

## **DS-3E1518P-EI/M** **16 Port Gigabit Smart PoE Switch**



Smart managed switches are developed by Hikvision, featuring easy management and maintenance. You can easily deploy, monitor, and expand your video security system anytime and anywhere with our software platforms. You can view the network topology, monitor the health of the network, and receive device alarms in real time, which greatly reduces the cost of network operation and maintenance.

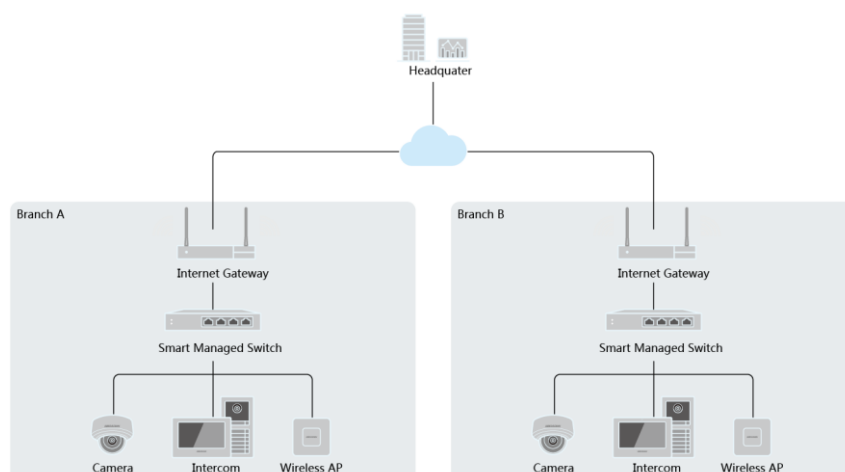
- 16 × Gigabit PoE port, 1 × Gigabit RJ45 port, 1 × Gigabit fiber optical port
- Total PoE power budget 130 W
- Support IEEE 802.1Q VLAN tagging
- Support energy saving mode with user-configurable plans
- Support IEEE 802.3az Energy Efficient Ethernet (EEE) standard, saving power during periods of low data activity
- Support STP/RSTP loop prevention
- Support cable detection to locate failure
- Support DHCP snooping
- 6 kV surge protection

## ▪ Specification

General	
Shell	Metal material
Net Weight	2.7 kg (5.9 lb)
Gross Weight	2.9 kg (6.4 lb)
Dimensions (W × H × D)	440.0 mm × 44.0 mm × 220.8 mm (17.32" × 1.73" × 8.69")
Operating Temperature	0 °C to 45 °C (0 °F to 113 °F)
Storage Temperature	-40 °C to 85 °C (-40 °F to 185 °F)
Operating Humidity	5% to 95% (no condensation)
Relative Humidity	5% to 95% (no condensation)
Power Supply	100~240 V AC, 50/60 Hz, Max. 2.5 A
Installation Mode	Rack (equipped with mounting ears)
Max. Power Consumption	150 W
Power Consumption in Idle	20 W
Surge Protection	6 kV
Network Parameters	
Ports	16 × Gigabit PoE port, 1 × Gigabit RJ45 port, 1 × Gigabit fiber optical port
MAC Address Table	8 K
Switching Capacity	56 Gbps
Packet Forwarding Rate	41.66 Mpps
Internal Cache	4.1 Mbits
PoE Power Supply	
PoE Standard	IEEE 802.3af, IEEE 802.3at
PoE Power Pin	8-pin power: 1/2(-), 3/6(+), 4/5(+), 7/8(-)
PoE Port	PoE: Ports 1 to 16
Max. Port Power	30 W
PoE Power Budget	130 W
Software Function	
Long Range	Ports 1 to 16: up to 300 m. Long range performance may vary depend on camera model or cable condition.
Port Isolation	Ports 1 to 18: port isolation mode to improve network security Ports in an isolation group cannot communicate with each other, but they can communicate with ports outside the isolation group.
PoE Watchdog	Ports 1 to 16: auto detect and restart the cameras that do not respond.
Link Aggregation	Link aggregation is used to aggregate multiple physical ports to form a logical port for load balancing, bandwidth expansion, and port protection. Support static link aggregation. Support 8 aggregation groups.
QoS	QoS is used to allocate bandwidth to different services so as to provide end-to-end service quality assurance. Support port-based priority configuration. Support SP and WRR priority scheduling modes.
Loop Prevention	Loop prevention is used to prevent the switching network from forming loops, which will seriously affect network communication. Disabled by default. Support 802.1D STP. Support 802.1w RSTP.

