Networks

PD-Switch
PoE-Powered, Network-Extending 10/100Base-T Multi-Port Switch

MEDIA CONVERSION

PD-Switch combines flexible copper and fiber interface options with port and packet-based traffic prioritization while extending network range by utilizing Power over Ethernet (PoE) technology

Features and Benefits

10/100Base-T multi-port switch powered by IEEE 802.3af Power Over Ethernet
- PD accepts power from any network device providing PoE
- Multiple ports increase network port density

Meets a multitude of installation requirements
- SFP and fiber port configurations (optional) for different network environments
- 1X9 fiber port is fixed at 100 Mbps
- SFP port speed is SFP dependent
- All RJ-45 ports feature Auto-Cross and Auto Negotiation
- Port for High Priority traffic
- Available with ST or SC fiber connectors
- Optional single-strand fiber model

Full-Featured Switch
- Broadcast Storm Protection helps control excessive broadcast traffic
- DiffServ on all ports provides quality of service prioritization
- Far End Fault provides notification of Link Loss on all fiber ports
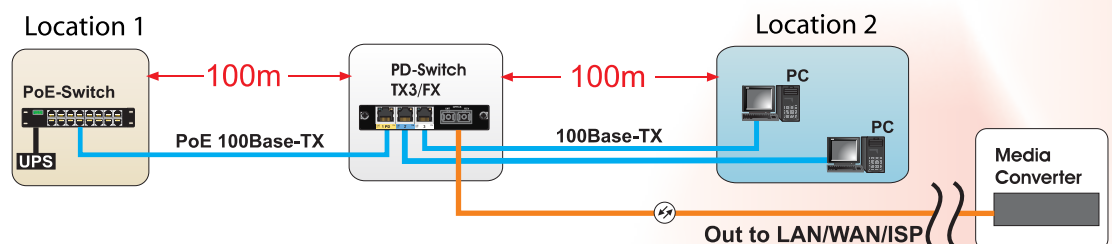- One High-Priority Port
- Supports 1,916 byte Packet Size

The (PoE) PD-Switch is a full-featured, 5-port 10/100Base-T MAC layer switch that extends the range of Ethernet networks, and increases port density, while being powered via IEEE 802.3af-compliant PoE through its "PD-port" (eliminating the need to run a separate power line for the device). Ethernet cabling usually runs only 100 meters; through the use of the PD-Switch, the outer range of an Ethernet network can be extended by an additional 100 meters.

With multiple port configurations, the PD-Switch provides a variety of port options while increasing port density. PD-Switches come equipped with one "PD" RJ-45 port and either:
- Four 10/100Base-T RJ-45 data ports
- Three 10/100Base-T RJ-45 data ports and one SFP data port
- Two 10/100Base-T RJ-45 data ports and one 100Base-FX fiber data port

Application Example

The PD-Switch has been connected to a central (PoE) PSE-Switch, extending the range of the network and increasing port density by using a combination of RJ-45 ports and fiber ports.

Location 1
PoE-Switch
UPS
100m
PoE 100Base-TX

PD-Switch TX3/FX
100m

Location 2
PC
PC
100Base-TX

Media Converter

Out to LAN/WAN/ISP

Technical Specifications

- RoHS-Compliant
- Acts as a PD – Powered Device
- IEEE 802.3x 10/100Base-T
- IEEE 802.3u Auto-Negotiation
- IEEE 802.3af Power Over Ethernet, Powered (PD)
- RFC-2474 and RFC-2475 DiffServ/ToS
- High Priority port
- AutoCross and Auto-Negotiation on all ports
- Includes diagnostic LEDs
- Maximum 1,916 byte Packet Size
- Broadcast Storm Protection
- 50/125μm or 62.5/125μm multi-mode
- 9/125μm single-mode
- Available for single-strand fiber
- Small, rugged design
- Supports Half and Full-Duplex operation

Connectors:

- RJ-45 and optional ST, SC or SFP

Regulatory Approvals:

- FCC Class A
- CE

Dimensions:

1.55"H x 4.75"L x 7.31"D
(3.94cm H x 12.07cm L x 18.57cm D)

Shipping Weight:

1.8 lbs (.82 kg)

Operating Temp:

+32° F to +122° F (0° C to +50℃)

Storage Temp:

-13° C to +158° F (-25° C to +70° C)

Humidity:

5% to 95%, non condensing,
0 to 10,000 ft. altitude

Power Rating:

36 to 50 VDC, 56 to 40mA

Fiber Optics Specifications

For each product listed below in the Ordering Information section, the DISTANCE represents an approximate fiber distance based on industry-standard fiber attenuation specifications. Actual distances will vary for each installation. For complete power budgets and information on calculating specific distances, visit www.imcnetworks.com/go/fcs or contact IMC Networks Fiber Consulting Services at 949-465-3000 for a free consultation.

Ordering Information

PART NUMBER	DESCRIPTION	DISTANCE
PD-Switch		
852-16440	PD-Switch, TX/5	100 m
852-16441	PD-Switch, TX/4 + SFP [§]	Various
852-16442	PD-Switch, TX/3 + TX/SX-MM850-ST	2 km
852-16443	PD-Switch, TX/3 + TX/SX-MM850-SC	2 km
852-16444	PD-Switch, TX/3 + TX/FX-MM1300-ST	2 km
852-16445	PD-Switch, TX/3 + TX/FX-MM1300-SC	2 km
852-16446	PD-Switch, TX/3 + TX/FX-SM1310/PLUS-ST	40 km
852-16447	PD-Switch, TX/3 + TX/FX-SM1310/PLUS-SC	40 km
852-16448	PD-Switch, TX/3 + TX/FX-SM1310/LONG-ST	80 km
852-16449	PD-Switch, TX/3 + TX/FX-SM1310/LONG-SC	80 km
852-16450	PD-Switch, TX/3 + TX/FX-SM1550/LONG-SC	80 km
PD-Switch Single-Strand Fiber *		
852-16470	PD-Switch, TX/3 + TX/SSFX-SM1310-SC (1550 rcv)	20 km
852-16471	PD-Switch, TX/3 + TX/SSFX-SM1550-SC (1310 rcv)	20 km
852-16472	PD-Switch, TX/3 + TX/SSFX-SM1310/PLUS-SC (1550 rcv)	40 km
852-16473	PD-Switch, TX/3 + TX/SSFX-SM1550/PLUS-SC (1310 rcv)	40 km
852-16474	PD-Switch, TX/3 + TX/SSFX-SM1310/LONG-SC (1550 rcv)	60 km
852-16475	PD-Switch, TX/3 + TX/SSFX-SM1550/LONG-SC (1310 rcv)	60 km

* These products have single-strand fiber technology. Deploy in pairs, or connect to another compatible IMC Networks single-strand fiber product.
For more information go to: www.imcnetworks.com/products/SSFX.cfm

[§] SFP modules are sold separately. For more information on IMC Networks' SFPs, go to: www.imcnetworks.com/Products/product.cfm?family=32

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