

S3700 SERIES



Supports Maximum 48
GE Ports and 8 10GE
SFP+ Uplink Ports



Advanced Hardware
Architecture and
Industry-leading Port
Density



Carrier-Level High
Reliability
Layer-3 Routing
Functions



Varied Service
Characteristics Versatile
Ipv6 Solution Complete
Security Mechanism

Product Overview

BDCOM S3700 Series is a new generation of aggregation 10GE switches introduced by Shanghai Baud Data Communication Co., LTD. It is targeted at the IP MAN (metropolitan area network), campus networks and enterprise networks. It is developed on the basis of high performance hardware and BDROS - a software platform with BDCOM own independent intellectual property rights. It supports multiple services like IPv6, MPLS, VPN and network security based on L2/L3/L4 wire-speed switching service. It also supports nonstop upgrade, continuous forwarding, graceful restarting and redundancy protection.

BDCOM S3700 Series has 6 models: S3740, S3740F, S3756, S3756F, S3756P and S3756M.

It supports maximum 48 gigabit ports and 8 10GE ports.

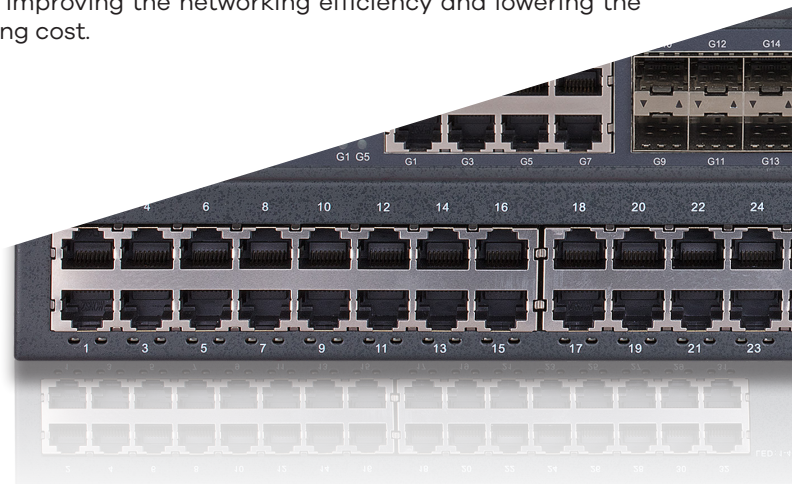
Carrier-Level Aggregation Layer-3 Ethernet Switch Innovative BVSS (BDCOM Virtual Switch System):

S3700 Series virtualize multiple physical devices into one. Its performance, reliability and management of the virtual system are superior to the physical ones;

Improved Performance: BVSS makes full use of each link in the physical devices, which avoids STP blocking the link and protects the original link to the maximum extent;

High Reliability: Based on the advanced distribution mechanism and efficient cross-physical link aggregation link function, the logic control plane, service control plane and service data plane are separated. Thus, S3700 Series supports continuous layer3 routing forwarding, avoiding service interruption as a result of a single point of failure;

Easy Management: BVSS realizes single IP management, greatly improving the networking efficiency and lowering the operating cost.



Product Characteristics

Carrier-level High Reliability

Based on HPS (Hitless Protection System), the key components of S3700 Series, such as the power module, support dual back-up, hot-swap, seamless switching in the downtime without manual intervention;

S3700 Series supports STP/RSTP/MSTP, VRRP protocol, Ethernet ring protection, dual master-slave uplink protection and LACP link aggregation; S3700 Series supports ISSU (In-Service Software Upgrade);

S3700 Series supports BFD mechanism;

S3700 Series supports Ethernet OAM mechanism, 802.3ah, 802.1ag and ITU-Y.1731;

High reliability (99.999%): MTTR of S3700 Series is 50ms, meeting the requirement of the carrier-level service.

Varied Service Features

S3700 Series supports layer2 and layer3 multicast routing protocol, which enable the device can access to IPTV, HD video surveillance and HD video conference;

S3700 Series supports layer3 routing protocol and super-large routing table capacity, which enables the device is available in large campus networks, enterprise networks and industry networks;

S3700 Series supports layer2 and layer3 MPLS VPN.

Security+

Equipment-level security: The advanced hardware infrastructure design realizes the level-based packet schedule and packet protection, prevents DoS-/TCP- related SYN Flood, UDP Flood, Broadcast Storm or large traffic attacks, and supports level-based command line protection, endowing different levels of users with different management permissions.

