OPTICAL SYSTEMS DESIGN

OSD2051 MICRO 10/100Base-T to 100Base-Fx BRIDGE TYPE MEDIA CONVERTER

APPLICATIONS

- Any network utilising a mix of copper and fiber
- Industrial IP communications
- IP Camera systems

FEATURES AND BENEFITS

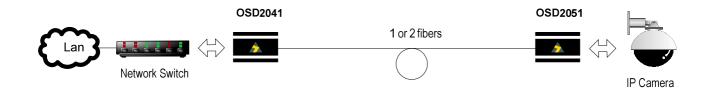
- ▲ Complies with the IEEE 802.3 standard.
- ▲ Supports network traffic of 10 or 100Mbps.
- Automatic TP setup: no need for crossover cables.
- Auto-sensing of half or full duplex operation.
- Automatic setup for 10 or 100Mbps on copper side.
- A very compact design that fits in the camera housing





- Available for singlemode, multimode operation over a variety of link budgets
- Available for operation over 1 or 2 fibers.
- Powered by non-critical 12VDC or 24VAC supplies
- Operates over the temperature range of -20 to +75°C
- ▲ Utilizes 100Base-Fx SFP transceivers that can be selected according to specific length or fiber requirements without changing the whole unit.
- ▲ SFP Module sold separately.

TYPICAL SYSTEM DESIGN



ORDERING INFORMATION

OSD2051	Micro standalone 100Base-Fx Media Converter
OSDSFP100Fx	2-fiber 100Base-Fx 1310nm SFP Plugin Module with LC connectors for up to 10km
OSDSFP100FxA	Single fiber SFP Plugin Module with an SC connector for up to 10km (TX @1310nm, Rx @ 1550nm)
OSDSFP100FxB	Single fiber SFP Plugin Module with an SC connector for up to 10km (TX @ 1550nm, Rx @ 1310nm)



SPECIFICATIONS

Data Interface	IEEE 802.3 Ethernet
Data Rate	10/100Mbps
Operating Mode	Half or full duplex
Data Connector	RJ45
Optical Interface	100Base-Fx
Optical Port Connector	SFP (LC connectors for 2-fiber operation and SC for 1-fiber operation)
SFP Options	OSDSFP100Fx – 2 fiber, SFP Plug-in Transceiver @1310nm
	OSDSFP100WFxA –1 fiber, SFP Plug-in Transceiver (Tx @1310nm, Rx @ 1550nm)
	OSDSFP100WFxB –1 fiber, SFP Plug-in Transceiver (Tx @1550nm, Rx @ 1310nm)
Transmit Optical Power	-15 to -8dBm into singlemode fiber (See SFP datasheet for options)
Receiver Sensitivity	<-33dBm
Receiver Saturation	>-3dBm
Standard Optical Link Budget	>18dB: >10km on multimode fiber @ 1310nm >40km on singlemode fiber @ 1310nm

NOTE: Special configurations to cover longer distances also available. Contact OSD for a full listing of available options

PHYSICAL

Operating Temperature Range	-20°C to +75°C
Relative Humidity	0 to 95% non-condensing
Power Requirements	+8V to 35V DC or 22 to 28VAC @ 3VA
Power Connector	3.5mm 2-way terminal block on the module
Indicators	TP activity TP link speed Power indicator Fiber link activity
Dimensions of Module (mm)	52W x 55D x 26H
Weight of Module (kg)	0.3

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