

S1700 Series Enterprise Switches





Product Overview

The Huawei Quidway® S1700 enterprise switch (S1700) is a next-generation energy-saving Ethernet access switch. The S1700 uses high-performance hardware provides a rich array of features to help customers build secure, reliable high-performance networks. It is easy to install and maintain and is suitable for use by middle- and small-size enterprises, Internet cafes, hotel, and schools.

The S1700 series consist of SNMP-based switches, a web-managed switch, and maintenance-free switches.

Maintenance-free switches include S1700-8-AC, S1700-24-AC, S1700-52R-2T2P-AC, S1700-8G-AC, and S1724G; the web-managed switch is S1728GWR-4P; SNMP-based switches include S1700-28FR-2T2P-AC, S1700-52FR-2T2P-AC, S1700-28GFR-4P-AC, and S1700-52GFR-4P-AC.

Produce Model and Appearance

S1700-8-AC



Eight 10/100 Mbit/s Ethernet electrical ports and AC power supply

Packet forwarding rate: 1.2 Mpps

Switching capacity: 1.6 Gbit/s

S1700-24-AC



Twenty-four 10/100 Mbit/s Ethernet electrical ports and AC power supply

Packet forwarding rate: 3.6 Mpps

Switching capacity: 4.8 Gbit/s

S1700-52R-2T2P-AC



Forty-eight 10/100 Mbit/s Ethernet electrical ports, two GE electrical ports, and two GE optical ports, and AC power supply

Packet forwarding rate: 13.2 Mpps

Switching capacity: 17.6 Gbit/s

S1700-8G-AC



Eight 10/100/1000 Mbit/s Ethernet electrical ports and AC power supply

Packet forwarding rate: 12 Mpps

Switching capacity: 16 Gbit/s

S1724G



Twenty-four 10/100/1000 Mbit/s Ethernet electrical ports and AC power supply

Packet forwarding rate: 36 Mpps

Switching capacity: 48 Gbit/s

S1728GWR-4P



Twenty-four 10/100/1000 Mbit/s Ethernet electrical ports and four GE SFP optical ports, and AC power supply

Packet forwarding rate: 42 Mpps

Switching capacity: 56 Gbit/s

S1700-28FR-2T2P-AC

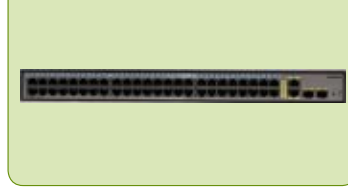


Forty-eight 10/100 Mbit/s Ethernet electrical ports, two GE RJ45 ports, and two GE SFP ports, and AC power supply

Packet forwarding rate: 9.6Mpps

Switching capacity: 12.8 Gbps

S1700-52FR-2T2P-AC



Forty-eight 10/100 Mbit/s Ethernet electrical ports, two GE RJ45 ports, and two GE SFP ports, and AC power supply

Packet forwarding rate: 13.2Mpps

Switching capacity: 17.6 Gbps

S1700-28GFR-4P-AC



Twenty-four 10/100/1000 Mbit/s Ethernet electrical ports and four GE SFP ports, and AC power supply