Perfect security authentication mechanisms: IEEE 802.1x, Radius and BDTacacs+.

S3700 Series supports storm/multicast/unicast limit, ensuring the normal running of equipment in harsh network conditions.

S3700 Series supports perfect ring detection mechanism, ensuring the long-term stable running of network.

S3700 Series supports port isolation within the same VLAN, DHCP-Snooping, and IP + MAC + Port binding.

Versatile IPv6 Solution

S3700 Series supports the IPv6 protocol suite, IPv6 neighbor discovery, ICMPv6, path MTU discovery, DHCPv6, etc;

S3700 Series supports Ping, Traceroute, Telnet, SSH, ACL based on IPv6;

S3700 Series supports MLD, MLD Snooping, IPv6 static routing, RIPng, OSPFv3 and BGP4+, etc;

S3700 Series supports IPv6 tunnel: manual tunnel, automatic tunnel, GRE tunnel, 6to4 tunnel, ISATAP;

S3700 Series supports IPv4 transiting to IPv6: IPv6 manual tunnel, automatic tunnel, 6 to 4 tunnel, ISATAP tunnel.

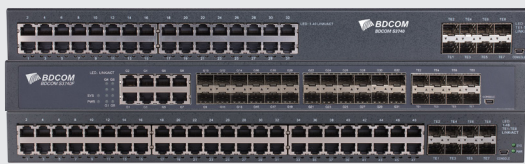
Innovative Energy-saving Design

Intelligent power management: The power system of S3700 Series supports real-time monitoring the device and the slow-start. It is also power-saving;

Intelligent fan management system: The fan system of S3700 Series supports automatic speed regulation, which efficiently slow the fan speed and mitigate the noise;

Comply with the international standard IEEE 802.3az.

