PDS-408G

Digital Ceiling PoE Switch

Summary

The PDS-408G Digital Ceiling PoE Switch offers an optimal and cost-effective solution for PoE application like PoE lighting and other digital ceiling applications. It allows lighting fixtures and other Ethernet terminals to receive power and data, over standard Ethernet cables in the most efficient way. PDS-408G is a 480W fan-less switch, designed to be deployed in the ceiling or in communications rooms. It provides automatic output PoE power based on PoE PD device class. It supports full power mode by providing 60W for all 8 ports simultaneously and any specific port can go up to 90W.

The 480W high-speed switch can be managed over Web, SSH, Telnet and CLI. It has 8 ports of 10/100/1000 Mbps (Gigabit Ethernet) with PoE BT ports, 2 Gigabit ports and one 1000M/100M SFP port.

Key Features

- Supports IEEE® 802.3bt/at/af
- Legacy PoE detection
- Fan-less design
- High power efficiency: low standby consumption < 10W
- Layer 2 switch – including VLAN, STP-spanning tree backup and loop protection, LACP Link aggregation, IGMP snooping, LLDP, port isolation and port mirroring
- Remote management – Web HTTP/HTTPS (encrypted TLS v1.2), ACL – access list for enhanced secured remote users access, Telnet, SSHv2, SNMPv2-v3, RADIUS/TACACS user authentication
- Software update can be performed without interfering with the PoE delivery to connected PoE devices rates

Feature	Description
Number of Ports	8+3
Data Rate	PoE Ports: 8 ×10/100/1000 Mbps Uplinks: 2 ×10/100/1000 Mbps Copper SFP: 1 × SFP – Fiber/Copper
Input Power Requirements	AC Input Voltage: 100 to 240 VAC AC Frequency: 50/60 Hz
User Port Power	90W Aggregate 480W
Dimensions	L × W × H 443 mm × 291 mm × 44.4 mm 17.44in × 11.46 in. × 1.75 in.
Net Weight	5.6 kg
Connectors	RJ-45, EIA 568A and 568B SFP Cage AC Connector - Universal 3 pins (IEC60320 Type C14), Option to Connect External Junction Box
Indicators	Main LED - Power On/Off System LED - Start Up Status Data LEDs - Link/Data Status Power LED - PoE Power Status
Environmental Conditions	Operating Ambient Temperature: 32ºF to 113ºF (0ºC to 45ºC) Operating Humidity: Maximum 90%, Non-Condensing Storage Temperature: –40ºF to +158ºF (–40ºC to +70ºC) Storage Humidity: Maximum 95%, Non-Condensing
Hazardous Substances	CE, WEEE
Warranty	3 years
Reliability	100,000 hours @ 25ºC
Thermal	240 BTU/hr
Regulatory Compliance	IEEE® 802.3bt Ethernet 10/100/1000 IEEE 802.3, 802.3u, 802.3ab, 802.3z IEEE 802.3x Flow Control and Back Pressure IEEE 802.3ad Port Trunk With LACP Spanning Tree STP/RSTM/MSTP IEEE 802.1D, 802.1w, 802.1s IEEE 802.1ab LLDP IEEE 802.1Q VLAN Tagging IEEE 802.3az Energy-Efficient Ethernet
Electromagnetic Emission and Immunity	FCC Class B EN 55032 Class B EN 55035 EN 61000-3-2 EN 61000-3-3
Safety Approvals	UL/EN/IEC 62368-1 UL 2043, Plenum Rating

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Feature	Description
VLAN	802.1Q VLAN switch with 8K MACs and 4K VLANs Push/pop up to two VLAN tags
Port-Isolation and Private-VLAN	Isolate ports without VLAN configuration.
MAC Address Table	8k
Jumbo Frame	9.6k
Spanning Tree	STP/RSTP/MSTP
IGMP Snooping	IPv4, IPv6, IGMP Snooping v1-v3, including IGMP Querier
Link Aggregation	IEEE® 802.3ad LACP or Static
Access Control List	Limit which network protocol and IP can manage the unit
SNMP	SNMP MIBs used to monitoring and semi management
Management Web	HTTP/HTTPS, CLI, Telnet, SSHv2, SNMPv1,v2C, and V3
Port Mirroring	Mirror Rx, Tx and both
Software Upgrade	Easy upgrade over HTTP (also TFTP) with dual image support and no PoE power loss during software update

Digital Ceiling
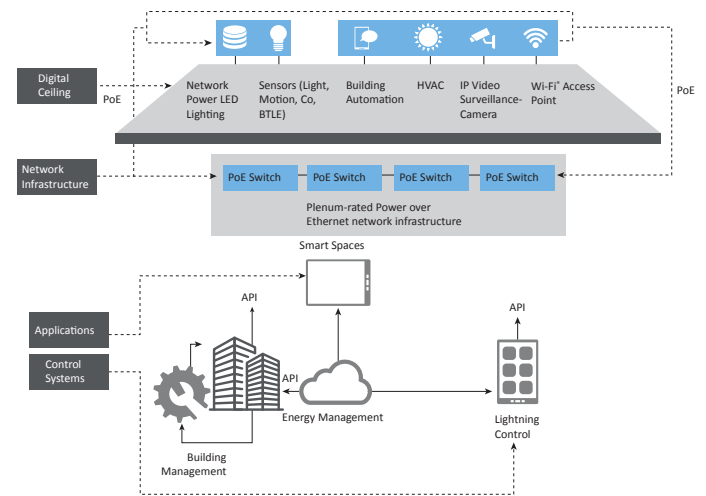
Technical Support

For technical support, please visit the Microchip Technical Support Portal at www.microchip.com/support.

Ordering Information

Part Numbers	Product Name	Description
PDS-408G/AC PDS-408G/AC-US: US Plug PDS-408G/AC-EU: EU Plug PDS-408G/AC-UK: UK Plug PDS-408G/AC-AU: AU Plug	PDS-408G/AC	8+3 ports PoE Switch, AC input

Contact Microchip for other options

About Microchip mPoE

Microchip multi-Power over Ethernet (mPoE) is a technology that powers any wired network device seamlessly and efficiently, making it the ideal solution for Ethernet-based applications. Leveraging a uniquely designed algorithm, this technology solves interoperability issues between different PoE standards and legacy solutions to provide an international network power standard. As a pioneer in PoE technology, we offer a comprehensive end-to-end portfolio of PoE solutions comprised of PoE ICs and PoE systems (midspans/injectors and switches).