Packet forwarding rate: 42 Mpps

Switching capacity: 56 Gbps

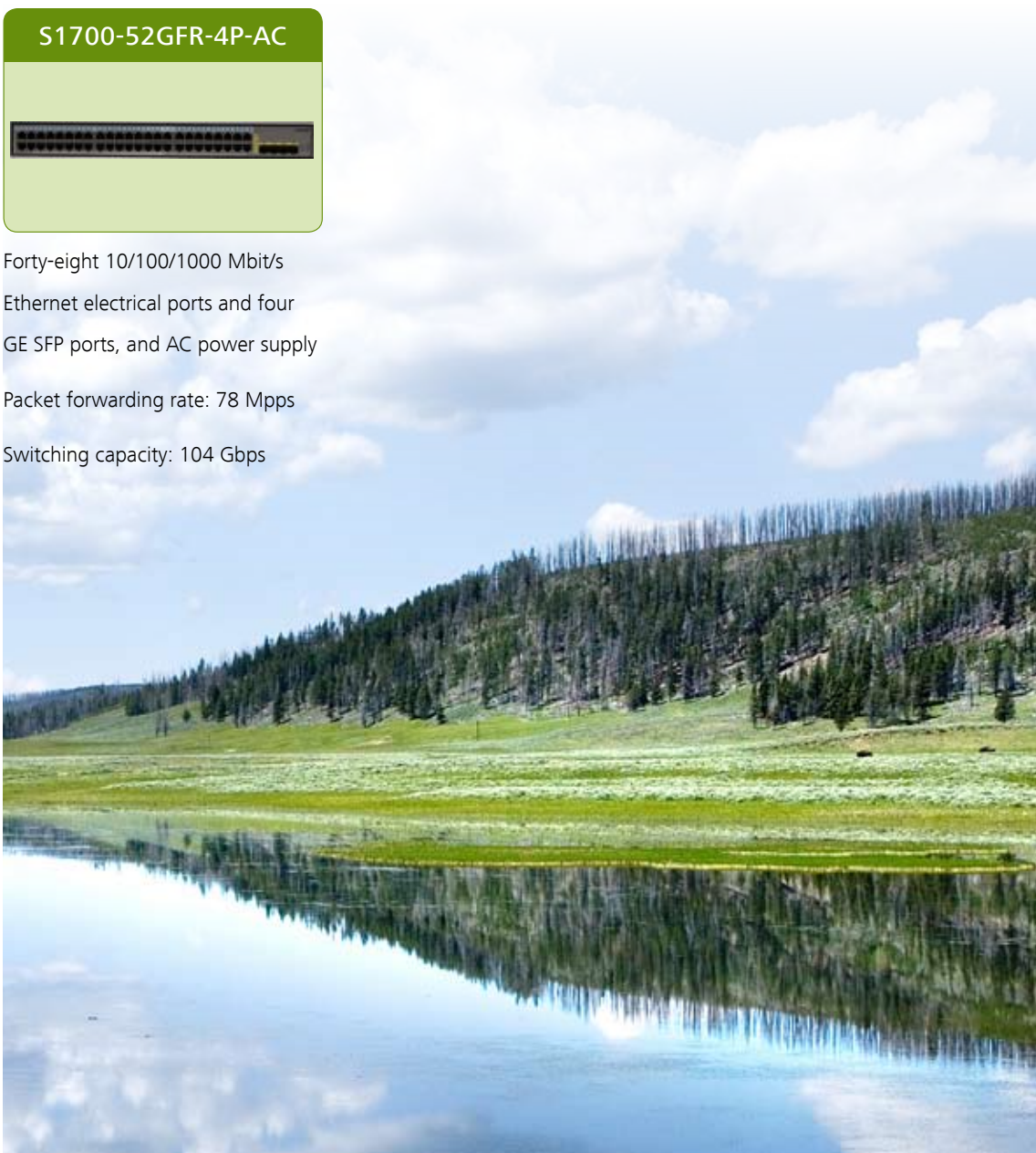
S1700-52GFR-4P-AC



Forty-eight 10/100/1000 Mbit/s Ethernet electrical ports and four GE SFP ports, and AC power supply

Packet forwarding rate: 78 Mpps

Switching capacity: 104 Gbps



Product Characteristics and Advantages

Innovative energy saving design

- All the S1700 series switches except the S1700-52GFR-4P-AC use a fan-free design that reduces power consumption and noise.
- The S1700 supports Energy Efficient Ethernet (EEE) that enables the switch to enter power-saving mode when the traffic is light.
- The S1700 can adjust power output for transmissions based on the cable length and set ports that are transmitting no traffic to sleep mode.

Non-blocking and high-speed forwarding

- All S1700 ports provide Layer 2 wire-speed forwarding capabilities to ensure non-blocking packet forwarding. Most S1700 models provide optical and electrical GE uplink ports, which facilitate user access and are cost-effective.
- The S1700 MAC address table supports up to 8 K of MAC addresses, making it easy to expand networks and deploy new services.

Convenient management and maintenance

- The S1700 is easy to manage and maintain and comes with one-key operation button on the front panel.
- Web-managed S1700 models come with a web network management system, making it easy to configure switches.
- SNMP-based S1700 models allow for the use of an SNMP-based NMS for centralized configuration and management.