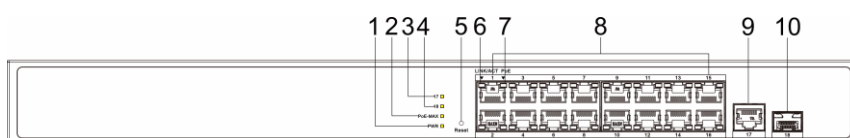
VLAN	<p>VLAN is used for network scale planning and network health improvement.</p> <p>Support 802.1Q.</p> <p>Configurable VLAN ID from 1-4094.</p> <p>Support Trunk, Access port mode.</p> <p>Support Max. 32 VLAN.</p>
HPP	<p>Support one-click activation and remote management via Hik-Partner Pro. Functions supported:</p> <ol style="list-style-type: none"> <li>1. Display the port rate.</li> <li>2. Display the port bandwidth utilization rate.</li> <li>3. Display the PoE power usage.</li> <li>4. Display topology information.</li> <li>5. Display the alarm status.</li> <li>6. Restart ports and devices.</li> <li>7. Enable port long-range mode.</li> <li>8. Remotely upgrade the device.</li> </ol>
System Maintenance	<p>Support device management via web.</p> <p>Support DHCP Client. Enabled by default for dynamic assignment of management IP addresses.</p> <p>Support Super IP, which is a configurable IP address (default: 10.180.190.200) for direct access.</p> <p>Support management via Hik-Central Pro.</p> <p>Support remote management via Hik-Partner Pro.</p> <p>Support cable detection. Abnormal open circuits and short circuits as well as network cable length can be detected.</p> <p>Support 802.1ab LLDP for peer device discovery.</p> <p>Support port mirroring for fault locating.</p>
DHCP Snooping	<p>DHCP Snooping can prevent unauthorized connections to DHCP servers from disrupting the network and affecting normal network communication, and only allow DHCP packets from trusted ports to pass through. Disabled by default.</p>
<b>Approval</b>	
EMC	<p>CE-EMC (EN 55032: 2015+A11: 2020, EN IEC 61000-3-2: 2019, EN 61000-3-3: 2013+A1: 2019, EN 50130-4: 2011+A1: 2014, EN 55035: 2017+A11: 2020)</p>
Safety	<p>CB (AMD1:2009, AMD2:2013, IEC 62368-1: 2014 (Second Edition), CE-LVD (EN 62368-1: 2014+A11: 2017)</p>
Chemistry	<p>CE-RoHS (2011/65/EU);</p> <p>WEEE (2012/19/EU);</p> <p>Reach (Regulation (EC) No.1907/2006)</p>

