



HUAWEI eKit

Huawei eKitEngine S310S Series Switches Datasheet



Make SME Network Easier and Smarter



Product Overview

Huawei eKitEngine S310S series switches are fully-managed 10GE switches designed for the SME and SMB market. These switches provide many features, such as These switches feature flexible Ethernet networking, diversified security control, rich management methods, higher performance, and extended service processing capabilities. Therefore, they can be widely used in scenarios such as economic hotels, factories, primary and secondary education, and building security.

Product Models and Appearances

Product Model	Product Appearance	Port Description	Others
S310S-8T2X		8 x 10/100/1000BASE-T ports 2 x 10GE SFP+ ports	Built-in AC power module, fanless
S310S-8P4JX		8 x 10/100/1000BASE-T ports (PoE+) 2 x 10GE SFP+ ports 2 x 2.5GE SFP ports 128 W PoE	Built-in AC power module, fanless
S310S-10PN4JX		8 x 10/100/1000BASE-T ports (PoE+ supported on 6 ports) 2 x 10M/100M/1000M/2.5GBASE-T ports (PoE+) 2 x 10GE SFP+ ports 2 x 2.5GE SFP ports 128 W PoE	Built-in AC power module, fanless
S310S-24T4J		24 x 10/100/1000BASE-T ports 4 x 2.5GE SFP ports	Built-in AC power module, fanless
S310S-24T4JX		24 x 10/100/1000BASE-T ports 2 x 10GE SFP+ ports 2 x 2.5GE SFP ports	Built-in AC power module, fanless
S310S-24P4J		24 x 10/100/1000BASE-T ports (PoE+) 4 x 2.5GE SFP ports 400 W PoE	Built-in AC power module
S310S-24P4JX		24 x 10/100/1000BASE-T ports	Built-in AC

Product Model	Product Appearance	Port Description	Others
		(PoE+) • 2 x 10GE SFP+ ports • 2 x 2.5GE SFP ports • 400 W PoE	power module
S310S-26PN4JX		• 24 x 10/100/1000BASE-T ports (PoE+ supported on 22 ports) • 2*10/100/1000/2.5GBASE-T Combo (PoE+) • 2 x 10GE SFP+ ports • 400 W PoE	Built-in AC power module

Product Features and Highlights

Flexible Ethernet Networking

- eKitEngine S310S provides various uplink and downlink ports and provide GE/2.5GE multi-rate electrical ports for access and GE/2.5GE/10GE multi-rate optical ports for uplink, greatly improving networking flexibility.
- In addition to supporting traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), eKitEngine S310S is also designed with the industry's latest Ethernet Ring Protection Switching (ERPS) technology. ERPS is defined in ITU-T G.8032, and it implements millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.

Diversified Security Control

- eKitEngine S310S supports comprehensive defense against DoS attacks and user-targeted attacks.
- eKitEngine S310S sets up and maintains a DHCP snooping binding table, and discards the packets that do not match the table entries. The DHCP snooping trusted port feature ensures that users connect only to the authorized DHCP server.

PoE Power Supply

PoE models of eKitEngine S310S series switches provide the following capabilities:

- *Fast PoE: PoE switches can supply power to PDs within seconds upon power-on, which is different from common switches that supply power to PDs in 1 to 3 minutes after power modules are installed. When a PoE switch restarts due to a power failure, it continues to supply power to PDs immediately after being powered on without waiting until it completes the restart. This greatly shortens the power-off time of PDs.
- Perpetual PoE: When a PoE switch restarts (for example, during software upgrade), it continues to supply power to the connected PDs, ensuring uninterrupted PoE power supply.

* S310S-24P4J/S310S-24P4JX/S310S-26PN4JX supports fast PoE

Smart Upgrade

- Based on Huawei Online Upgrade Repository (HOUP), eKitEngine S310S series switches support smart upgrade. They obtain the version upgrade path from the HOUP and download the new version. The upgrade process is highly automated as it supports one-click upgrade. In addition, this feature supports version pre-loading, which enormously shortens the upgrade time and reduces the service interruption time.
- Smart upgrade greatly simplifies device upgrade operations, making it possible for customers to upgrade versions by themselves. This feature helps customers reduce considerable maintenance costs. In addition, the upgrade policy of the HOUP is used to standardize the upgrade path, which greatly reduces the risk of upgrade failure.

