



AMERICAN ELECTRICAL, INC.
INDUSTRIAL ELECTRICAL COMPONENTS

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PoE-8-48

- Unmanaged for quick setup and “Plug-and-Play” deployment
- 8 Gigabit IEEE 802.3af/at ports
- 1 SFP uplink port
- Fanless industrial design
- Redundant power inputs, over-current protection, reverse-current protection
- Extruded aluminum alloy case for superior durability
- -40°C to 75°C operating range
- Integrated DIN-rail and surface mounts
- Made using Marvell and MicroSemi chips
- Ideal for security, rail, traffic, mining, industrial IoT, and more



The PoE-8-48, manufactured by Solis Energy, is an unmanaged, hardened, industrial-grade switch designed to reliably connect PoE devices in harsh environments. The PoE-8-48 features eight 802.3af/at Gigabit PoE ports and one SFP uplink which allow it to handle cutting-edge high-power and high-bandwidth devices.

The PoE-8-48 was designed with durability in mind. An extruded aluminum alloy case, fanless design, redundant power inputs, over-current protection, reverse-polarity protection, and a -40°C to 70°C operating temperature range, and American Marvell and Microsemi chipsets mean that the PoE-8-48 is extremely resistant to hardware failure and well-suited to even the most demanding operating conditions.

The PoE-8-48's integrated DIN-rail and wall mounts, small form factor, and unmanaged plug-and-play interface mean that the PoE-8-48 can be quickly and easily added to any network.



PoE-8-48

Technology

Ethernet Standards	IEEE 802.3af	PoE
	IEEE 802.3at	PoE+
	IEEE 802.3	10BaseT
	IEEE 802.3u	100BaseT (X)
	IEEE 802.3ab	1000BaseT (X)
	IEEE 802.3z	1000BaseX
	IEEE 802.3x	Flow Control
EMI Standards	IEEE 802.3az	Energy Efficiency
	FCC Part 15, CISPR (EN55022) Class A	
EMS Standards	EN61000-4-2 (ESD), Level 4	
	EN61000-4-3 (RS), Level 3	
	EN61000-4-4 (EFT), Level 4	
	EN61000-4-5 (Surge), Level 4	
	EN61000-4-6 (CS), Level 3	
	EN61000-4-8, Level 5	

Port Specifications

Number of Ethernet Ports	8
Ethernet Connector Type	RJ45
Ethernet Standard	10/100/1000BASE-TX Auto Negotiation Speed
	Full/Half Duplex Mode
	Auto MDI/MDI-X Connection
Number of Fiber Ports	1
Fiber Connector Type	SFP Slot
Fiber Standard	1000BASE-X

Switch Properties

Packet Forwarding Rate	8.9 MPPS
Data Processing	Store and Forward
MAC Table Size	1 K
Jumbo Frame Size	10 Kbytes
Packet Buffer Size	1 Mbit

PoE Specifications

PoE Modes	IEEE 802.3af Power over Ethernet (PoE)
	IEEE 802.3at High Power over Ethernet (PoE+)
Number of PoE+ Ports	8
Maximum Power/PoE Port	15.4W (IEEE 802.3af) 30W (IEEE 802.3at)
PoE Pinout	Pins 1, 2: V+; Pins 3, 6: V- (End-span)
PoE Format	Mode A

Power Specifications

Connection	1 removable 6-contact terminal block
Input Voltage	48VDC (44 – 57 VDC), Redundant Dual Inputs
No-Load Consumption	5W @ 48VDC
Full-Load Consumption	8W @ 48VDC (Excluding PD's consumption)
Power Budget	248W @ 48VDC total for PD and Switch
Redundant Dual Inputs	Present
Reverse Polarity	Present
Over-Current Protection	Present

Physical Specifications

Housing	Extruded Aluminum Alloy
Ingress Protection	IP40
Dimensions (W x H x D)	41 x 202 x 128 mm (including DIN mount)
	1.6 x 8 x 5 in (including DIN mount)
Weight	590g
Installation	DIN-rail mount; wall mount
Operating Temperature	-40 to 75 °C (-40 to 167 °F)
Storage Temperature	-40 to 85 °C (-40 to 185 °F)
Ambient Relative	5 to 95% (non-condensing)