Powerful security performance

- The S1700 provides a range of security features, including 802.1x, RADIUS, and NAC. The S1700 also supports packet filtering based on MAC addresses or ports to defend against hacker and virus attacks.

Great networking and bandwidth extensibility

- The S1700 provides LACP, STP, RSTP, and MSTP functions to implement link aggregation and backup. SNMP-based switches support up to eight MSTP instances for flexible networking.

Product Specifications

Type	Maintenance-free Switch					Web-managed Switch	SNMP-based Switch			
Model	S1700-8-AC	S1700-24-AC	S1700-52R-2T2P-AC	S1700-8G-AC	S1724G	S1728G WR-4P	S1700-28FR-2T2P-AC	S1700-52FR-2T2P-AC	S1700-28GFR-4P-AC	S1700-52GFR-4P-AC
Fixed port	Eight 10/100 Mbit/s electrical interfaces	Twenty-four 10/100 Mbit/s electrical ports	Forty-eight 10/100 Mbit/s electrical ports	Eight 10/100/1000 Mbit/s electrical ports	Twenty-four 10/100/1000 Mbit/s electrical ports	Twenty-four 10/100/1000 Mbit/s electrical ports	Twenty-four 10/100 Mbit/s electrical ports	Forty-eight 10/100 Mbit/s electrical ports	Twenty-four 10/100/1000 Mbit/s electrical ports	Forty-eight 10/100/1000 Mbit/s electrical ports
Optional port	None	None	2 GE electrical ports 2 GE SFP optical ports	None	None	4 GE SFP optical ports	2 GE electrical ports 2 GE SFP optical ports	2 GE electrical ports 2 GE SFP optical ports	4 GE SFP optical ports	4 GE SFP optical ports
MAC address table	8 K MAC	8 K MAC	8 K MAC	8 K MAC	8 K MAC	8 K MAC	8 K MAC	8 K MAC	8 K MAC	8 K MAC
Dimensions (H x W x D)	30 mm x 160 mm x 134 mm	43.6 mm x 320 mm x 208 mm	43.6 mm x 442 mm x 220 mm	30 mm x 160 mm x 130 mm	43.6 mm x 330 mm x 208 mm	43.6 mm x 442 mm x 220 mm	43.6 mm x 442 mm x 220 mm	43.6 mm x 442 mm x 220 mm	43.6 mm x 442 mm x 220 mm	43.6 mm x 442 mm x 220 mm
Input voltage	100 V to 240 V AC, 50/60 Hz	100 V to 240 V AC, 50/60 Hz	100 V to 240 V AC, 50/60 Hz	100 V to 240 V AC, 50/60 Hz	100 V to 240 V AC, 50/60 Hz	100 V to 240 V AC, 50/60 Hz	100 V to 240 V AC, 50/60 Hz	100 V to 240 V AC, 50/60 Hz	100 V to 240 V AC, 50/60 Hz	100 V to 240 V AC, 50/60 Hz
EEE	Not supported	Not supported	Not supported	Supported	Supported	Supported	Not supported	Not supported	Supported	Supported
Power consumption	<5W	<10W	<20W	<10W	<20W	<20W	<20W	<30W	<25W	<45W
Operating temperature	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C