Model Lists A



S3700 SERIES

S3740



- 32 GE TX ports,
- 8 10GE SFP+ ports

S3740



S3740F



- 24 GE SFP ports,
- 8 GE TX ports,
- 8 10GE/GE SFP+ ports

S3740F



S3756

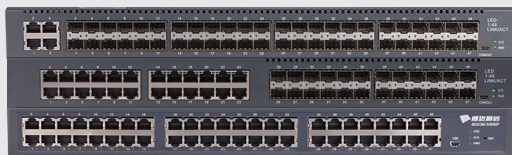


- 48 GE TX ports,
- 8 10GE/GE SFP+ ports

S3756



Model Lists B



S3700 SERIES

S3756F



- 44 GE SFP ports,
- 4 GE TX/SFP combo ports,
- 8 10GE SFP+ ports

S3756F



S3756M



- 24 100/1000M SFP ports,
- 24 GE TX ports,
- 8 10GE/GE SFP+ ports

S3756M



S3756P

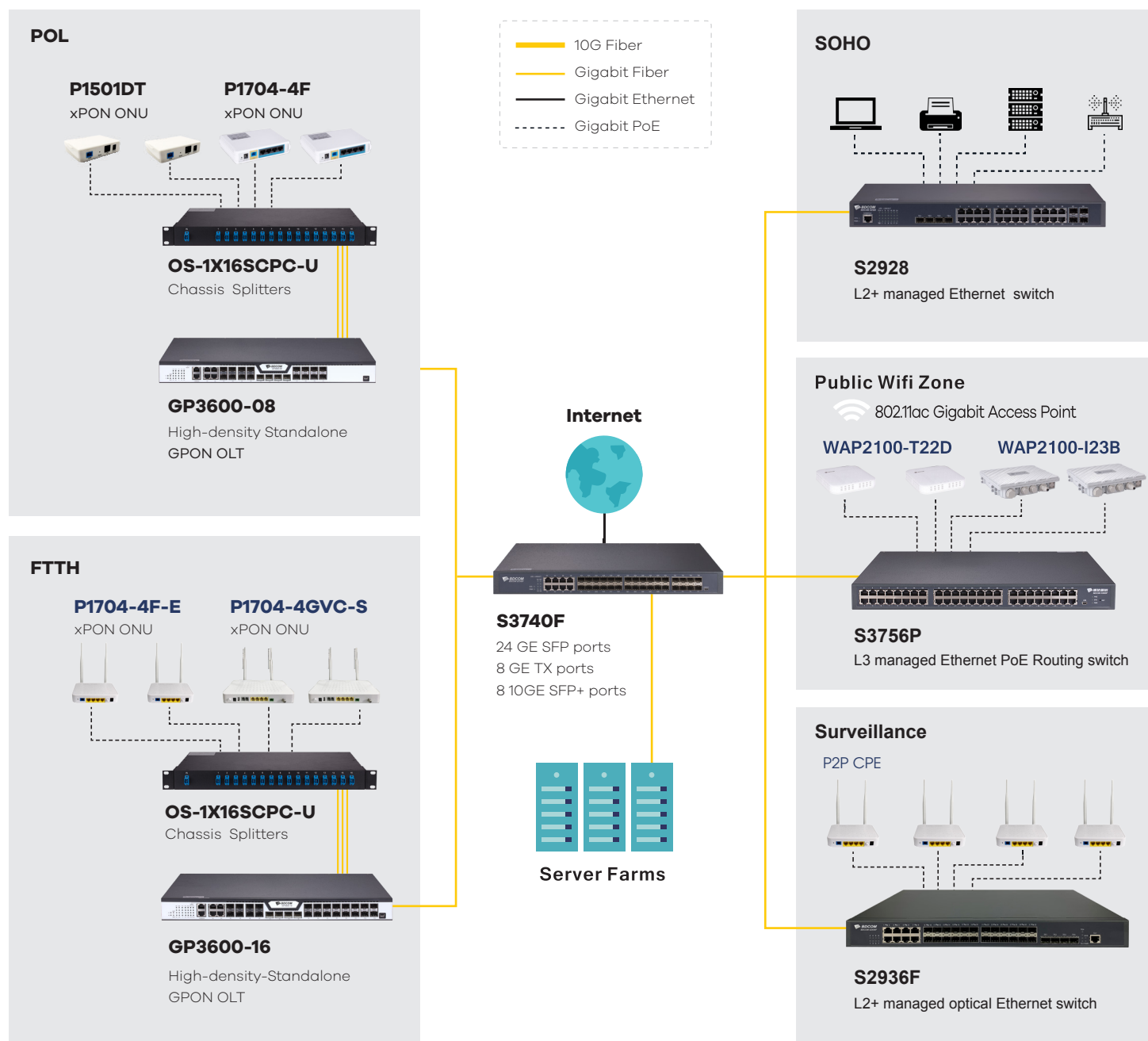


- 48 GE POE ports,
- 8 10GE/GE SFP+ ports

S3756P



Application Diagram



Product Specifications A

Item		S3740	S3740F	S3756
Interface		32 GE TX ports, 8 10GE SFP+ ports	24 GE SFP ports, 8 GE TX ports, 8 10GE/GE SFP+ ports	48 GE TX ports, 8 10GE/GE SFP+ ports
Console		1 Mini USB port	1 Mini USB port	1 Mini USB port
Backplane		176 Gbps	176 Gbps	176 Gbps
Forwarding rate		132 Mpps	132 Mpps	132 Mpps
Chassis	Dimensions (WxDxH)(mm)	440x350x44	440x350x44	440x350x44
	Weight(KG)(empty)	5.3	5.5	6
Package	Dimensions (WxDxH)(mm)	576x448x94	576x448x94	576x448x94
	Weight(KG)	6.5	6.7	7.2
Power consumption	no-load	< 32W	< 32W	< 33W
	full-load	58W	64W	64W
Power supply	AC: 100V-240V, 50Hz±10%	75W	75W	75W
POE power budget		/	/	/
Total output BTU (1000BTU/H=293W)		255.97	255.97	255.97
Fan number		2	2	2
Noise@25°C (dBA)		45	45	45
MTBF(H)		>100,000	>100,000	>100,000
Item		S3756F	S3756M	S3756P
Interface		44 GE SFP ports, 4 GE TX/SFP combo ports, 8 10GE SFP+ ports	24 100/1000M SFP ports, 24 GE TX ports, 8 10GE/GE SFP+ ports	48 GE POE ports, 8 10GE/GE SFP+ ports
Console		1 Mini USB port	1 Mini USB port	1 Mini USB port
Backplane		176 Gbps	176 Gbps	176 Gbps
Forwarding rate		132 Mpps	132 Mpps	132 Mpps
Chassis	Dimensions (WxDxH)(mm)	440x350x44	440x350x44	440x350x44
	Weight(KG)(empty)	6	6.2	5.5
Package	Dimensions (WxDxH)(mm)	576x448x94	576x448x94	576x448x94
	Weight(KG)	7.6	7.4	6.7
Power consumption	no-load	< 38W	< 53W	< 38W
	full-load	69W	78W	1520W
Power supply	AC: 100V-240V, 50Hz±10%	150W	150W	/
POE power budget		/	/	Max. 1,600W
Total output BTU (1000BTU/H=293W)		511.94	511.94	511.94
Fan number		3	3	3
Noise@25°C (dBA)		45	45	45
MTBF(H)		>100,000	>100,000	>100,000

