

### 1000 Mbps Fiber Optic Ethernet Transceiver (1Gb/s)

The DS-109TR non-managed copper-to-fiber Ethernet Transceiver media converters make the transition from copper to fiber more affordable and easier than ever. Designed as stand alone units that can be placed virtually anywhere, the new converters boast an exceptionally compact form factor and an external universal power supply.

The DS-109TR modules come standard with a duplex autosensing 1000Base-Tx port, while the modules have a 1000Base-Tx port that supports auto-negotiation. The modules can be manually configured to accommodate either half Duplex or Full Duplex transmissions and, with the available port selection, links can be established using either crossover or straight through cabling.

A variety of multimode and singlemode 1000BaseT-fiber ports are available, including DSC, LC and MTRJ connectors. Single fiber solutions are also available with SC-APC connectors.

Installation is quick and easy with no configuration required. Simply plug in the power, connect the data lines and the network is up and running.

The DS-109TR is ideally suited for Fiber To The Home (FTTH) applications where they can be used as CPE connecting the subscriber to the service providers Central Office. The modules can be used anywhere that Optical Ethernet service is deployed.



### Features

- Supports 1000BaseT Ethernet Transceiver (1Gb/s)
- Plug-and-play installation
- Multimode and singlemode Fiber Optics are available
- Small stand alone form factor
- External universal power supply
- Available in Single Fiber version
- Available in insert card version

865	1310	1550	Type	Mode	Wavelength Suffix	Fiber Type	Output Power	Receiver Sensitivity	Optical Loss Budget	Range*	Conn Type
•			LED	MM	L0	50/125μ	-10 dBm	-17 dBm	7 dB	0.5 km	DSC
•						62.5/125μ				0.3 km	
	•		Laser	MM	L1	50/125μ	-13 dBm	-20 dBm	7 dB	10 km	DSC
	•		Laser	SM	L3	09/125μ	-3 dBm	-23 dBm	20 dB	35 km	DSC

\* Chromatic dispersion and additional losses should be taken into account

# Data (Ethernet/Serial/USB)

## Data

Data rate	1000 Mbps per channel
Connector Type	RJ-45 UTP
Interface	Ethernet IEEE 802.3 FOIRL
Bit error rate	10E <sup>-9</sup>

## General

Dimensions & Weight	Stand Alone: 3.5" L x 2.3" W x 1.0" H	9 oz
Operating temperature	-0° C to +50° C	
Storage temperature	-30° C to +85° C	
Humidity	0 to 95% non-condensing	
Operating voltage	5 V <sub>DC</sub> (2A)	
Vibration	Up to 5 g's	
Shock	Up to 12 g's	

## Diagnostics

Status monitoring	LED indicator
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## Accessories

RJ-45 interface cables	RJ-45 to DB
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## Sample Configuration

