

### Introduction

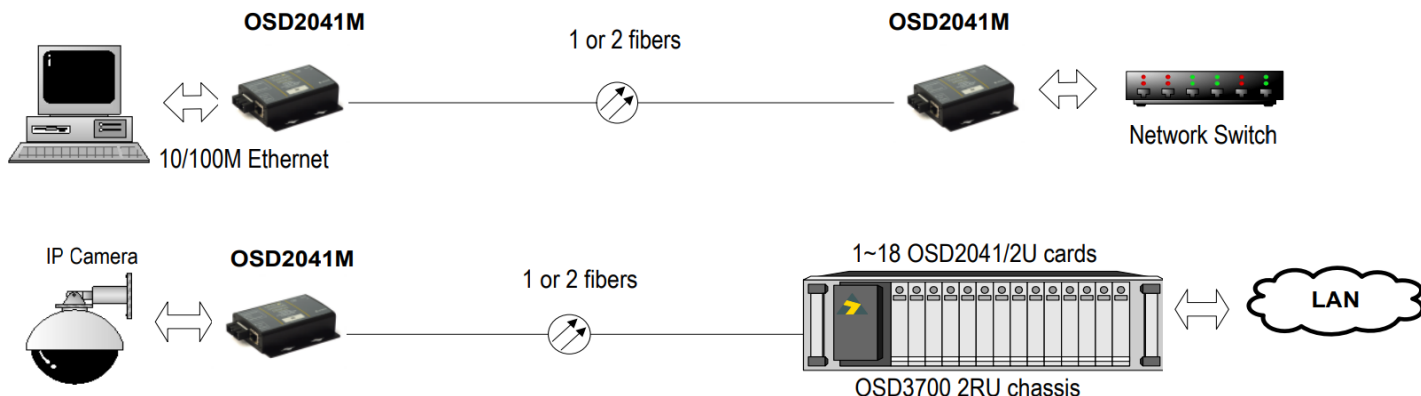
The OSD2041 is an industrial Ethernet media converter providing one RJ45 port and one optical fiber port which can be either a fixed optical connector port or a SFP port. The OSD2041 is available as a standalone module or as a card for use in an OSD 19" rack mount chassis. The OSD2041 module can also be mounted on a DIN rail using the OSD DRB02 bracket. A rugged fanless design and wide operating temperature range of -20 to +75°C make this product ideally suited for use in a wide range of harsh industrial environments where Industrial IP networks are a mix of copper and fiber.



### Features and Benefits

- ▲ Complies with IEEE802.3i/802.3u 10/100Base-T, IEEE802.3u 100Base-Fx
- ▲ One fixed 10/100Base-T copper port
- ▲ Optical port can be either a fixed optical connector or one SFP port
- ▲ Available for singlemode and multimode operation over a variety of link budgets and for operation over 1 or 2 fibers
- ▲ Auto MDI/MDIX on copper ports (support both straight through and crossover cables)
- ▲ Operates over the temperature range of -20 to +75°C
- ▲ Powered by non-critical 12VDC supplies, 24VAC supplies or optional -48VDC supplies

### Typical System Design



## Specifications

Hardware	
Ethernet	10/100/Base-T RJ45, IEEE802.3i/802.3u
SFP Port	SFP port (100Mbps) (contact OSD for SFP options)
Fixed Optical Port	Duplex or Simplex fixed connector (SC/PC, ST/PC) Various Optical Link Budgets and Wavelengths available.
Optical Data Interface	IEEE802.3u 100Base-Fx
Enclosure Protection Class (module)	IP30
Installation	Wall mount or desktop (DIN Rail with addition of DRB02 bracket) (Module) Related OSD 19" rack mount chassis (2RU card & 3RU card)
Power Requirements	Vin +8 to +35VDC or +22 to +28VAC @ 3VA +18V to 75V DC @ 3VA (Optional 48VDC version) (Isolation >3kV)
Power Connector	2 way 5.08mm terminal block on module DB9 connector on 3RU card (for use in OSD350 or OSD370 chassis) 4-way PCB mounting plug on 2RU card (for use in OSD350 or OSD3700 chassis)
Indicators	TP activity TP link speed Fiber link OK Fiber link activity
Environmental	-20 to +75°C
Relative Humidity	0 to 95% non-condensing
Dimensions & Weight	83.4W x 94D x 26.4H (mm), 280g (Module) 25W x 208D x 100H (mm), 300g (3RU card) 20W x 216D x 70H (mm), 200g (2RU card)

### Fixed Optical Connector (contact OSD for further options)

Transmitter Wavelength	1310nm for duplex
Transmit Optical Power	-15 to -7dBm into singlemode fiber -13 to -4dBm into multimode fiber -19 to -10dBm into multimode fiber (OSD2041LP only)
Receiver Sensitivity	<-33dBm
Receiver Saturation	>-2dBm
Standard SM Optical Link Budget	>18dB: >30km on singlemode fiber @ 1310nm >20dB: >10km on multimode fiber @ 1310nm (fiber bandwidth limited)
Optional SM Optical Link Budget	>33dB: >100km on singlemode with 0dBm 1550nm transmitter
Optional MM Link Budget	>14dB: >5km on multimode fiber (Option LP only)

## Ordering Information

Part No.	Description
OSD2041	10/100BaseT to 100BaseFx media converter card for use in OSD370 or OSD350 chassis
Option LP	Low Power (for multimode fiber)
Option 48VDC	48VDC power supply
Option ST	ST optical connectors
Option SC	SC optical connectors
Option M	Standalone module version
Option WA	Single fiber operation (TX @ 1310nm, Rx @ 1550nm)
Option WB	Single fiber operation (TX @ 1550nm, Rx @ 1310nm)
Option 2U	2RU card version to slot into the OSD3700 chassis
Option MD	DIN Rail mounting bracket (DRB02) for small OSD modules
SFP	See OSD SFP datasheets #102100XX
Option MD	DIN Rail mounting bracket (DRB02) for small OSD modules
OSD2041PP	240VAC to 12VDC plug pack for use with OSD2041 product family

## Warranty

Warranty Period	5 years
MTBF (Ground Benign Environment, 30°C)	681,000 hours

## Dimensions

