

## ET4111PH Series

Unmanaged Hardened 4-port 10/100BASE-TX + 1-port 100BASE-FX Ethernet Switch with PoE/PSE



OT Systems combines Ethernet and Fiber transmission with its new, fast ET4111PH Series media converter, offering 4 Ethernet ports and 1 fiber port. The ET4111PH Series connects 10/100Base-TX to 100Base-FX providing a seamless integration of two popular network technologies. As an added benefit, the ET4111PH Series also provides Power over Ethernet (PoE) for those remote applications without additional power sources. The ET4111PH complies with 802.3af PoE standards for reliable operation. Designed for easy and flexible installation, the ET4111PH Series features wall mounting or desk mounting options. In keeping with OT Systems reputation for reliability, the ET4111PH supports redundant power inputs and an operating temperature range of -40°C to 75°C (-40°F to 167°F).

### Features

- Port1-4 supports IEEE802.3af Power over Ethernet (PoE), Power Sourcing Equipment (PSE)
- Alarms for power and port link failure by relay output
- Redundant power inputs with Terminal Block and DC Jack
- Complies with NEMA TS1 & TS2 Environmental requirements for Traffic control equipment
- Complies with IEC61000-6-2 EMC Generic standard immunity for Industrial environment
- -40°C to 75°C (-40°F to 167°F) operating temperature
- Wall-mount

### Ordering Information

Model	Description			
ET4111PH-X-YY	4-port 10/100Base-TX + 1-port 100Base-FX Ethernet Switch with PoE/PSE			
(X) =	<b>Fiber Options</b>	<b>Wavelengths</b>	<b>Link Budget</b>	<b>Max. Distance</b>
A	Multimode/2-fiber/SC	1310nm	11 dB	2 km
B	Singlemode/2-fiber/SC	1310nm	17dB	20 km
C	Multimode/WDM 1-fiber/SC	TX:1310nm/RX:1550nm	18dB	2 km
D	Multimode/WDM 1-fiber/SC	TX:1550nm/RX:1310nm	18dB	2 km
E	Singlemode/WDM 1-fiber/SC	TX:1310nm/RX:1550nm	17dB	20 km
F	Singlemode/WDM 1-fiber/SC	TX:1550nm/RX:1310nm	17dB	20 km
(YY) =	<b>Installation</b>	<b>Power Adapter (Purchase separately)</b>		
SA	Standalone Wall-mount	<b>AS-120P-48.</b> 120W/2.5A 48VDC Power Adapter. DC Jack with latch. (US, European, UK or Australian power plug available)		

NOTES: (1) Transmission distance will suffer if additional losses are introduced by the optical connectors, fusions, splices and the fibers within the network.

(2) Operating distance of multimode is limited by the characteristics of the fiber bandwidth .

(3) Please feel free to consult factory for any special requirement and customization

# ET4111PH Series

## Specifications

### Ethernet

Standards:	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX/FX IEEE802.3x IEEE802.3af PoE
Packet Buffer Memory:	512K bits
Processing Type:	Store and forward Half-duplex back-pressure and IEEE802.3x Full-duplex flow control
Forward and Filter Rate:	14,880pps(10Mbps) 148,810pps(100Mbps)
Cabling:	10Base-T: Cat5 or above 100Base-TX: Cat5 or above
Maximum Distance:	Cat5 UTP up to 100m
Connector:	4 x RJ45
Address table size:	1024MAC addresses

### Optical

Cabling:	62.5/125µm (Multimode) 9/125µm (Singlemode)
Maximum Distance:	2km (Multimode) 20km (Singlemode)
Wavelength:	1310 nm 1310/1550nm
Connector:	SC

### Electrical and Mechanical

Input Power:	48VDC (Terminal Block and DC Jack)
Power Consumption:	72W Max. 1.5A@48VDC (for 15.4W per PoE port)
Protection:	
Overload Current:	Present
Reverse Polarity:	Present
LED Indicators:	
Power:	Power Status (Power1, 2, 3 and Fault)
10/100TX(Per Port):	Link/Activity
100FX(Per Port):	Link/Activity
PoE (Per-Port):	Link
Alarm Contact:	One relay output (with current 1A@24VDC)
Dimensions (WxDxH):	220 X 134.3 X 35 mm
Weight:	0.8Kg
Casing:	Aluminum case, IP30
Mounting Options:	Wall-mount

### Environmental

Operating Temperature:	-40°C to 75°C (-40°F to 167°F) Tested -40°C to 85°C (-40°F to 185°F)
Storage Temperature:	-40°C to 85°C (-40°F to 185°F)
Relative Humidity:	5% to 95% non-condensing

### Regulatory Approvals

ISO9001
FCC Part 15, Class A
EN61000-6-4:
-EN55022
-EN61000-3-2
-EN61000-3-3
EN61000-6-2:
-EN61000-4-2 (ESD Standards)
Contact: +/- 6KV; Criteria B
Air: +/- 8KV; Criteria B
-EN61000-4-3 (Radiated RFI Standards)
10V/m, 80 to 1000MHz; 80% AM Criteria A
3V/m, 1400 to 2000MHz; 80% AM Criteria A
1V/m, 2000 to 2700MHz; 80% AM Criteria A
-EN61000-4-4 (Burst Standards)
Signal Ports: +/- 4KV; Criteria B
D.C. Power Ports: +/-4KV; Criteria B
-EN61000-4-5 (Surge Standards)
Signal Ports: +/-1KV; Line-to-Line; Criteria B
D.C. Power Ports: +/-0.5KV; Line-to-earth; Criteria B
-EN61000-4-6 (Induced RFI Standards)
Signals Ports: 10V <sub>rm</sub> @0.15~80MHz; 80% AM Criteria A
D.C. Power Ports: 10V <sub>rm</sub> @0.15~80MHz; 80% AM Criteria A
-EN61000-4-8 (Magnetic Field Standards)
30A/m@50, 60Hz; Criteria A
IEC60068-2-6 Fc (Vibration Resistance):
5g@10~150Hz, Amplitude 0.35mm (Operation/Storage/Transport)
IEC60068-2-27 Ea (Shock):
25g@11ms (Half-Sine Shock Pulse; Operation)
50g@11ms (Half-Sine Shock Pulse; Storage/Transport)
IEC60068-2-32 Ed (Free Fall):
1m