# OPTICAL SYSTEMS DESIGN

## OSD2153P MICRO 10/100/1000Base-T to 1000Base-X BRIDGE TYPE MEDIA CONVERTER with PoE+ SOURCE

### APPLICATIONS

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





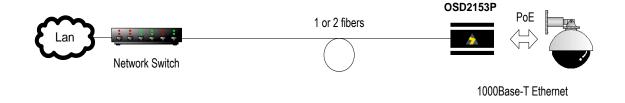


#### FEATURES AND BENEFITS

- 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 10/100/1000Base-T copper port and one SFP port which can be 10/100/1000Base-T, 100Base-Fx or 1000BaseLx/Sx/Zx.
- Auto MDI/MDIX.
- Can be used with either singlemode or multimode fiber over a variety of link budgets.
- Complies with the IEEE802.3af and IEEE802.3at standards providing up to 30W from PSE

- Available for operation over 1 or 2 fibers.
- Powered by non-critical 48VDC 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
- Supports IEEE802.af/at Alternative A, and B cable wiring
- Supports 10KB jumbo frames
- ▲ SFP module sold separately.

#### TYPICAL SYSTEM DESIGN



#### **ORDERING INFORMATION**

OSD2153P Micro 10/100/1000Base-T to 100Base-Fx/1000Base-X media converter module with PoE+ SFP Module See OSD SFP datasheet #1021000XX



## **SPECIFICATIONS**

#### 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
Jumbo Frame Support	10KB
Optical Data Interface	IEEE802.3z 1000Base-Lx/Sx or IEEE802.3u 100Base-Fx
Optical Data Rate	100Mbps or 1000Mbps
Operating Mode	Half or full duplex for 10/100 Full duplex for 1000 Flow control
Electrical Data Connector	RJ45
Controls	100 or 1000Mbps on fiber Link loss forwarding: on or off Fault detection: fiber only or copper and fiber
РоЕ	IEEE802.3af, IEEE802.3at
Operating Mode	Alternative A & B (Pins 1/2, 3/6, 4/5, and 7/8)
OPTICAL	
Optical Port Connector	SFP (LC connectors for 2-fiber operation and SC for 1-fiber operation)
SFP Options	Short haul, long haul, single fiber operation, etc. Please consult OSD datasheet #1021000XX or contact OSD
PHYSICAL	
Operating Temperature Range	-20 to +75°C
Relative Humidity	0 to 95% non-condensing
OSD2153P Power Requirements	+46VDC to +57VDC @ 6W plus up to an extra 30W for PoE operation (attached powered device dependent) ≥52VDC recommended for PoE+
Power Connector	2-way 3.5mm terminal block on the module
Indicators	1xCopper Link/Activity on RJ451xCopper Speed on RJ451xPoE Enable/Disable1xPower On/Off1xLink Loss Forwarding Enable/Disable1xSFP Link/Speed on SFP
Dimensions (mm)	90W x 58D x 49H
Weight (kg)	0.3