Product Specifications B

Item		
Forwarding mode		Store-forward
Flash (MB)		32
MAC		512
Jumbo frame		9K
Routing table	IPv4	32K
	IPv6	8K
ARP table	IPv4	10K
	IPv6	5K
Total SVI		1K
VLAN		4K Active VLAN, QinQ & Selective QinQ, GVRP, Private VLAN
Spanning Tree		802.1D (STP), 802.1W (RSTP) and 802.1S (MSTP), BPDUGuard, root guard and loopback guard
Multicast		PIM-SM, PIM-DM, IGMP v1/v2/v3, IGMP Snooping, IGMP Fast Leave, MVR, IGMP filter
IPv4		Static routing, RIP v1/v2, OSPF, BGP, PBR, ECMP BFD for OSPF, BGP
IPv6		ICMPv6, DHCPv6, ACLv6 and IPv6 Telnet IPv6 neighbor discovery, Path MTU discovery MLD V1/V2, MLD snooping IPv6 Static Routing, RIPng, OSPFv3, BGP4+ Manual tunnel, ISATAP tunnel, 6 to 4 tunnel
MPLS		LDP protocol, Multi-VRF, MPLS L2 VPN
QoS		CAR, HQoS, MAC/IP/TCP/UDP/VLAN/COS/DSCP/TOS based QoS, 802.1P/DSCP priority re-labeling, SP, WRR, and "SP+WRR", Tail-Drop, WRED, flow monitoring and traffic shaping
Security		Port isolation, Port security, and "IP+MAC+port" binding, MAC stickyDHCP Snooping and option 82, DAI & IP source guard, PPPoE+, IEEE 802.1x, Radius and BD Tacacs+ L2/L3/L4 ACL flow identification and filtration Anti-attack from DDoS, TCP's SYN Flood, UDP Flood, etc. Broadcast/multicast/unknown unicast storm-control MD5, SHA-256, RSA-1024, AES256, etc.
Reliability		Static/LACP link aggregation, Interface backup BVSS virtual-stacking EAPS and ERPS URPF, LLDPISU VRRP 1+1 power backup
Management		Power cord, rackmount kits, console cable
Environment		Operating temperature/humidity: 0℃ -50℃ ,10%-90% non-condensing Storage temperature/humidity: -20℃ -70℃ , 5%-95% non-condensing
Certification		CE, FCC, ROHS

