DS-3E1520P-EI
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.

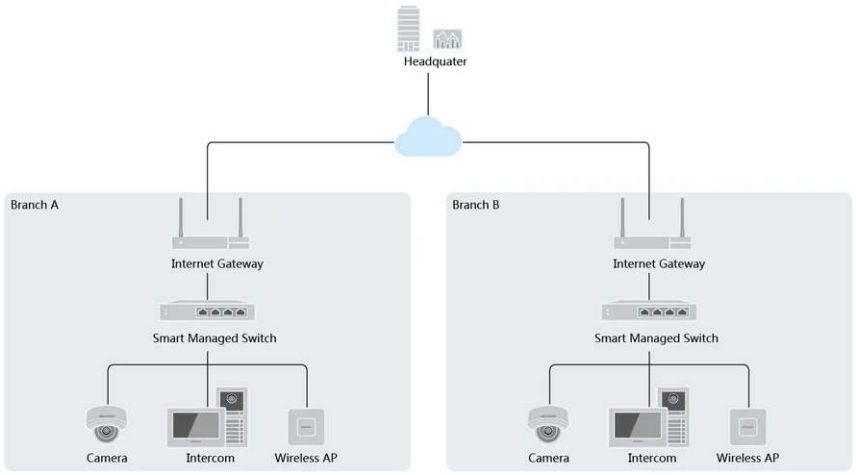
- 16 x gigabit PoE RJ45 port, 2 × gigabit RJ45 port, 2 x gigabit fiber optical port
- Total PoE power budget 230 W
- Unified cloud management for security systems
- Network topology at your fingertips
- Remote troubleshooting
- Visualized topology management
- Up to 300 m long-range PoE transmission
- 6 kV surge protection

▪ Specification

General	
Shell	Metal material
Net Weight	3.2 kg (7.0 lb)
Gross Weight	2.5 kg (5.5 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 (32 °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. 4 A
Max. Power Consumption	250 W
Power Consumption in Idle	20 W
Surge Protection	6 kV
Installation Mode	Desk-Mounted,Rack (equipped with mounting ears)
Network Parameters	
Ports	16 × Gigabit PoE port,2 × Gigabit RJ45 port,2 × Gigabit fiber optical port
MAC Address Table	16 K
Switching Capacity	68 Gbps
Packet Forwarding Rate	50.59 Mpps
Internal Cache	8.4 Mbits
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 20: 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 group(s).
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. Support DSCP-based QoS policy.
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	VLAN is used for network scale planning and network health improvement. Support 802.1Q. Configurable VLAN ID from 1-4094. Support Trunk, Access port mode. Support Max. 1024 VLAN.

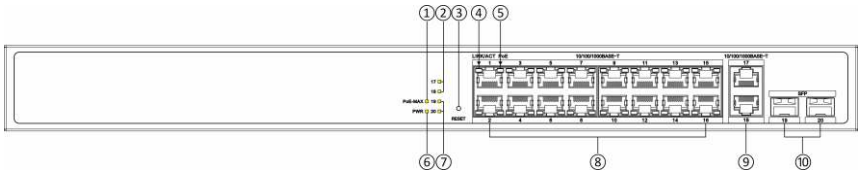
HPP	Support one-click activation and remote management via Hik-Partner Pro. Functions supported: 1. Display the port rate. 2. Display the port bandwidth utilization rate. 3. Display the PoE power usage. 4. Display topology information. 5. Display the alarm status. 6. Restart ports and devices. 7. Enable port long-rage mode. 8. Remotely upgrade the device.
System Maintenance	Support device management via web. Support DHCP Client. Enabled by default for dynamic assignment of management IP addresses. Support Super IP, which is a fixed IP address (10.180.190.200) for direct access. Support management via Hik-Central Pro. Support remote management via Hik-Partner Pro. Support cable detection. Abnormal open circuits and short circuits as well as network cable length can be detected. Support 802.1ab LLDP for peer device discovery. Support port mirroring for fault locating.
DHCP Snooping	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.
DDM (Digital Diagnostic Monitoring)	Support real-time monitoring of key parameters in optical modules, such as operating temperature, operating voltage, operating current, and Rx and Tx optical power.
PoE Power Supply	
PoE Standard	IEEE 802.3af,IEEE 802.3at
PoE Power Pin	End-span: 1/2(-), 3/6(+)
PoE Port	PoE: Ports 1 to 16
Max. Port Power	30 W
PoE Power Budget	230 W
Approval	
EMC	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)
Safety	UL (UL 60950-1); CB (IEC 60950-1:2005, AMD1:2009, AMD2:2013, IEC 62368-1: 2014 (Second Edition); CE-LVD (EN 60950-1: 2006 + A11: 2009 +A1: 2010+A12: 2011+A2: 2013, EN 62368-1: 2014+A11: 2017)
Chemistry	CE-RoHS (2011/65/EU),WEEE (2012/19/EU),Reach (Regulation (EC) No.1907/2006)