Cloud Management

- The HUAWEI eKit App allows users to configure, monitor, and inspect switches on the cloud, reducing onsite deployment and O&M manpower costs and decreasing network OPEX.
- eKitEngine S310S series switches support both cloud management and on-premise management modes. These two management modes can be flexibly switched as required to achieve smooth evolution while maximizing return on investment (ROI).

Easy O&M

- eKitEngine S310S can be managed and maintained using HUAWEI eKit App, SNC, and web system.

Product Specifications

Item	S310S-8T2X	S310S-8P4JX	S310S-10PN4JX
Switching capacity	56 Gbps	66 Gbps	76 Gbps
Packet forwarding rate	42 Mpps	49 Mpps	56 Mpps
Downlink port	8 x 10/100/1000BASE-T ports	8 x 10/100/1000BASE-T PoE+ ports	6 x 10/100/1000BASE-T PoE+ ports; 2 x 10/100/1000BASE-T ports; 2 x 10M/100M/GE/2.5GE BASE-T PoE+ ports (multi-GE ports)
Uplink port	2 x 2.5GE SFP ports	2 x 10GE SFP+ ports; 2 x 2.5GE SFP ports	2 x 10GE SFP+ ports; 2 x 2.5GE SFP ports

Item	S310S-8T2X	S310S-8P4JX	S310S-10PN4JX
Dimensions (H x W x D)	43.6 mm x 250 mm x 180 mm	43.6 mm x 320 mm x 210 mm	43.6 mm x 320 mm x 210 mm
Chassis height	1 U	1 U	1 U
Rated input voltage	AC input: 100 V AC to 240 V AC, 50/60 Hz	AC input: 100 V AC to 240 V AC, 50/60 Hz	AC input: 100 V AC to 240 V AC, 50/60 Hz
Input voltage range	AC input: 90 V AC to 264 V AC, 45 Hz to 65 Hz	AC input: 90 V AC to 300 V AC, 47 Hz to 63 Hz	AC input: 90 V AC to 300 V AC, 47 Hz to 63 Hz
Long-term operating temperature	-5°C to +40°C (0 m to 1800 m)	-5°C to +40°C (0 m to 1800 m)	-5°C to +40°C (0 m to 1800 m)
Storage temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Operating humidity	5% RH to 95% RH, non-condensing	5% RH to 95% RH, non-condensing	5% RH to 95% RH, non-condensing
Heat dissipation mode	Fanless, natural heat dissipation	Fanless, natural heat dissipation	Fanless, natural heat dissipation

Item	S310S-24T4J	S310S-24T4JX	S310S-24P4J
Switching capacity	68 Gbps	98 Gbps	68 Gbps
Packet forwarding rate	51 Mpps	73 Mpps	51 Mpps
Downlink port	24 x 10/100/1000BASE-T ports	24 x 10/100/1000BASE-T ports	24 x 10/100/1000BASE-T PoE+ ports
Uplink port	4 x 2.5GE SFP ports	2 x 10GE SFP+ ports; 2 x 2.5GE SFP ports	4 x 2.5GE SFP ports
Dimensions (H x W x D)	43.6 mm x 442 mm x 160 mm	43.6 mm x 320 mm x 210 mm	43.6 mm x 442 mm x 220 mm
Chassis height	1 U	1 U	1 U
Rated input voltage	AC input: 100 V AC to 240 V AC, 50/60 Hz	AC input: 100 V AC to 240 V AC, 50/60 Hz	AC input: 100 V AC to 240 V AC, 50/60 Hz

