upon request. With the aid of a 6.3x0.8 Faston connector, the EN-50 can be connected to the appliance ground in order to improve EMC performance.

Technical Data for EMOSAFE EN-50: Front Outlet: RJ45 socket (Cat6a) screened; Back (Device): RJ45 socket (Cat6a) + Faston 6.3x0.8 connector (for potential equalization), or insulation displacement connection with strain relief / isolation voltage: 4kV AC / meets IEC 60601-1 (3rd Ed.) providing 2 MOPPs / suitable for 10BASE-T, 100BASE-TX, and 1000BASE-T networks / CE / UL (E249126) / ROHS / Damping <-2dB (0.3 - 62.5MHz)

Product Code and Examples of EMOSAFE EN-50

EMOSAFE EN-50 network isolators are versatile in their mounting configurations. The following specifies the details of the isolator product codes.

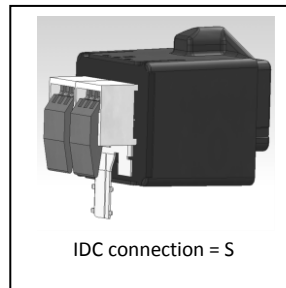
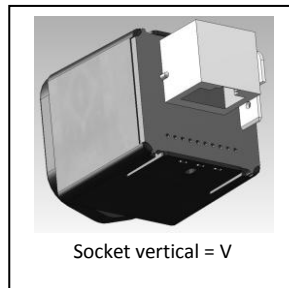
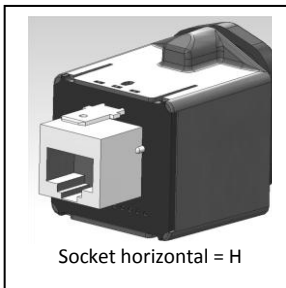
Product code:

EN-50 -
 1 2 3

Example: EN-50HG-S

Position 1: Internal Connection

- H = Socket pointing straight (horizontal)
- V = Socket pointing downwards (vertical)
- S = Insulation displacement connection, pointing downwards



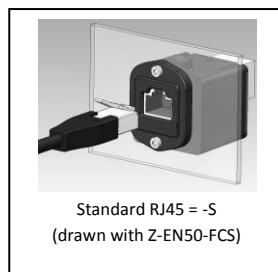
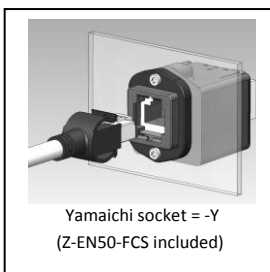
Position 1: Internal Connection Examples

Position 2: Transfer Rate

- G = Transfer performance of 1Gbit/s (suitable for 10BASE-T, 100BASE-TX, and 1000BASE-T networks)

Position 3: Outlet

- Y = Socket for Yamaichi cable. Standard RJ45 connectors can still be used. Ships with front cover Z-EN50-FCS.
- S = Socket for standard RJ45 connector. Ships without front cover.



Position 3: Cable Outlet Examples

Front Covers

The -S isolators (i.e. EN-50xG-S) can be combined with two different front covers: Z-EN50-FCS (Front Cover Standard) and Z-EN50-FCI (Front Cover Interlock). These are to be ordered separately, the choice does not affect the isolator product code.



Front Cover Examples