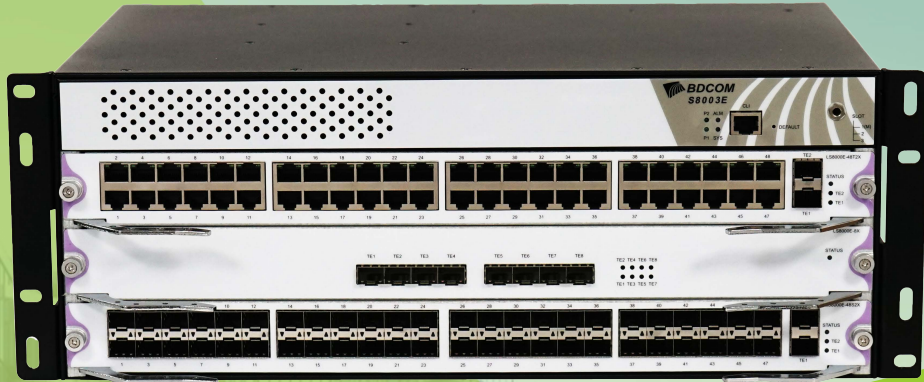


S8003E

Clustered Core Chassis Switch



Enterprise-grade
Core Switches



Advanced Hardware
Architecture and
Industry-leading Port
Density



99.999%Carrier-level
Reliability



Varied Service
Characteristics
Versatile IPv6 Solution
Complete Security
Mechanism

management module. It also offers modular design, high-density port expansion service, and rich port combinations of six line cards.

Product Overview

BDCOM S8003E Chassis Switch is a clustered multicore switch designed for the next-generation converged networks by BDCOM. S8003E series switch matches the application requirements of SMB scenarios, and can be deployed in medium and large video surveillance networks, smart device networks, campus networks and other scenarios according to business needs.

Product Characteristics

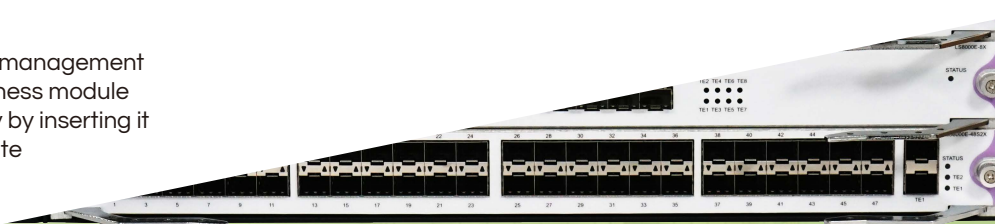
Advanced Hardware Architecture Design & Rich Port Combination

BDCOM S8003E core switch integrates the management module with the business module. Any business module can serve as a management module simply by inserting it into slot 1, eliminating the need for a separate

Rich Service Features

S8003E series caters to the application requirements of SMB scenarios, and can be deployed in medium and large video surveillance networks, smart device networks, campus networks and other scenarios according to business needs.

Perfect two-layer and three-layer multicast routing protocol of S8003E Series can meet various types of network interconnection requirements, and can set up super-large campus networks, enterprise networks and industrial private networks, which meet the requirements of high-density, multi-terminal HD video surveillance and HD video conferencing;



Product Characteristics

Comprehensive Security Mechanisms

All ports have lightning protection capabilities up to 6KV, reducing the port damage caused by surges.

Device-level Security Protection: S8003E Series adopts advanced hardware architecture design, realizing hierarchical scheduling and protection of messages, supports for defending against attacks on devices such as DoS, TCP SYN Flood, UDP Flood, broadcast storms, high traffic, etc., supports 6KV lightning protection, and supports command line hierarchical protection based on user levels.

Comprehensive Security Certification: S8003E Series complies with IEEE 802.1x, Radius, BDTacacs+.

Enhanced Service Security Mechanism: S8003E Series supports the plain text or MD5 authentications of relevant routing protocol; supports uRPF reverse route lookup technology, which can effectively control illegal business; supports DPI (Deep Packet Inspection) and DPF (Deep Packet Filtration), thus effectively isolating illegal data packets and improving the security of the network system.

