

Cloud Managed Series
16-Port LumiPoE Gigabit Switch
SML-20GPA



Overview

- Layer 2 Network Management PoE Ethernet Switch
- Sixteen (16) Gigabit PoE Ports and Four (4) Uplink Ports (Two (2) SFP Ports, Two (2) RJ-45 Ports)
- Total PoE Budget 375 W
- Supports IEEE802.3af, IEEE802.3at, and IEEE802.3bt Standards
- Web-Based and Cloud-Based Management Interface
- Extendable PoE Signal Up to 820 ft (250 m) at 10 Mbps
- Switching Capacity: 40 Gbps

Certifications

- NDAA Compliant
- FCC

Key Features

Intelligent PoE

This switch lets users control power consumption and monitor power consumption changes in real time. This feature prioritizes the most important ports while preventing malfunction during power consumption rate changes.

PoE Watchdog

This switch includes PoE watchdog capabilities to ensure the switch is running properly at all times. The switch is able to monitor the status of connected PoE devices and reboots the device when problem occurs.

Up to 90 W Output per Blue Port

This switch allows blue port support for IEEE802.3af, IEEE802.3at, IEEE802.3bt and IEEE802.3bt standards. It has a maximum output power consumption of 90 W per port, making the switch suitable for devices with high powerconsumption rates.

Specifications

Hardware

PoE Ports	16 x 10/100/1000 Mbps PoE/PoE+/PoE++
Uplink Ports	2 x 100/1000 Mbps SFP 2 x 10/100/1000 Mbps RJ-45
PoE Standards	IEEE802.3af, IEEE802.3at(PoE+), IEEE802.3bt(PoE++)
Network Standards	IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3ab, IEEE802.3z
PoE Ports Power	Ports 1 to 2: ≤ 90 W (PoE++) Ports 3 to 16: ≤ 30 W (PoE+)
Total Power Budget	240 W
PoE Pin Assignment	1, 2, 4, 5, (V+), 3, 6, 7, 8 (V-)

Performance

Switching Capacity	40 Gbps
Packet Forwarding Rate	29.8 Mpps
Packet Buffer Size	8,000
MAC Table Size	4.1 Mbit
MTBF	86.94 Years

Features

Layer	2
Port Configuration	Port Rate Configuration, Flow Control, and Port Enabling
PoE Watchdog	PoE ports automatically detect and restart unresponsive cameras.
Long Distance Transmission	Up to 820 ft (250 m) at 10 Mbps on PoE Ports
VLAN	Port-Based
VLAN Number	32
IEEE 802.3x Flow Control	Supported
Storm Control	Unknown Unicast, Multicast, and Broadcast
Port Mirroring	Supported
Port Isolation	Supported
LLDP	Supported
DHCP Function	Client

Electrical

Power Supply	100-240 VDC, 47-63 Hz, Max. 7 A Internal Power Supply
Power Consumption	Idle: 8.3 W Total: 265 W
Surge Protection	Power Port: 4 kV/2 kV Telecom Port: 8 kV

General

Operating Temperature	-10 °C to +55 °C (+14 °F to +131 °F)
Operating Humidity	5% to 95% (RH), Non-Condensing
Storage Temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Storage Humidity	5% to 95% (RH), Non-Condensing
Product Dimensions (L x W x H)	440 mm x 220 mm x 44 mm (17.32 in. x 8.66 in. x 1.73 in.)
Net Weight	2.37 kg (5.21 lb)
Gross Weight	3.02 kg (6.64 lb)
Construction Material	Metal
Certifications	FCC Part 15 Subpart B

Transmission Performance

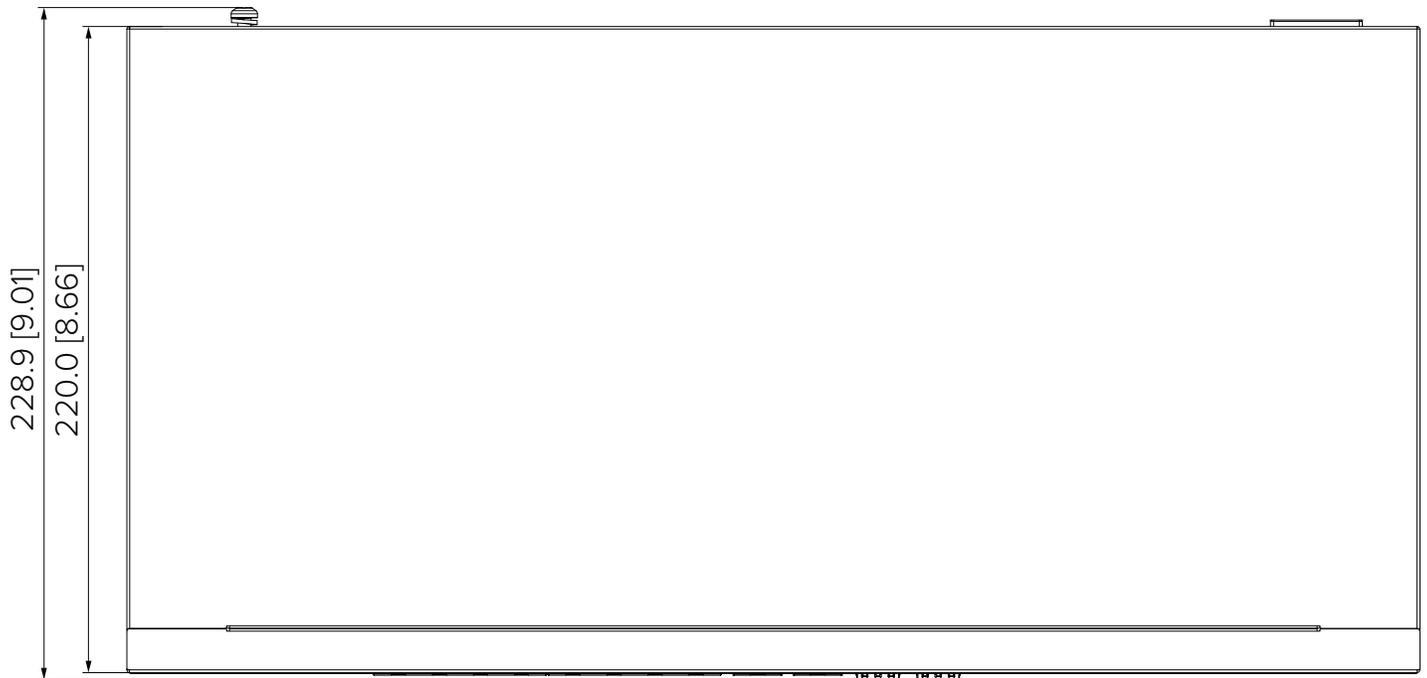
Switch power supply voltage 53V.
CAT5E/CAT6. Max. DC resistance < 10Ω/328ft

