



HUAWEI eKit

# Huawei eKitEngine S220S

## Series Switches Datasheet



Make SME Network Easier and Smarter



## Product Overview

Huawei eKitEngine S220S series switches, offering rich uplink and downlink ports, are Layer 2 GE/10GE switches designed for the SME and SMB market. These switches provide many features, such as rich management methods (web-based management, app-based management and SNC- based management), flexible Ethernet networking, and diversified security control. Therefore, they can be widely used in scenarios such as SME office, economic hotels, factories, primary and secondary education, and building security.

## Product Models and Appearances

Product Model	Product Appearance	Port Description	Others
S220S-8T2J		<ul style="list-style-type: none"><li>• 8 x 10/100/1000BASE-T ports</li><li>• 2 x 2.5GE SFP ports</li></ul>	Built-in AC power module Fanless
S220S-8T2X		<ul style="list-style-type: none"><li>• 8 x 10/100/1000BASE-T ports</li><li>• 2 x 10GE SFP+ ports</li></ul>	Built-in AC power module Fanless
S220S-8P4J		<ul style="list-style-type: none"><li>• 8 x 10/100/1000BASE-T ports (PoE+)</li><li>• 4 x 2.5GE SFP ports</li><li>• 128 W PoE</li></ul>	Built-in AC power module Fanless
S220S-8P4JX		<ul style="list-style-type: none"><li>• 8 x 10/100/1000BASE-T ports (PoE+)</li><li>• 2 x 10GE SFP+ ports</li><li>• 2 x 2.5GE SFP ports</li><li>• 128 W PoE</li></ul>	Built-in AC power module Fanless
S220S-10PN4JX		<ul style="list-style-type: none"><li>• 8 x 10/100/1000BASE-T ports (PoE+ supported on 6 ports)</li><li>• 2 x 10M/100M/1000M/2.5GBASE-T ports (PoE+)</li><li>• 2 x 2.5GE SFP ports</li><li>• 2 x 10GE SFP+ ports</li><li>• 128 W PoE</li></ul>	Built-in AC power module Fanless
S220S-24T4J		<ul style="list-style-type: none"><li>• 24 x 10/100/1000BASE-T ports</li><li>• 4 x 2.5GE SFP ports</li></ul>	Built-in AC power module Fanless
S220S-24T4JX		<ul style="list-style-type: none"><li>• 24 x 10/100/1000BASE-T ports</li><li>• 2 x 2.5GE SFP ports</li><li>• 2 x 10GE SFP+ ports</li></ul>	Built-in AC power module Fanless
S220S-24P4J		<ul style="list-style-type: none"><li>• 24 x 10/100/1000BASE-T ports (PoE+)</li><li>• 4 x 2.5GE SFP ports</li></ul>	Built-in AC power module

Product Model	Product Appearance	Port Description	Others
		<ul style="list-style-type: none"> <li>• 400 W PoE</li> </ul>	
S220S-24P4JX		<ul style="list-style-type: none"> <li>• 24 x 10/100/1000BASE-T ports (PoE+)</li> <li>• 2 x 2.5GE SFP ports</li> <li>• 2 x 10GE SFP+ ports</li> <li>• 400 W PoE</li> </ul>	Built-in AC power module
S220S-24LP4JX		<ul style="list-style-type: none"> <li>• 24 x 10/100/1000BASE-T ports (PoE+)</li> <li>• 2 x 2.5GE SFP ports</li> <li>• 2 x 10GE SFP+ ports</li> <li>• 195 W PoE</li> </ul>	Built-in AC power module
S220S-26PN4JX		<ul style="list-style-type: none"> <li>• 24 x 10/100/1000BASE-T ports (PoE+ supported on 22 ports)</li> <li>• 2 x 10/100/1000/2.5GBASE-T Combo (PoE+)</li> <li>• 2 x 10GE SFP+ ports</li> <li>• 400 W PoE</li> </ul>	Built-in AC power module

## Product Features and Highlights

### Flexible Ethernet Networking

- eKitEngine S220S 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.
- Inaddition to supporting traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), eKitEngine S220S 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 S220S supports comprehensive defense against DoS attacks and user-targeted attacks.
- eKitEngine S220S 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 S220S series switches provide the following capabilities:

- 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.

## Smart Upgrade

- Based on Huawei Online Upgrade Repository (HOUP), eKitEngine S220S 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, enabling customers to upgrade versions by themselves. This feature helps customers reduce maintenance costs considerably.

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 S220S 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 S220S supports various management and maintenance modes, such as HUAWEI eKit App, SNC, web system.