Innovative Green Environmental Design

S8003E Series inherits BDCOM's advanced "GreenTouch" concept, maximizing energy conservation and environmental protection.

Smart Power Management System: S8003E Series adopts advanced power system architecture design, achieving efficient power conversion, private power monitoring, soft start, and sequential power-up functions, real-time monitoring of the overall operation status, intelligent adjustment and deep energy-saving.

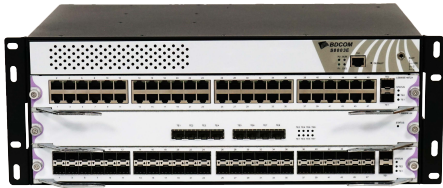
Smart Fan Management System: S8003E Series is designed with the intelligent fan design, supporting automatic speed adjustment and independent zone control, effectively reducing noise, and prolong the service life of the fan.

S8003E Series supports Efficient Ethernet and complies with International standard IEEE 802.3az, effectively reducing energy consumption.

Model lists

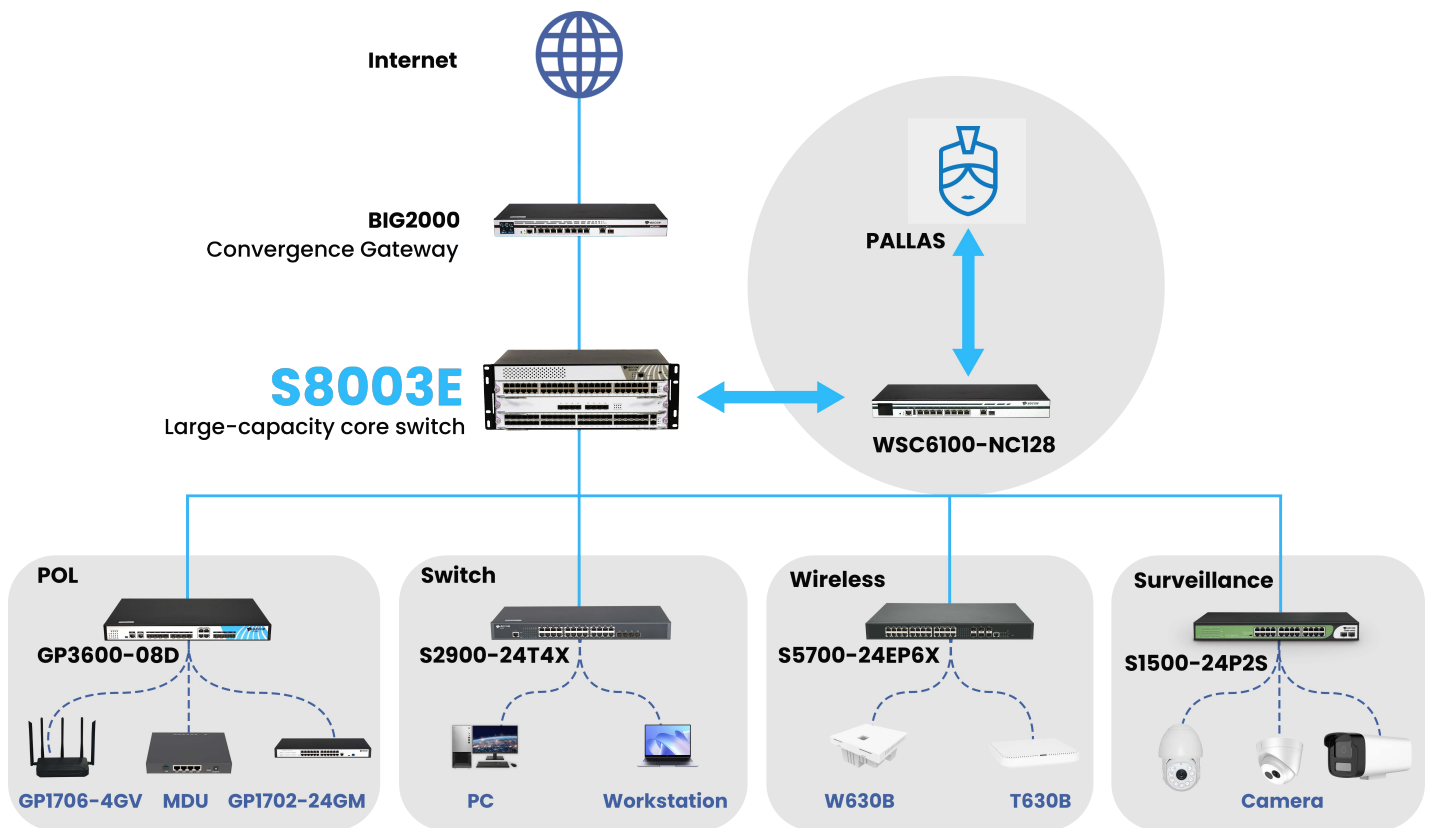
S8003E

Carrier-level Core Switch



- 4U chassis
- 1 MCU/business slot
- 2 business slots
- 1 hot-swap fan tray
- 2 hot-swap power slots

Application Diagram



Product Specifications

Items	S8003E
Interface	
Switching capacity	15.36Tbps
Forwarding rate	2880Mpps
Slots	1 MCU/business hybrid slot, 2 business slots
Dimensions (WxDxH)	436x280x166mm 4U
Power supply slot	2
Weight (empty chassis)	10kg
Power supply	AC: 100V-240V, 50Hz±10% DC: 48V

Features

MAC Switching Capacity

- Static configuration and dynamically learning of MAC address
- MAC browsing and removal
- Configuring of MAC aging time
- Limited number of learnable MAC addresses
- MAC filtering
- Black-hole MAC entry

VLAN

- 4K VLAN
- GVRP
- 1:1 and N:1 VLAN Mapping
- Basic QinQ and Flexible QinQ
- Private VLAN

Reliability

