OPTICAL SYSTEMS DESIGN

OSD2054P MICRO 10/100Base-T to 100Base-X 3-PORT SWITCH with PoE SOURCE

APPLICATIONS
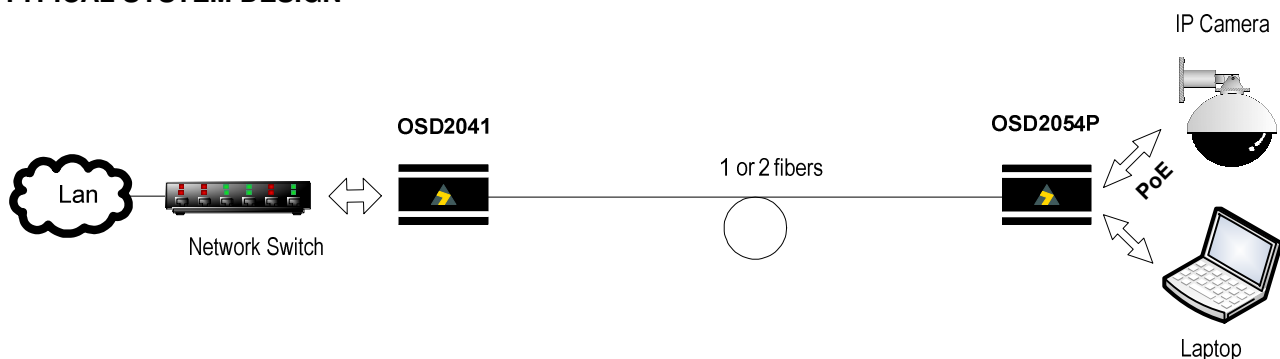
▲ Any network utilising a mix of copper and fiber

▲ Industrial IP communications

▲ Extremely space constrained environments

▲ Networks using Power over Ethernet devices such as cameras, intercoms, access control, telephones, etc
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FEATURES AND BENEFITS

▲ Two 10/100Base-T RJ45 ports and one SFP fiber port.

▲ Supports IEEE802.3af Alternative B cable wiring on one RJ45 port only.

▲ Complies with the IEEE 802.3af standard including compliant powered device (PD) signature detection and classification.

▲ Provides up to 15.4W from port 1 only.

▲ Supports network traffic of 10 or 100Mbps

▲ Auto MDI/MDIX.

▲ 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.

▲ Available for singlemode, multimode operation over a variety of link budgets

▲ Available for operation over 1 or 2 fibers.

▲ Powered by non-critical 10 to 36VDC supply, 48VDC supply optional.

▲ Operates over the temperature range of -20 to +75ºC

▲ A very compact design that fits into almost any camera housing

▲ Utilizes 100Base-X SFP transceivers that can be selected according to specific length or fiber requirements without changing the whole unit.

▲ DIN rail mounting

▲ SFP Module sold separately.

TYPICAL SYSTEM DESIGN

ORDERING INFORMATION

OSD2054P	Micro standalone 10/100Base-T to 100Base-X 3-port Switch with PoE
OSDSFP100Fx	2-fiber 100Base-Fx 1310nm SFP Plugin Module with LC connectors for at least 10km
OSDSFP100FxA	1-fiber SFP Plugin Module with an SC connector for up to 10km (TX @ 1310nm, Rx @ 1550nm)
OSDSFP100FxB	1-fiber SFP Plugin Module with an SC connector for up to 10km (TX @ 1550nm, Rx @ 1310nm)
Option 48	48VDC power

SPECIFICATIONS

ELECTRICAL

Data Interface   IEEE 802.3 Ethernet

Data Rate   10/100Mbps

Operating Mode   Half or full duplex

Data Connectors   RJ45, the PoE unit mounted on the front panel and the non-PoE unit on the rear panel

PoE   IEEE802.3af

Operating Modes   Alternative B (Pins 4/5 and 7/8)

OPTICAL

Optical Interface   100Base-Fx/Sx

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 #102100XX or contact OSD

Transmit Optical Power   -15 to -8dBm into singlemode fiber (See SFP datasheet for details)

Receiver Sensitivity   <-31dBm

Receiver Saturation   >-3dBm

Standard Optical Link Budget   >16dB: >10km on multimode fiber @ 1310nm
                                                >40km on singlemode fiber @ 1310nm

NOTE: Special configurations to cover longer distances or short distance multimode links are also available. Contact OSD for a full listing of available options

PHYSICAL

Operating Temperature Range   -20 to +75ºC

Relative Humidity   0 to 95% non-condensing

Power Requirements   +10V to +36V DC @ 3W plus up to an extra 20W for PoE operation (attached powered device dependent). Use of isolated power supply is recommended.

Power Connector   3.5mm 2-way terminal block on the module

Indicators   2x   Copper Link/Activity on RJ45
                                        2x   Copper Speed on RJ45
                                        1x   PoE Enable/Disable
                                        1x   Power On/Off
                                        1x   SFP Link/Speed on SFP

Dimensions of Module (mm)   90W x 58D x 49H

Weight of Module (kg)   0.4