## Product Specifications

Item	S220S-8T2J	S220S-8T2X	S220S-8P4J
Switching capacity	26 Gbps	56 Gbps	36 Gbps
Packet forwarding rate	19 Mpps	42 Mpps	27 Mpps
Downlink port	8 x 10/100/1000BASE-T ports	8 x 10/100/1000BASE-T ports	8 x 10/100/1000BASE-T ports (PoE+)
Uplink port	2 x 2.5GE SFP ports	2 x 10GE SFP+ ports	4 x 2.5GE SFP ports
Dimensions (H x W x D)	43.6 mm x 250 mm x 180 mm	43.6 mm x 250 mm x 180 mm	43.6 mm x 320 mm x 210 mm
Chassis height	1 U	1 U	1 U
Maximum power consumption	10.94 W	10.94	Without PoE: 23.23 W -Full PoE load: 161.56 W (PoE: 128 W)
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 264 V AC, 45 Hz to 65 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	S220S-8P4JX	S220S-10PN4JX	S220S-24T4J
Switching capacity	66 Gbps	76 Gbps	68 Gbps
Packet forwarding rate	49 Mpps	57 Mpps	51 Mpps
Downlink port	8 x 10/100/1000BASE-T ports(PoE+)	6 x 10/100/1000BASE-T ports(PoE+); 2 x 10/100/1000BASE-T ports; 2 x 10M/100M/GE/2.5GE BASE-T PoE+ ports (multi-GE ports)	24 x 10/100/1000BASE-T ports
Uplink port	2 x 10GE SFP+ ports; 2 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 320 mm x 210 mm	43.6 mm x 320 mm x 210 mm	43.6 mm x 442 mm x 160 mm
Chassis height	1 U	1 U	1 U
Maximum power consumption	Without PoE: 23.23 W Full PoE load: 161.56 W (PoE: 128 W)	Without PoE: 24.03 W Full PoE load: 162.36 W (PoE: 128 W)	21.9 W
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 300 V AC, 47 Hz to 63 Hz	AC input: 90 V AC to 300 V AC, 47 Hz to 63 Hz	AC input: 90 V AC to 264 V AC, 45 Hz to 65 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	S220S-24T4JX	S220S-24P4J	S220S-24P4JX
Switching capacity	98 Gbps	68 Gbps	98 Gbps
Packet forwarding rate	73 Mpps	51 Mpps	73 Mpps
Downlink port	24 x 10/100/1000BASE-T ports	24 x 10/100/1000BASE-T ports (PoE+)	24 x 10/100/1000BASE-T ports (PoE+)
Uplink port	2 x 10GE SFP+ ports; 2 x 2.5GE SFP ports	4 x 2.5GE SFP ports	2 x 10GE SFP+ ports; 2 x 2.5GE SFP ports
Dimensions (H x W x D)	43.6 mm x 442 mm x 160 mm	43.6 mm x 442 mm x 220 mm	43.6 mm x 442 mm x 220 mm
Chassis height	1 U	1 U	1 U
Maximum power consumption	21.9 W	Without PoE: 38.58 W Full PoE load: 482.55 W (PoE: 400 W)	Without PoE: 38.58 W Full PoE load: 482.55 W (PoE: 400 W)
Rated input voltage	AC input: 100 V AC to 240 V AC, 50/60 Hz	<ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC; 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>	<ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC; 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>
Input voltage range	AC input: 90 V AC to 264 V AC, 45 Hz to 65 Hz	<ul style="list-style-type: none"> <li>AC input: 90 V AC to 290 V AC; 45 Hz to 65 Hz</li> <li>High-voltage DC input: 190 V DC to 290 V DC</li> </ul>	<ul style="list-style-type: none"> <li>AC input: 90 V AC to 290 V AC; 45 Hz to 65 Hz</li> <li>High-voltage DC input: 190 V DC to 290 V DC</li> </ul>
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	Air cooling, intelligent fan speed adjustment	Air cooling, intelligent fan speed adjustment

Item	S220S-24LP4JX	S220S-26PN4JX
Switching capacity	98 Gbps	98 Gbps
Packet forwarding rate	73 Mpps	73 Mpps
Downlink port	24 x 10/100/1000BASE-T ports ( PoE+)	22 x 10/100/1000BASE-T ports( PoE+); 2 x 10/100/1000BASE-T ports; 2 个 10/100/1000/2.5GBASE-T (Combo,PoE+)
Uplink port	2 x 10GE SFP+ ports; 2 x 2.5GE SFP ports	2 x 10GE SFP+ ports; 2 x 2.5GE SFP ports( Combo)
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
Maximum power consumption	Without PoE: 38.58 W Full PoE load: 277.55 W (PoE: 195 W)	Without PoE: 39.40 W Full PoE load: 484.27 W (PoE: 400 W)
Rated input voltage	<ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC, 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>	<ul style="list-style-type: none"> <li>AC input: 100 V AC to 240 V AC; 50/60 Hz</li> <li>High-voltage DC input: 240 V DC</li> </ul>
Input voltage range	<ul style="list-style-type: none"> <li>AC input: 90 V AC to 290 V AC; 45 Hz to 65 Hz</li> <li>High-voltage DC input: 190 V DC to 290 V DC</li> </ul>	<ul style="list-style-type: none"> <li>AC input: 90 V AC to 290 V AC; 45 Hz to 65 Hz</li> <li>High-voltage DC input: 190 V DC to 290 V DC</li> </ul>
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
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

Feature	Description
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
	Eight queues on each interface
	Packet filtering
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](mailto:support_e@huawei.com)

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