Item	S310S-24T4J	S310S-24T4JX	S310S-24P4J
Input voltage range	AC input: 90 V AC to 264 V AC, 45 Hz to 65 Hz	AC input: 90 V AC to 264 V AC, 45 Hz to 65 Hz	AC input: 90 V AC to 290 V AC, 45 Hz to 65 Hz High-voltage DC input: 190 V DC to 290 V DC
Long-term operating temperature	-5°C to +40°C (0 m to 1800 m)	-5°C to +40°C (0 m to 1800 m)	-5°C to +40°C (0 m to 1800 m)
Storage temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Operating humidity	5% RH to 95% RH, non-condensing	5% RH to 95% RH, non-condensing	5% RH to 95% RH, non-condensing
Heat dissipation mode	Fanless, natural heat dissipation	Fanless, natural heat dissipation	Air cooling, intelligent fan speed adjustment

Item	S310S-24P4JX	S310S-26PN4JX
Switching capacity	98 Gbps	98 Gbps
Packet forwarding rate	73 Mpps	73 Mpps
Downlink port	24 x 10/100/1000BASE-T PoE+ ports	22 x 10/100/1000BASE-T PoE+ ports; 2 x 10/100/1000BASE-T ports; 2 x 10M/100M/GE/2.5GE BASE-T PoE+ ports (multi-GE ports)
Uplink port	2 x 10GE SFP+ ports; 2 x 2.5GE SFP ports	2 x 10GE SFP+ ports;
Dimensions (H x W x D)	43.6 mm x 442 mm x 220 mm	43.6 mm x 442 mm x 220 mm
Chassis height	1 U	1 U
Rated input voltage	- AC input: 100 V AC to 240 V AC; 50/60 Hz - High-voltage DC input: 240 V DC	- AC input: 100 V AC to 240 V AC; 50/60 Hz - High-voltage DC input: 240 V DC
Input voltage	AC input: 90 V AC to 290 V AC; 45	AC input: 90 V AC to 290 V AC; 45 Hz

Item	S310S-24P4JX	S310S-26PN4JX
range	Hz to 65 Hz High-voltage DC input: 190 V DC to 290 V DC	to 65 Hz High-voltage DC input: 190 V DC to 290 V DC
Long-term operating temperature	-5°C to +40°C (0 m to 1800 m)	-5°C to +40°C (0 m to 1800 m)
Storage temperature	-40°C to +70°C	-40°C to +70°C
Operating humidity	5% RH to 95% RH, non-condensing	5% RH to 95% RH, non-condensing
Power port surge protection	±6 kV in differential mode, ±6 kV in common mode	±6 kV in differential mode, ±6 kV in common mode
Heat dissipation mode	Air cooling, intelligent fan speed adjustment	Air cooling, intelligent fan speed adjustment

Service Feature

Feature	Description
MAC address entry	Complies with the IEEE 802.1d standard
	16K MAC address entries at maximum
	Static, dynamic, and blackhole MAC address entries
	Automatic MAC address learning and aging
VLAN features	4094 VLANs
Ethernet ring protection	ERPS (G.8032)
	STP (IEEE 802.1d), RSTP (IEEE 802.1w), and MSTP (IEEE 802.1s)
Multicast	IGMPv1/v2/v3 and IGMPv1/v2/v3 snooping
Reliability	Link Aggregation Control Protocol (LACP)
	Storm control
QoS/ACL	Rate limiting on packets sent and received by an interface
	IPv4 access control list (ACL)
	Interface-based traffic policing

Feature	Description
	Eight queues on each interface
	Packet filtering
IP features	ARP
	DNS client
	DHCP client
	Static Routes
	Policy-based Routing
	NTP
Security features	Defense against DoS, ARP, and ICMP attacks
	Secure Boot
	Port isolation
	Blackhole MAC address entries
	AAA authentication
	CPU protection
	DHCP snooping
Management and maintenance	Cloud management
	Web system
	SSH v2.0
	HTTPS
	LLDP
	System logs and multi-level alarms
	IEEE 802.3az Energy Efficient Ethernet (EEE)
	Port mirroring
	Deployment through the registration query center

More Information

For more information about Huawei switches, visit <http://e.huawei.com/> or contact Huawei's local sales office.

Alternatively, you can contact us through one of the following methods:

- Global service hotline: <http://e.huawei.com/en/service-hotline>
- Enterprise technical support website: <http://support.huawei.com/enterprise>
- Service email address for enterprise users: support_e@huawei.com

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