

Media Converter



PHYSICAL:

Steel Powder Coated, Din Rail or Desktop
Dimensions 112mm x 127mm x 32.5mm
Weight 275gm

INDICATORS:

copper link - functional Green | dysfunctional Red
fibre link - functional Green | dysfunctional Red
Wavelength type A – amber | B – green [mating pair]

CONNECTIONS:

DC power via Phoenix bayonet three pole connector with anti vibration lock
Fibre via SC connection into 62.5/125 μ m or 50/125 μ m multimode fibre
Copper via M12 option D circular locking bayonet, four pole, CAT5/

CAT5E:

Body shell earth via DIN rail mount or power connector

POWER:

Input 24V dc nominal, operating range 18V to 36V at up to 5W
Internally fused at 3A for transient protection.

PROTOCOL:

IEEE802.3 Ethernet with full auto-negotiation
Conversion between:
10Base-T to 10Base-FL
100Base-TX to 100Base-FX/SX
FLP burst to FLNP burst

MEDIA CONNECTIONS:

COPPER

Ruggedised RJ45, two pair Rx Tx 100Base-TX equaliser with baseline wander correction

FIBRE

Connection SC 2x5 format into 62.5/125 μ m or 50/125 μ m multimode fibre.

Wavelengths:

Type A: Tx 1310nm Rx 1550nm Amber advisory
Type B: Tx 1550nm Rx 1310nm Green advisory

Input sensitivity –28dBm min to 0dBm max

Output optical power –10dBm min to 0dBm max delivered into 62.5/125 μ m.

Signal detect threshold assert at –28dBm de-assert at –45dBm typical, hysteresis >1dB. Indication of link integrity by Red/Green LED

With input data at 150 Mbps a 223–1 PRBS data pattern with 72 “1”s and 72 “0”s inserted per the ITU-T recommendation G.958 Appendix 1 the receiver is specified to provide output data with Bit Error Rate (BER) better than or equal to 1×10^{-10} .

ENVIRONMENTAL:

Temperature:

Operating –40°C through +90°C ambient
Storage –50°C through +125°C ambient

Humidity

10% through 95%RH non condensing
5% through 100%RH condensing

Vibration

Component: 10..500Hz 2G 10m/cycle period for 60m each along X,Y,Z axes
Mounting: compliance to IEC60068-2-6

Shock

Compliant with IEC61373 (Shock & Vibration), IEC 60068-2-27 (Shock) and IEC 60068-2-6-FC (Vibration)

Drop

ISTA Procedure 1A 10 – Ten drops from height of two metres onto concrete: one drop on a base corner, one drop on each edge radiating from that corner, and one on each flat face of the package. System remains functional.

MTTF/Reliability

>100,000 hrs MIL HDBK-217F (@60°C)

EMC

Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 12, ENV50204, EN55024, EN61000-6-2, heavy industry level, criteria A IEC 61850 and IEEE 1613 Environmental Standard for Electric Power Substations