

# DS-3D2000

## POE Multiservice Gigabit Ethernet Switch Series



DS-3D2208P



DS-3D2216P



DS-3D2228P

### Key features

#### Excellent performance

- 16Gbps backplane bandwidth, hardware forwarding and wire-speed L2 packet forwarding rate
- Gigabit optical-fiber transmission with up to 80Km distance and directly connecting the MAN backbone network

#### High security and reliability

- Providing multiple user authentication modes including 802.1x authentication
- Powerful ACL and hardware supporting L2 to L7 data filtration
- Port-MAC-IP bind
- Special ARP invasion detection to effectively stop ARP cheat
- Hardware IPv6 ACL

#### Flexible and varied management

- Automatically identifying the straight-through cable and the intercrossed cable
- Cluster technology; supports device stacking
- Supports multiple management modes such as Console port, Telnet, Web and SNMP
- Multiple general network management protocols like Broad Director, HP Open View and Cisco Works 2000

#### Powerful flow and broadcast management

- Automatically detects and controls broadcast storms, monitoring IGMP packets and effectively prevents broadcast packet flooding
- Supports flow control in full-duplex mode or half-duplex mode
- Ethernet rate limitation with a 64k minimum step
- IP multicast and QoS
- Flexible QinQ

#### Multiple protocols

- Full 802.3af power supply on all their ports.
- Ethernet rate limitation with a 64k minimum step
- PoE configuration and prioritization
- Delete last bullet

### Introduction

DS-3D2000 POE switch series is a new generation of L2.5 POE switches with high performance, multiservice, high reliability and high security that are independently developed by Hangzhou Hikvision Digital Technology Co., Ltd. They support all kinds of connections varying from 10/100M to 1000M, so the network can be configured flexibly according to actual needs. DS-3D2000 switches can access all Ethernet or fast-Ethernet devices, so they can be very compatible with the existing devices. DS-3D2000 POE switches support 802.3af and 802.3at power supply modes, so they can be applied on all kinds of POE application spots. The characteristic of DS-3D2000 POE switches is that they can also support 4 GE POE TX ports even after supporting 20 100M POE TX ports, and that is the reason why they can be flexibly used to build networks. The uplink GE SFP ports of DS-3D2000 POE switches support the auto-adaptation of GE or 100M modules, so that they can be flexibly used in a 100M uplink networking environment.

	DS-3D2208P	DS-3D2216P	DS-3D2228P
Ports	8 10/100M TX 2 10/100/1000M TX 2 gigabit TX/SFP combo ports 1 console ports	16 10/100M TX 2 10/100/1000M TX 2 gigabit TX/SFP combo ports 1 console ports	24 10/100M TX 4 10/100/1000M TX 4 gigabit TX/SFP combo ports 1 console ports
Flash	8MB		
Memory	64MB		
Forwarding	4.2Mpps	5.4Mpps	9.6Mpps
Backplane	5.6Gbps	7.2Gbps	12.8Gbps
Switching	Store forwarding		
MAC table	8K		
Size	340x250x44mm (13.4"x9.8"x1.7")	442x315x44mm (17.4"x12.4"x1.7")	442x315x44mm (17.4"x12.4"x1.7")
Power Source	110-240VAC (auto-adaptable), 47-63Hz, 1A/230V; POE/POE+ power supply		
Power consumption	DS-3D2208P: Up to 170W (including POE power supply) and supporting 802.3af power supply on 8 ports or 802.3at power supply on 5 ports; DS-3D2216P: Up to 400W (including POE power supply) and supporting 802.3af power supply on 16 ports or 802.3at power supply on 12 ports; DS-3D2228P: Up to 400W (including POE power supply) and supporting 802.3af power supply on 24 ports or 802.3at power supply on 12 ports;		
Indicator	Power indicator, system indicator, connection/data forwarding indicator, 10/100M indicator		
Environment	Working temperature: 0-50 C ; Storage temperature: -40-70 C ; Humidity: 0-90% no condensation		
STP	IEEE 802.1D STP; IEEE 802.1w RSTP; IEEE 802.1S MSTP		
VLAN	Port-based VLAN; 802.1Q VLAN; QinQ, flexible QinQ; Private Vlan; GVRP		
Flow control	Backpressure is adopted for half-duplex, while IEEE802.3x is adopted for full-duplex. CAR, a 64K step limitation is conducted to the 100M port, and a 8M step limitation is conducted to the gigabit port.		
Storm control	The broadcast storm is constrained. When the threshold value for controlling the broadcast storm is reached, the broadcast packets are stopped from being forwarded.		
Multicast	IGMP Snooping v1/v2/v3		
Aggregation	Each port binding group contains up to 8 ports, and 6 port binding groups are supported meanwhile. Dynamic LACP or static aggregation is supported.		
Mirroring	Flow-based or port-based mirroring		
Stacking	Adopting the cluster technology; managing uniquely through a unique IP address; saving address resources		
Security features	IEEE 802.1x port authentication Port security IP ACL, MAC ACL and VLAN ACL DHCP snooping DAI and static/dynamic ARP prevention RADIUS Hierarchical user management and password		
QoS	Head Of Line (HOL); 4 queues and 8 priority values of 802.1p; WRED, WFQ, SP and FIFO Best-effort service; Differentiated service; Strict priority; Weighted round robin; First come first served TOS re-labeling; RTS		
Management	SNMP v1/v2; RMON (groups 1, 2, 3, 9); Telnet; CLI page; WEB page; SNTTP; SSH; LLDAP		