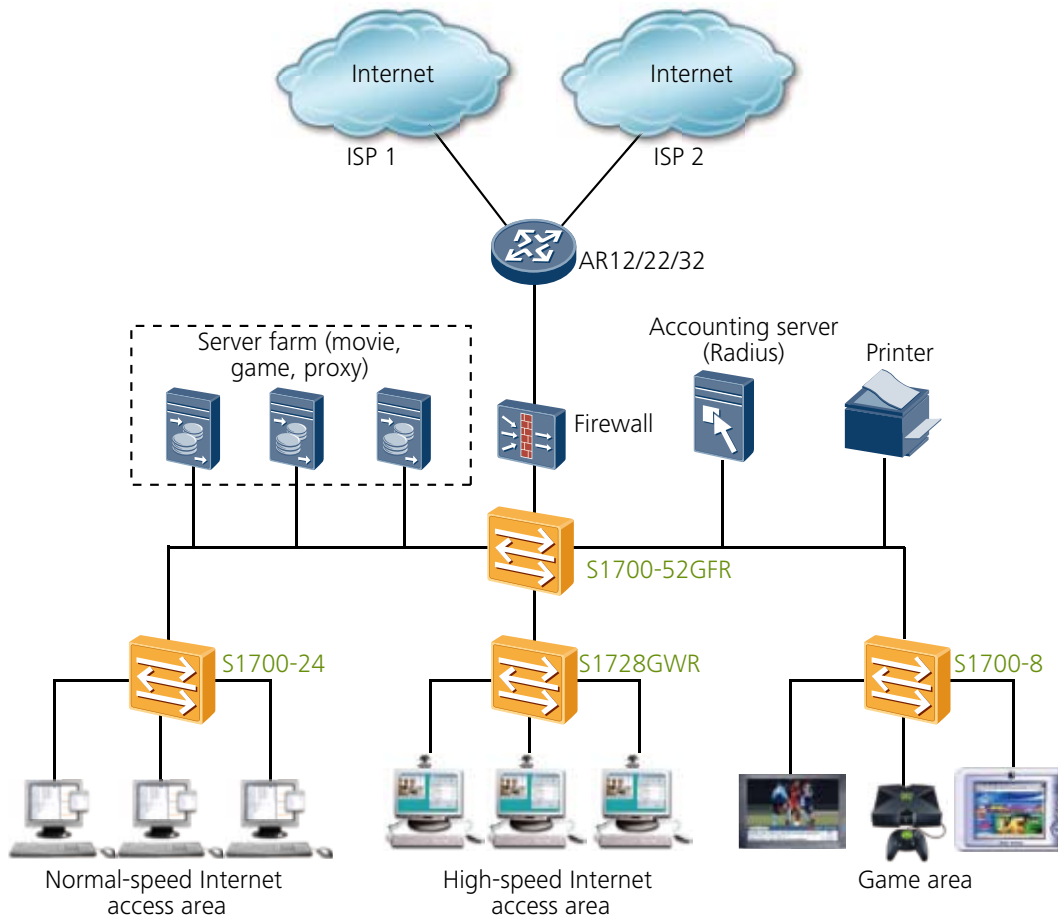
Type	Maintenance-free Switch					Web-managed Switch	SNMP-based Switch			
Model	S1700-8-AC	S1700-24-AC	S1700-52R-2T2P-AC	S1700-8G-AC	S1724G	S1728GWR-4P	S1700-28FR-2T2P-AC	S1700-52FR-2T2P-AC	S1700-28GFR-4P-AC	S1700-52GFR-4P-AC
Humidity	20% to 85% (non-condensing)	20% to 85% (non-condensing)	20% to 85% (non-condensing)	20% to 85% (non-condensing)	20% to 85% (non-condensing)	20% to 85% (non-condensing)	20% to 85% (non-condensing)	20% to 85% (non-condensing)	20% to 85% (non-condensing)	20% to 85% (non-condensing)
Storage humidity	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)	10% to 90% (non-condensing)
Heat dissipation	natural heat dissipation	natural heat dissipation	natural heat dissipation	natural heat dissipation	natural heat dissipation	natural heat dissipation	natural heat dissipation	natural heat dissipation	natural heat dissipation	fan modules for heat dissipation.