## ▪ Typical Application



## ▪ Physical Interface

Front Panel



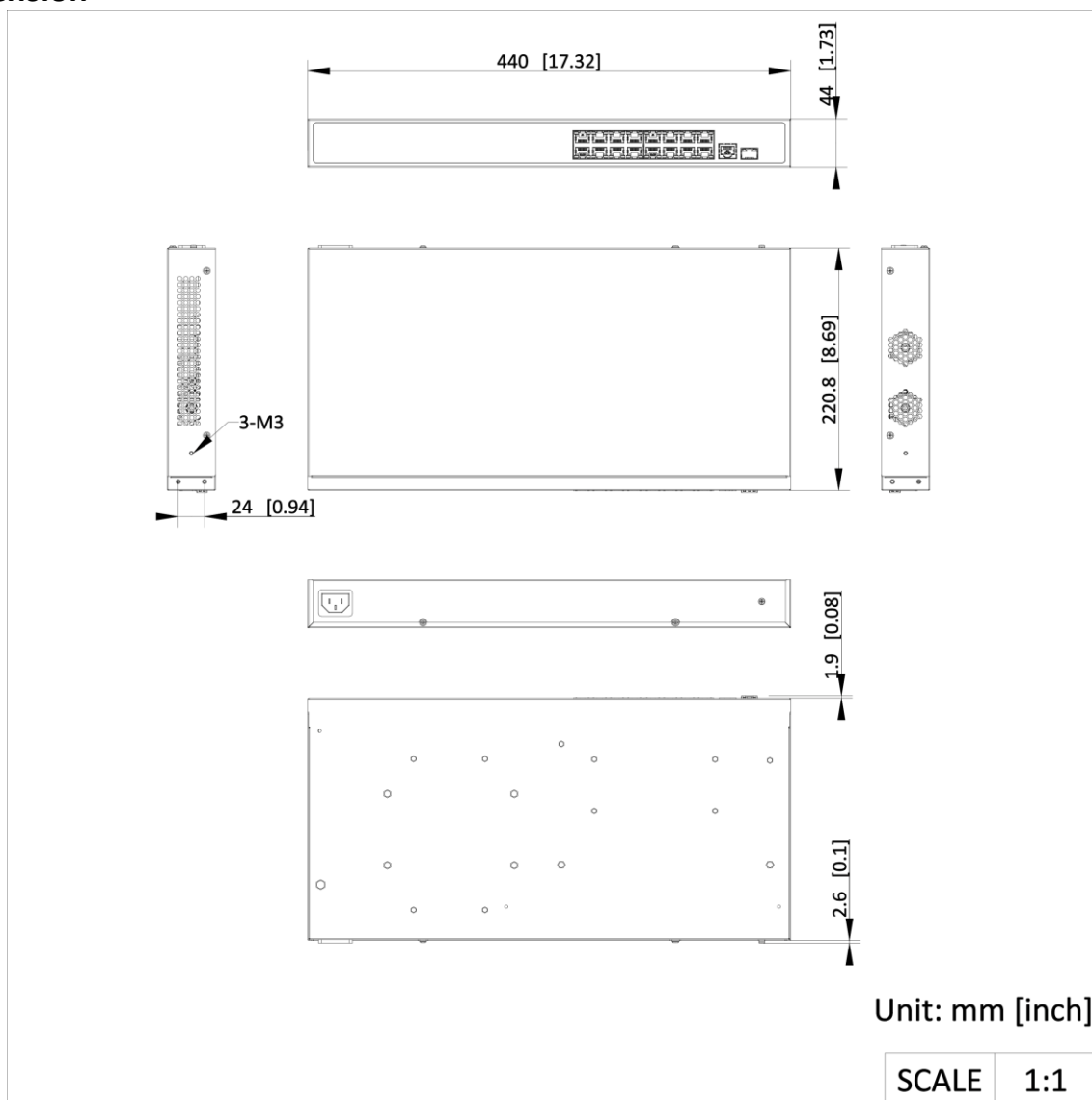
Rear Panel



No.	Indicator/Port	Description
1	PWR Indicator	<ul style="list-style-type: none"> <li>● Solid on: The switch is powered on normally.</li> <li>● Unlit: No power supply is connected or power supply is abnormal.</li> </ul>
2	PoE-MAX Indicator	<ul style="list-style-type: none"> <li>● Solid on: The output power of the switch is about to reach or has reached the upper limit. The power supply may be abnormal if more devices are connected.</li> <li>● Unlit: The switch supplies power to a powered device (PD) normally and its output power does not reach the upper limit. Note: The PoE-MAX indicator will be unlit in 5 seconds after the output power of the switch returns to normal.</li> </ul>
3	Gigabit RJ45 Port Indicator	<ul style="list-style-type: none"> <li>● Solid on: The port is connected.</li> <li>● Flashing: The port is transmitting data.</li> <li>● Unlit: The port is disconnected or connection is abnormal.</li> </ul>
4	Gigabit SFP Fiber Optical Port Indicator	<ul style="list-style-type: none"> <li>● Solid on: The gigabit SFP fiber optical port is connected.</li> <li>● Flashing: The gigabit SFP fiber optical port is transmitting data.</li> <li>● Unlit: The gigabit SFP fiber optical port is disconnected or connection is abnormal.</li> </ul>
5	Reset Button	Press and hold the reset button for more than 5 seconds to restore all the configurations of the switch to default settings.
6	LINK/ACT Indicator	<ul style="list-style-type: none"> <li>● Solid on: The port is connected.</li> <li>● Flashing: The port is transmitting data.</li> <li>● Unlit: The port is disconnected or connection is abnormal.</li> </ul>
7	PoE Indicator	<ul style="list-style-type: none"> <li>● Solid on: The switch supplies power to a PD normally.</li> <li>● Unlit: The switch is disconnected from a PD or power supply is abnormal.</li> </ul>
8	Gigabit PoE RJ45 Port	Used for connection to a PD via a network cable.
9	Gigabit RJ45 Port	Used for connection to another device via a network cable.

10	Gigabit SFP Fiber Optical Port	Used for connection to another device via an optical fiber when plugged into with an optical module.
11	Grounding Terminal	Used for connecting to the grounding cable to protect the switch from lightning.
12	Power Supply	Use the attached power cord to connect the switch to a socket.

## ▪ Dimension



# See Far, Go Further



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