- Power supply 1+1 backup
- Static/LACP LAG, M-LAG
- EAPS
- VRRP
- ISSU

STP

- 802.1D (STP), 802.1W (RSTP), 802.1S (MSTP)
- BPDU protection, root protection and loop protection

Energy saving

- IEEE 802.3az EEE (Energy Efficient Ethernet)

Multicast

- IGMP v1/v2/v3
- IGMP Snooping
- IGMP Fast Leave
- Multicast group policy and multicast number limit
- MVR
- PIM-SM/SSM

IPv4

- Static routing, RIP v1/v2, OSPF
- Policy-based routing(PBR)
- Load balance through equal-cost routing
- BFD for OSPF

IPv6

- ICMPv6, DHCPv6, ACLv6, IPv6 Telnet
- IPv6 Neighbor Discovery
- Path MTU Discovery
- MLD and MLD Snooping
- IPv6 static routing, RIPng, OSPFv3
- Manual tunnel, ISATAP tunnel and 6-to-4 tunnel

Management and maintenance

- Console, Telnet and SSH
- SNMP v1/v2/v3
- TFTP
- RMON
- Statistics analysis of sFLOW, Netflow

QoS

- Flow classification based on L2~4 protocols
- CAR
- 802.1P/DSCP priority re-labeling
- SP, WRR and SP+WRR
- Congestion avoidance mechanisms like Tail-Drop, WRED
- Flow monitoring and flow shaping
- Ingress and Egress ACL, support matching L2, L3, L4 and IP quintuple to copy, forward and discard
- Hash-based load balancing algorithm to ensure session integrity

Security features

- L2~4 ACL flow identification and filtration
- DDoS attack prevention, TCP's SYN Flood attack prevention
- Suppression of broadcast, multicast and unknown unicast packet
- Port isolation
- Port security, IP+MAC+port binding
- DHCP Snooping, DHCP Option 82
- IEEE 802.1x authentication
- Radius and BDTacacs+ authentication
- URPF
- Level-based command line protection

Environment

- Operating temperature/humidity: 0°C-40°C ; 10%-90% non-condensing
- Storage temperature/ humidity: -20° C-70°C ; 5%-95% non-condensing