Service Features

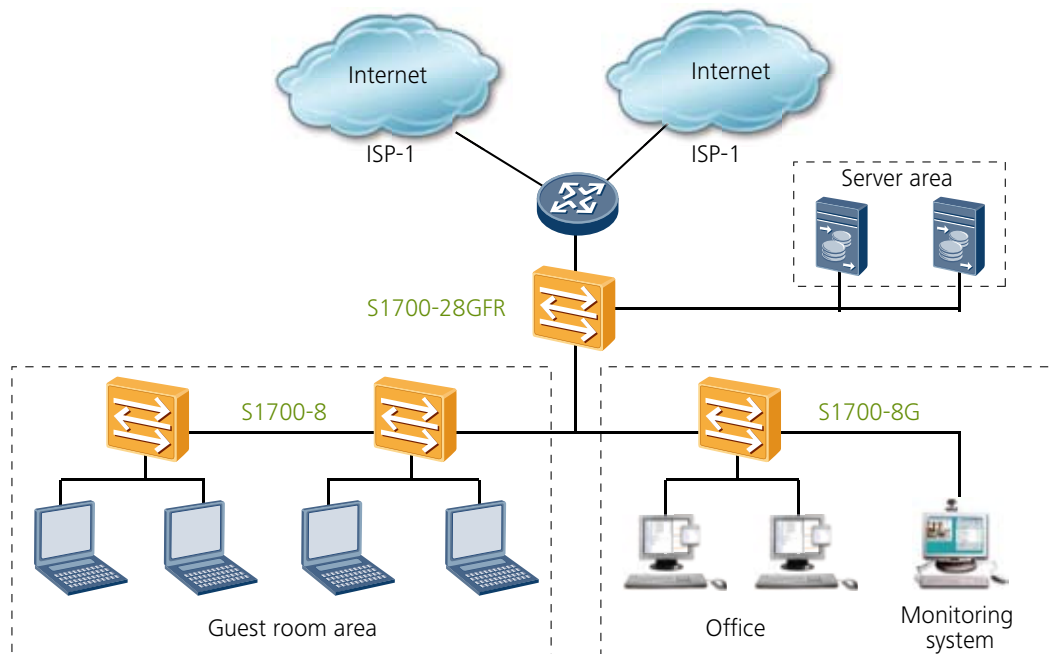
Item	Web-managed Switch	SNMP-based Switch
Security features	<ul style="list-style-type: none"> Packet filtering based on MAC addresses Port-based 802.1x authentication RADIUS authentication Port isolation 	<ul style="list-style-type: none"> Hardware ACL Packet filtering based on MAC addresses MAC address authentication Port-based 802.1x authentication. RADIUS authentication Port isolation Storm suppression Attack defense, which prevents broadcast traffic, ARP attacks, ICMP attacks, TCP attacks, worm viruses, and DoS attacks DHCP snooping
VLAN	<ul style="list-style-type: none"> 256 VLANs Access port Trunk port Hybrid port Management VLAN Voice VLAN 	<ul style="list-style-type: none"> 4 K VLANs Access port Trunk port Hybrid port Management VLAN Voice VLAN

Item	Web-managed Switch	SNMP-based Switch
QOS	PQ and WRR Four queues on each port Queue scheduling based on 802.1p or DSCP priorities	PQ and WRR Four queues on each port Queue scheduling based on 802.1p or DSCP priorities
STP	STP/RSTP	STP/RSTP/MSTP
Multicast	IGMP snooping and a maximum of 256 multicast groups	IGMP snooping and a maximum of 256 multicast groups Fast leave
Link aggregation	12 link aggregation groups (LAGs) and a maximum of eight ports in each LAG Static LACP	12 link aggregation groups (LAGs) and a maximum of eight ports in each LAG Static LACP
Port mirroring	Port-based bidirectional flow mirroring	Port-based bidirectional flow mirroring Configuring a trunk as a mirrored interface
Bandwidth control	Rate limiting for incoming and outgoing packets, with the granularity of 64 kbit/s	Rate limiting for incoming and outgoing packets, with the granularity of 64 kbit/s
Broadcast storm suppression	Broadcast storm suppression based on the interface rate Sending alarms when the traffic rate reaches the upper limit	Broadcast storm suppression based on the interface rate Sending alarms when the traffic rate reaches the upper limit
Device management	Web system network management DHCP client One-key restoration	SNMP Web system network management (HTTPS) DHCP client User password protection One-key restoration
Device maintenance	System log Ping Virtual Cable Test (VCT) Link Layer Discovery Protocol (LLDP)	Remote Network Monitoring (RMON) System log Ping and traceroute Virtual Cable Test (VCT) Link Layer Discovery Protocol (LLDP)