▪ Typical Application



▪ Physical Interface

Front Panel



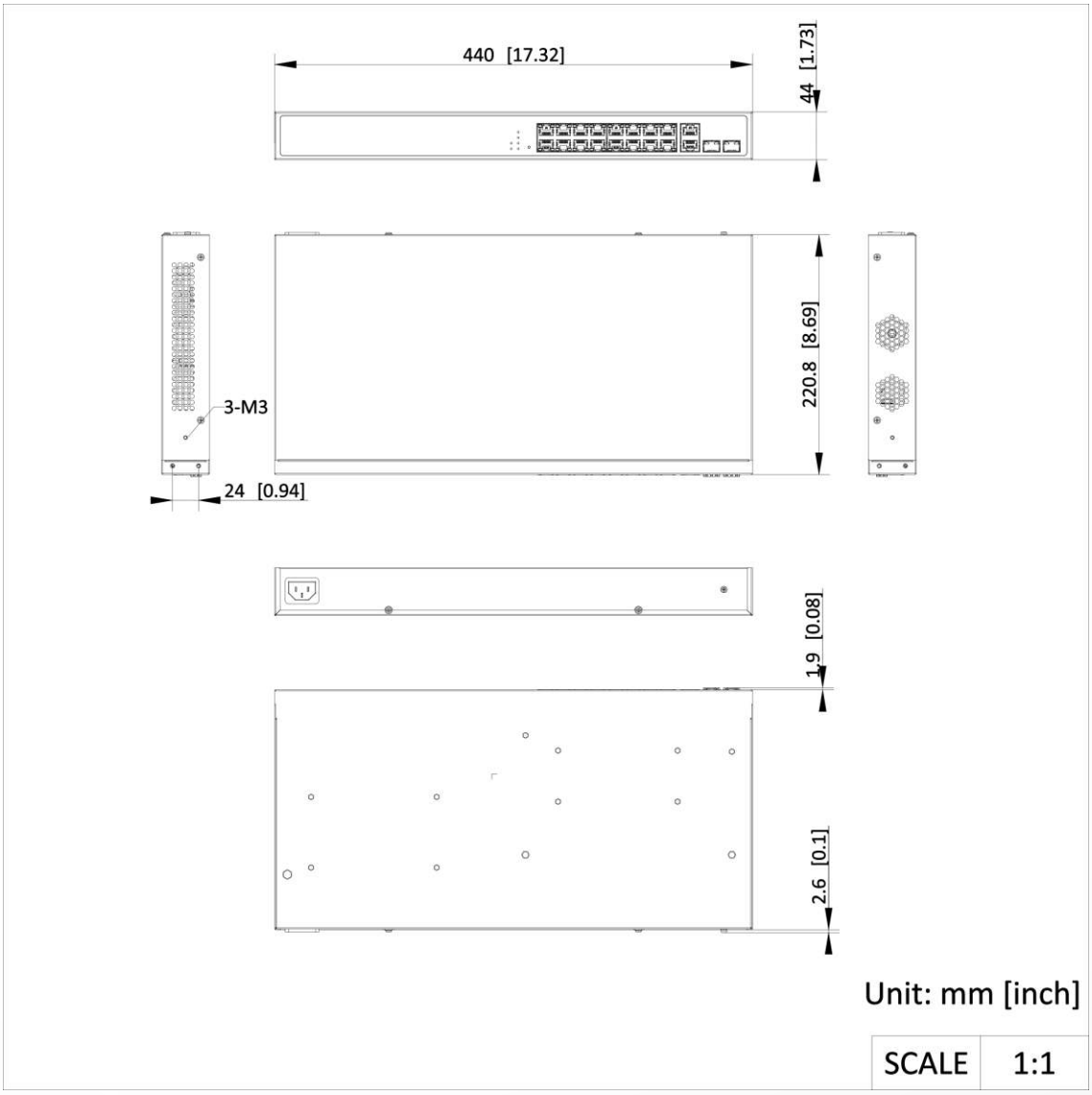
Rear Panel



No.	Indicator/Port	Description
①	PoE-MAX Indicator	● 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. ● 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.
②	Gigabit RJ45 Port Indicator (Ports 17&18)	● Solid on: The port is connected. ● Flashing: The port is transmitting data. ● Unlit: The port is disconnected or connection is abnormal.
③	Reset Button	Press and hold the reset button for more than five seconds to restore all the configurations of the switch to default settings.
④	LINK/ACT Indicator	● Solid on: The port is connected. ● Flashing: The port is transmitting data. ● Unlit: The port is disconnected or connection is abnormal.
⑤	PoE Indicator	● Solid on: The switch provides power supply to a PD normally. ● Unlit: The switch is disconnected to a PD, or provides power supply to a PD abnormally.
⑥	PWR Indicator	● Solid on: The switch is powered on normally. ● Unlit: No power supply connected or power supply is abnormal.

⑦	Gigabit SFP Fiber Optical Port Indicator (Ports 19&20)	● Solid on: The gigabit SFP fiber optical port is connected. ● Flashing: The gigabit SFP fiber optical port is transmitting data. ● Unlit: The gigabit SFP fiber optical port is disconnected or connection is abnormal.
⑧	Gigabit PoE RJ45 Port (Ports 1 to 16)	Used for connection to a PD via a network cable.
⑨	Gigabit RJ45 Port (Ports 17&18)	Used for connection to another device via a network cable.
⑩	Gigabit SFP Fiber Optical Port (Ports 19&20)	Used for connection to another device via an optical fiber when plugged into with an optical module.
⑪	Grounding Terminal	Used for connection to a grounding cable to protect the switch from lightning.
⑫	Power Supply	Use the attached AC power cord to connect the switch to a socket.

▪Dimension



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