

# PERTRONIC INDUSTRIES LTD

## TECHNICAL DATASHEET Net2 Fibre Optic Converter FIBNET



### Overview

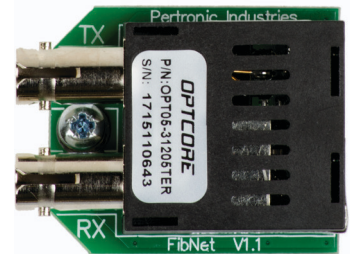
Pertronic Net2 Fibre Optic Converters (FIBNET) provide dual fibre-optic network ports for the Pertronic Net2 Network Card (NET2CARD).

Each duplex fibre-optic converter module connects one end of a fibre-optic link segment to the network card. The converter provides two connectors (“RX” and “TX”) for terminating the link segment’s dual fibre-optic cables.

Converters are available for multi-mode and single-mode fibre, and are made with type ST (bayonet) or SC (push-in) connectors.

The Net2 Network Card accommodates any mix of fibre-optic converters and / or RS-485 copper connections. The card has two network ports: “NET IN”, and “NET OUT”. Each port may be configured as either: Copper (without fibre converter), Multi-mode fibre-optic (with FIBNET-MMF or FIBNET-MMF-SC), or Single-mode fibre-optic (with FIBNET-SMF or FIBNET-SMF-SC). Please note that both ends of each link segment must have terminations appropriate to the cable type.

(Please refer to the Pertronic Net2 Network Card and Pertronic Net2 Network datasheets for more information about the Pertronic Net2 System.)



*Fibre-optic converters for the Pertronic Net2 Network Card:  
Above: with ST connectors  
Below: with SC connectors*



### Specifications

Fibre Type	Multi-Mode	Single-Mode
Fibre Size	50/125 µm or 62.5/125 µm	9/125 µm
Maximum Network Segment Length	2 km	20 km
Wavelength	1310 nm (1260 – 1360 nm)	
Tx Power	-3 dBm to -9 dBm	
Rx Sensitivity	-16 dBm	-20 dBm
Rx Overload (Note 1)	-3 dBm	
Link Budget (Note 2)	7 dB	11 dB

Note 1: The optical power arriving at the receiver must be greater than the specified Rx Sensitivity, and less than the specified Rx Overload. To satisfy this requirement it may be necessary to fit an attenuator.

Note 2: Maximum allowable end-to-end link attenuation.

Note 3: The Net2 Network Card’s maximum current consumption will increase by approximately 15 mA per installed FIBNET converter. Please refer to the Net2 Network Card datasheet or technical manual for more detail.

### Ordering Information

Product Code	Description
FIBNET-MMF	Multi-mode fibre converter for NET2CARD (2 km), ST Connector
FIBNET-MMF-SC	Multi-mode fibre converter for NET2CARD (2 km), SC Connector
FIBNET-SMF	Single-mode fibre converter for NET2CARD (20 km), ST Connector
FIBNET-SMF-SC	Single-mode fibre converter for NET2CARD (20 km), SC Connector