PoE++ (90W)		
Cable (ft)	Load Capacity (W)	Bandwidth (Mbps)
328	71.3	1000
492	62	10
656	51	10
820	40	10

PoE+ (30W)		
Cable (ft)	Load Capacity (W)	Bandwidth (Mbps)
328	25.5	1000
492	25.5	10
656	25.5	10
820	25.5	10

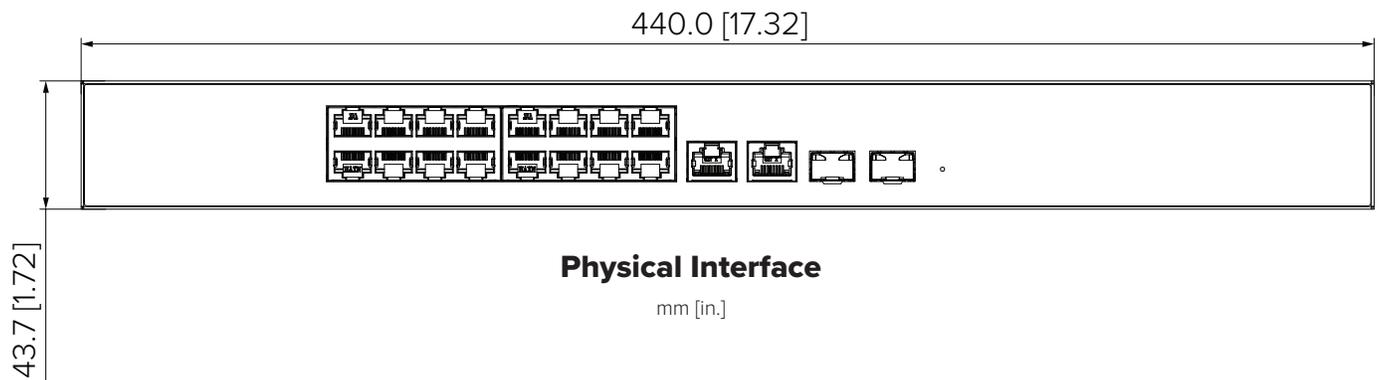
Note: Data from this table was collected by Luminy Systems Corporation test lab and is for reference only. The actual transmission distance may vary due to power consumption of connected devices or the cable type and status.

Drawings



Dimensional Drawing

mm [in.]



Physical Interface

mm [in.]

Ordering Information

The Luminys Cloud Managed Switches series is designed to offer intelligent PoE management, cloud-based control, and scalability. These switches are available in various configurations and options to accommodate any installation.

SKU	Product	PoE Ports	Fiber Ports	PoE Output	Total PoE Budget	Switching Capacity	Mounting Capabilities
SML-6GPA	4-Port Cloud Managed Switch	4	None	PoE+	60 W	12 Gbps	Desktop
SML-10GPA	8-Port Cloud Managed Switch	8	None	PoE++	110 W	20 Gbps	Desktop
SML-20GPA	16-Port Cloud Managed Switch	16	2 x SFP	PoE++	240 W	40 Gbps	Desktop or Rack-Mounted
SML-28GPA	24-Port Cloud Managed Switch	20	2 x SFP	PoE++	375 W	56 Gbps	Desktop or Rack-Mounted

LumiCloud Add-Ons

SKU	Add-On	Description
LCL-SW100	LumiCloud Switch 100 Channel	<p>A one-year license for cloud-based management of up to 100 channels. Offers high-performance data exchange and monitoring across large-scale surveillance networks.</p> <p><i>Note: LumiCloud VsaaS platform is expected to available in the near future.</i></p>