

**OSD2153 MINIATURE 10/100/1000BaseT  
ETHERNET MEDIA CONVERTER**

**APPLICATIONS**

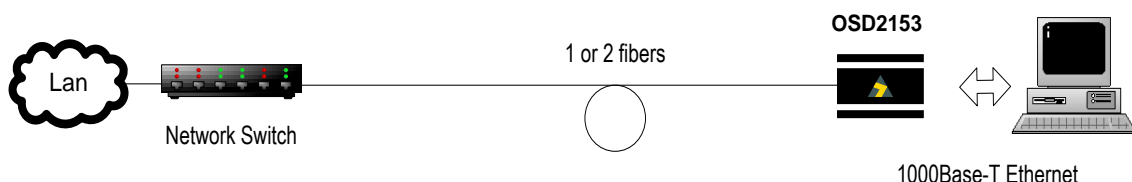
- ▲ Any network utilising a mix of copper and fiber
- ▲ Industrial IP communications
- ▲ Gigabit backbone networks
- ▲ Extremely space constrained environments



**FEATURES AND BENEFITS**

- ▲ Complies with IEEE802.3i/802.3u/802.3ab 10/100/1000Base-T, IEEE802.3z 1000Base-Lx/Sx standards.
- ▲ Supports network traffic of 100Mbps or 1000Mbps.
- ▲ Has one fixed 10/100/1000BaseT copper port and one SFP port which can be 10/100/1000BaseT, 100Base-Fx or 1000BaseLx/Sx.
- ▲ Automatic TP setup: no need for crossover cables.
- ▲ Can be used with either singlemode or multimode fiber over a variety of link budgets.
- ▲ Available for operation over 1 or 2 fibers.
- ▲ Powered by non-critical 12VDC supplies.
- ▲ Operates over the temperature range of -20 to +75°C
- ▲ Advanced features like Link Loss Forwarding to detect the link status of link partners either on the fiber and/or copper port
- ▲ Interoperates with the OSD2151 card or module
- ▲ SFP module sold separately.
- ▲ Supports 10KB jumbo frames

**TYPICAL SYSTEM DESIGN**



**ORDERING INFORMATION**

- OSD2153      Miniature singlemode or multimode 10/100/1000Base –T to 100Base-Fx/1000Base-Lx/Sx media converter module
- SFP Module      See OSD SFP datasheet #102100002



## SPECIFICATIONS

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### ELECTRICAL

|                           |  |
|---------------------------|--|
| Electrical Data Interface | IEEE802.3i/802.3u/802.3ab, 10/100/1000Base-T Ethernet  |
| Electrical Data Rate      | 10, 100, 1000Mbps with energy detect, auto negotiate, auto MDIX  |
| Optical Data Interface    | IEEE802.3z 1000Base-Lx/Sx  |
| Optical Data Rate         | 100Mbps or 1000Mbps  |
| Operating Mode            | Half or full duplex for 10/100<br>Full duplex for 1000<br>Pause frames for 1000Mbps flow control               |
| Electrical Data Connector | RJ45   |
| Controls                  | 100 or 1000Mbps on fiber<br>Link loss forwarding: on or off<br>Fault detection: fiber only or copper and fiber |

### OPTICAL

|                        |   |
|------------------------|---|
| Optical Port Connector | SFP   |
| SFP Options            | Short haul, long haul, single fiber operation, etc.<br>Please consult OSD datasheet #102100002 or contact OSD |

### PHYSICAL

|                             |   |
|-----------------------------|---|
| Operating Temperature Range | -20 to +75°C  |
| Relative Humidity           | 0 to 95% non-condensing   |
| Power Requirements          | +8V to 35V DC   |
| Power Connector             | 2-way 3.5mm terminal block  |
| Indicators                  | Power<br>Copper link, blink indicates activity<br>Fiber Rx – Link/No Link |
| Dimensions (mm)             | 52W x 55D x 26H   |
| Weight (kg)                 | 0.2   |