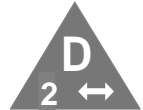
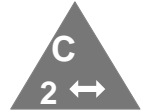


**OSD2139 10/100/1000BASE-T MEDIA CONVERTER WITH
2 DUPLEX DATA & CONTACT CLOSURE CHANNELS**

APPLICATIONS

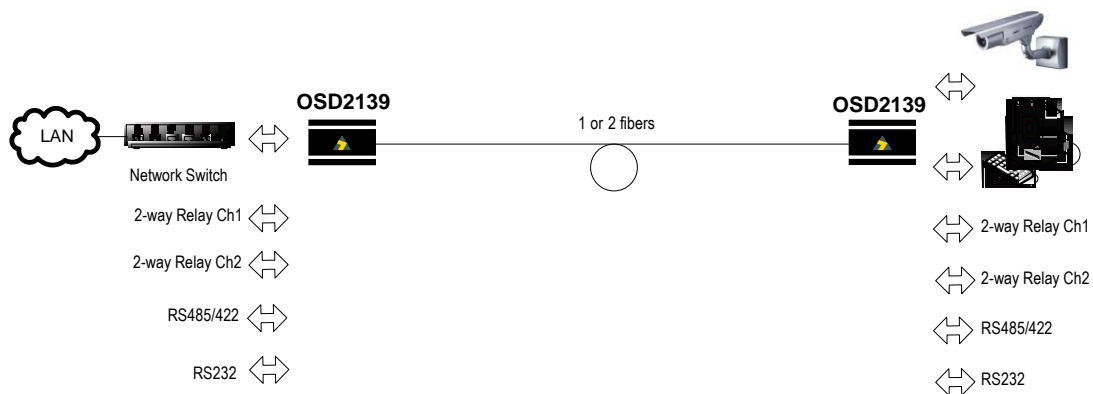
- ▲ Any network utilising a mix of copper and fiber
- ▲ Industrial IP communications
- ▲ Gigabit backbone networks
- ▲ IP cameras with Pan Tilt Zoom, tamper alarms and/or washer/wiper controls



FEATURES AND BENEFITS

- ▲ Complies with IEEE802.3i/802.3u/802.3ab 10/100/1000Base-T, IEEE802.3u 100Base-Fx, IEEE802.3z 1000Base-Lx/Sx standards
- ▲ Has a total of two ports: one fixed copper port for 10/100/1000Base-T and one SFP port which may be either copper (1000Mbps) or fiber (100M/100Mbps).
- ▲ Supports network traffic up to 1000Mbps
- ▲ Duplex transmission of two alarm signals
- ▲ Duplex transmission of one RS485 or RS422, and one RS232 channel
- ▲ Can be used with either singlemode or multimode fiber over a variety of link budgets
- ▲ Available for operation over 1 or 2 fibers
- ▲ Automatic TP setup: no need for crossover cables
- ▲ Auto MDIX of half or full duplex operation in 10/100 mode
- ▲ Supports Jumbo Frames
- ▲ Powered by non-critical 12VDC supplies
- ▲ Operates over the temperature range of -20 to +75°C
- ▲ SFP modules sold separately

TYPICAL SYSTEM DESIGN



ORDERING INFORMATION

- OSD2139M 10/100/1000Base –T to 100Base-Fx/1000Base-Lx/Sx media converter module with 2 duplex data and 2 duplex contact closure channels
- 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 Connector	RJ45 for Port 2
Electrical Data rates	10, 100, 1000Mbps with energy detect, auto negotiate, auto MDIX
Operating Modes	Half or full duplex for 10/100 Full duplex for 1000 Pause frames based flow control
Serial Data Interface	1 x RS232, 1 x RS422/RS485
Serial Data Rate	DC to 115.2kbps for RS232/RS422/RS485-4wire 300bps to 115.2kbps for RS485-2wire
Contact Closure Transmission	Buffered input, optically isolated MOSFET output (100mA @ 350V(max))
Data Connector	15 pin female subminiature D connector
User Controls	eight externally accessible switches; 1. 100/1000BASE-X for optical port 2. RS422 or RS485 for Data Channel 3. 2-wire or 4-wire RS485 for Data Channel 4 } 5 } Turnaround time (for RS485-2wire only): See table 1 6 } 7. Link Loss Forwarding Enable/Disable 8. N/A

4.	0	0	0	0	1	1	1	1
5.	0	0	1	1	0	0	1	1
6.	0	1	0	1	0	1	0	1
RS485 Turnaround Time	30ms	5ms	3ms	2ms	1ms	300us	200us	100us

Table 1: DIP-Switch settings for RS485 turnaround time

OPTICAL

Optical Port Connector	SFP
Various SFP Options Possible	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
Power Requirements	+9V to +35VDC @ 8VA (with SFP loaded)
Power Connector	2 way terminal block
Indicators	1x Power 1x Copper Speed/Activity/Link on RJ45 1x Copper Duplex on RJ45 1x SFP Speed/Activity/Link
Dimensions of Module (mm)	114W x 105D x 32H (module)
Weight of Module (kg)	0.5