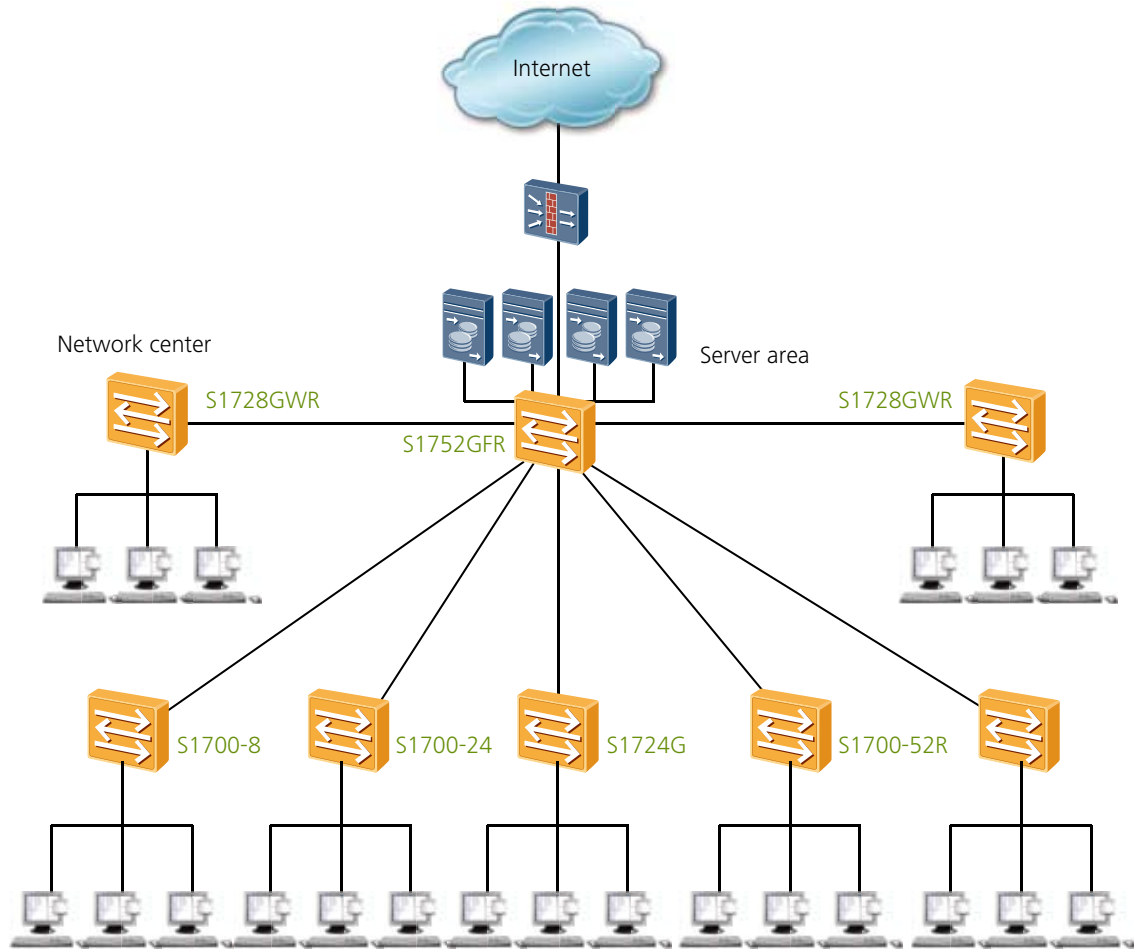
Deploying S1700s in Internet cafes



Deploying S1700s in hotels



Deploying S1700s in schools



Order Information

Product Description
S1700-8-AC
S1700-24-AC
S1700-52R-2T2P-AC
S1700-8G-AC
S1724G
S1728GWR-4P
S1700-28FR-2T2P-AC
S1700-52FR-2T2P-AC
S1700-28GFR-4P-AC
S1700-52GFR-4P-AC
GE-SFP optical module
Optical Transceiver, eSFP, GE, Multi-mode Module(850nm,0.5km,LC)
SFP Optical Interface Module(1310nm, 10km)
Optical Transceiver, eSFP, GE, Single-mode Module(1310nm,40km,LC)
Optical Transceiver, eSFP, GE, Single-mode Module(1550nm,40km,LC)
Optical Transceiver, eSFP, GE, Single-mode Module(1550nm,80km,LC)
Optical Transceiver, eSFP, GE, Single-mode Module(1550nm,100km,LC)
BIDI-SFP optical module
Optical Transceiver, eSFP, GE,BIDI Single-mode Module(TX1490/RX1310,10km,LC)
Optical Transceiver, eSFP, GE,BIDI Single-mode Module(TX1310/RX1490,10km,LC)

For more information, visit <http://www.huawei.com/enterprise/> or contact the Huawei local sales office.

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