Ordering Information

Item	
Optical Modules	Description
S3700 series switch	
S3740	Ethernet routing switch with 32 GE ports and 8 10GE ports (1 Mini USB console port, 32 GE TX ports, 8 10GE/GE SFP+ ports; 2 power slots with 1 hot-swap AC220V power supply; the cooling fan, 1U, standard 19-inch rack-mounted installation)
S3740F	Ethernet routing switch with 32 GE ports and 8 10GE ports (1 Mini USB console port, 24 100M/1000M SFP ports, 8 GE TX ports, 8 10GE/GE SFP+ ports; 2 power slots with 1 hot-swap AC220V power supply; the cooling fan, 1U, standard 19-inch rack-mounted installation)
S3756	Ethernet routing switch with 48 GE ports and 8 10GE ports (1 Mini USB console port, 48 GE TX ports, 8 10GE/GE SFP+ ports; 2 power slots with 1 hot-swap AC220V power supply; the cooling fan, 1U, standard 19-inch rack-mounted installation)
S3756F	Ethernet routing switch with 48 GE ports and 8 10GE ports (1 Mini USB console port, 44 100M/1000M SFP ports, 4 GE TX/SFP combo ports, 8 10GE/GE SFP+ ports; 2 power slots with 1 hot-swap AC220V power supply; the cooling fan, 1U, standard 19-inch rack-mounted installation)
S3756M	Ethernet routing switch with 48 GE ports and 8 10GE ports (1 Mini USB console port, 24 GE TX ports, 24 100M/1000M SFP ports, 8 10GE/GE SFP+ ports; 2 power slots with 1 hot-swap AC220V power supply; the cooling fan, 1U, standard 19-inch rack-mounted installation)
S3756P	Ethernet routing switch with 48 GE ports and 8 10GE ports (1 Mini USB console port, 48 GE POE ports, 8 10GE/GE SFP+ ports; 2 power slots without power supply; the cooling fan, 1U, 19-inch rack-mounted installation)
S3700 series power modules	
S3700 Series POE Power Modules	
POE-500-AC	S3700 Series Non-POE Hot-swap AC Power (Max Power 150W, AC100~240V input, the isolated cooling fan)
PWR-150-DC	S3700 Series Non-POE Hot-swap DC Power (Max Power 150W, DC-36V ~ -72V input, the isolated cooling fan)
S3700 Series Non-POE Power Modules	
PWR-150-AC	S3700 Series POE Hot-swap AC Power (Max Power 1100W, POE 720W, AC100~240V input, the isolated cooling fan)
POE-1100-AC	S3700 Series POE Hot-swap AC Power (Max Power 500W, POE 370W, AC100~240V input, the isolated cooling fan)

Ordering Information

Item	Description
Optical Modules	
GE Optical Modules	
GSFP-TX-B	GE SFP-to- RJ45 module
GSFP-SX-D	GE SFP multi-mode (500m, 850nm, LC, DDM)
GSFP-LX-10-D	GE SFP single-mode (10Km, 1310nm, LC, DDM)
GSFP-LX-20-D	GE SFP single-mode (20Km, 1310nm, LC, DDM)
GSFP-LX-40-D	GE SFP single-mode (40Km, 1310nm, LC, DDM)
GSFP-ZX-80-D	GE SFP single-mode (80Km, 1550nm, LC, DDM)
GSFP-ZX-120-D	GE SFP single-mode (120Km, 1550nm, LC, DDM)
GSFP-LX-SM1310-10-BIDI GSFP-LX-SM1550-10-BIDI	GE SFP single-mode, single core bidirectional (10Km, TX1310/RX1550, LC, DDM) GE SFP single-mode, single core bidirectional (10Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-20-BIDI GSFP-LX-SM1550-20-BIDI	GE SFP single-mode, single core bidirectional (20Km, TX1310/RX1550, LC, DDM) GE SFP single-mode, single core bidirectional (20Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-40-BIDI GSFP-LX-SM1550-40-BIDI-1310	GE SFP single-mode, single core bidirectional (40Km, TX1310/RX1550, LC, DDM) GE SFP single-mode, single core bidirectional (40Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1490-80-BIDI GSFP-LX-SM1550-80-BIDI	GE SFP single-mode, single core bidirectional (80Km, TX1490/RX1550, LC, DDM) GE SFP single-mode, single core bidirectional (80Km, TX1550/RX1490, LC, DDM)
GSFP-LX-SM1490-120 GSFP-LX-SM1550-120	GE SFP single-mode, single core bidirectional (120Km, TX1490/RX1550, LC, DDM) GE SFP single-mode, single core bidirectional (120Km, TX1550/RX1490, LC, DDM)
10GE Optical Modules	
SFP+TX	10GE SFP+-to-RJ45 module
SFP+SX	10GE SFP+ multi-mode (300m, 850nm, 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-fiber (10Km, TX1270/RX1330, LC, DDM) 10GE SFP+ single-mode, single-fiber (10Km, TX1330/RX1270, LC, DDM)
SFP+LX-SM-1270-20 SFP+LX-SM-1330-20	10GE SFP+ single-mode, single-fiber (20Km, TX1270/RX1330, LC, DDM) 10GE SFP+ single-mode, single-fiber (20Km, TX1330/RX1270, LC, DDM)
SFP+LX-SM-1270-40 SFP+LX-SM-1330-40	10GE SFP+ single-mode, single-fiber (40Km, TX1270/RX1330, LC, DDM) 10GE SFP+ single-mode, single-fiber (40Km, TX1330/RX1270, LC, DDM)

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