Ordering Information

Item	Description
S8003E Chassis	
S8003E	Integrated Chassis of S8003E switch (1 fan tray, 2 power slots excluding power supply, 3 line card slots, any line card inserted into slot1 can act as the main control module)
S8000E Power Supplies	
S8000-PA350	Hot-swap AC power module 350W
S8000-PD350	Hot-swap DC power module 350W
Line Card of S8000E Series	
LS8000E-24S2X	24-port GE SFP + 2-port 10GE SFP+ Line Card
LS8000E-24T2X	24-port GE RJ45 + 2-port 10GE SFP+ Line Card
LS8000E-48S2X	48-port GE SFP + 2-port 10GE SFP+ Line Card
LS8000E-48T2X	48-port GE RJ45 + 2-port 10GE SFP+ Line Card
LS8000E-24T24S2X	24-port GE RJ45 + 24-port GE SFP + 2-port 10GE SFP+ Line Card
LS8000E-8X	8-port 10GE SFP+ Line Card
Optical Modules	
Gigabit Optical Modules	
GSFP-TX-B	Gigabit SFP to RJ45 module
GSFP-SX-D	Gigabit SFP multi-mode (500m, 680nm, LC, DDM)
GSFP-LX-10-D	Gigabit SFP single mode (10Km, 1310nm, LC, DDM)
GSFP-LX-20-D	Gigabit SFP single mode (20Km, 1310nm, LC, DDM)
GSFP-LX-40-D	Gigabit SFP single mode (40Km, 1310nm, LC, DDM)
GSFP-ZX-80-D	Gigabit SFP single mode (80Km, 1550nm, LC, DDM)
GSFP-ZX-120-D	Gigabit SFP single mode (120Km, 1550nm, LC, DDM)
GSFP-LX-SM1310-10-BIDI	Gigabit SFP single mode, single-core bidirectional (10Km, TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-10-BIDI	Gigabit SFP single mode, single-core bidirectional (10Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-20-BIDI	Gigabit SFP single mode, single-core bidirectional (20Km, TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-20-BIDI	Gigabit SFP single mode, single-core bidirectional (20Km, TX1550/RX1310, LC, DDM)

Ordering Information

Item	Description
GSFP-LX-SM1310-40-BIDI GSFP-LX-SM1550-40-BIDI	Gigabit SFP single mode, single-core bidirectional (40Km, TX1310/RX1550, LC, DDM) Gigabit SFP single mode, single-core bidirectional (40Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1490-80-BIDI GSFP-LX-SM1550-80-BIDI	Gigabit SFP single mode, single-core bidirectional (80Km, TX1490/RX1550, LC, DDM) Gigabit SFP single mode, single-core bidirectional (80Km, TX1550/RX1490, LC, DDM)
GSFP-LX-SM1490-120 GSFP-LX-SM1550-120	Gigabit SFP single mode, single-core bidirectional (120Km, TX1490/RX1550, LC, DDM) Gigabit SFP single mode, single-core bidirectional (120Km, TX1550/RX1490, LC, DDM)

10GE Optical Modules

SFP+SX	10GE SFP+ multi-mode (300m, 680nm, LC)
SFP+LX-10	10GE SFP+ single mode (10Km, 1310nm, LC, DDM)
SFP+LX-20	10GE SFP+ single mode (20Km, 1310nm, LC, DDM)
SFP+LX-40	10GE SFP+ single mode (40Km, 1550nm, LC, DDM)
SFP+LX-80	10GE SFP+ single mode (80Km, 1550nm, LC, DDM)
SFP+LX-SM-1270-10 SFP+LX-SM-1330-10	10GE SFP+ single mode, single-core bidirectional (10Km, TX1270/RX1330, LC, DDM) 10GE SFP+ single mode, single-core bidirectional (10Km, TX1330/RX1270, LC, DDM)
SFP+LX-SM-1270-20 SFP+LX-SM-1330-20	10GE SFP+ single mode, single-core bidirectional (20Km, TX1270/RX1330, LC, DDM) 10GE SFP+ single mode, single-core bidirectional (20Km, TX1330/RX1270, LC, DDM)
SFP+LX-SM-1270-40 SFP+LX-SM-1330-40	10GE SFP+ single mode, single-core bidirectional (40Km, TX1270/RX1330, LC, DDM) 10GE SFP+ single mode, single-core bidirectional (40Km, TX1330/RX1270, LC, DDM)

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