HUAWEI eKit

Huawei eKitEngine S210 Series Switches Datasheet

GE/10GE Uplink | Noise-Free and Energy-Saving | Layer 2 Managed Switches

Make SME Network Easier and Smarter

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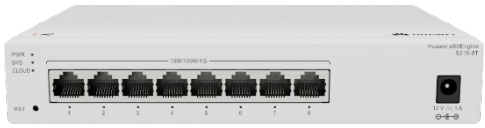
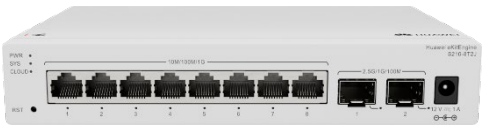
Product Overview

Huawei eKitEngine S210 series switches (S210 for short) are web-managed switches designed for the SME market. The S210 series switches provide 8 x GE electrical (PoE/non-PoE) ports, 24 x GE electrical (PoE/non-PoE) ports, 2 x 2.5GE optical ports, and 2 x 10GE optical ports. With features like easy installation and deployment, as well as flexible Ethernet networking, the products can be widely used in various scenarios, such as SME Network enterprise office, economic hotels, factories, primary and secondary education, and building security.

Product Models and Appearances

Huawei eKitEngine S210 series switches consist of the following models:

Product Appearance	Description
 eKitEngine S210-8T	• 8 x 10/100/1000BASE-T ports • Power supply by power adapters • Packet forwarding rate: 12 Mpps • Switching capacity: 16 Gbps
 eKitEngine S210-8T2J	• 8 x 10/100/1000BASE-T ports, 2 x 100M/GE/2.5GE SFP ports • Power supply by power adapters • Packet forwarding rate: 19.5 Mpps • Switching capacity: 26 Gbps
 eKitEngine S210-8LP2J	• 8 x 10/100/1000BASE-T ports (PoE+), 2 x 100M/GE/2.5GE SFP ports • Power supply by power adapters • PoE+: 32 W • Packet forwarding rate: 19.5 Mpps • Switching capacity: 26 Gbps
 eKitEngine S210-8P2J	• 8 x 10/100/1000BASE-T ports (PoE+), 2 x 100M/GE/2.5GE SFP ports • Power supply by power adapters • PoE+: 128 W • Packet forwarding rate: 19.5 Mpps • Switching capacity: 26 Gbps
 eKitEngine S210-24T2J	• 24 x 10/100/1000BASE-T ports, 2 x 100M/GE/2.5GE SFP ports • Built-in AC power supply • Packet forwarding rate: 43.5 Mpps • Switching capacity: 58 Gbps
 eKitEngine S210-24P2J	• 24 x 10/100/1000BASE-T ports (PoE+), 2 x 100M/GE/2.5GE SFP ports • Built-in AC power supply

Product Appearance	Description
	• PoE+: 400 W • Packet forwarding rate: 43.5 Mpps • Switching capacity: 58 Gbps

Product Features and Highlights

Flexible Ethernet Networking

- Flexible installation: The switches support wall-, desktop-, and rack-mounted installation, meeting installation and deployment requirements.
- These switches provide a wide range of ports, including GE electrical ports, 2.5GE optical ports, and 10GE optical ports, greatly improving networking flexibility.
- In addition to traditional Spanning Tree Protocol (STP) and Rapid Spanning Tree Protocol (RSTP), the switches also support the industry's latest Ethernet Ring Protection Switching (ERPS) standard. ERPS is defined in ITU-T G.8032. It provides millisecond-level protection switching using traditional Ethernet MAC.

Ultra-High-Speed and Reliable Access

- These switches support full-line-rate forwarding, allowing all ports to achieve non-blocking data packet forwarding. This provides ultra-high-speed access experience for users, meeting the requirements of high-bandwidth services, such as HD video conferencing, online video, and large file download.
- Port isolation can be configured on the downlink ports of these switches as required. In this way, all data is forwarded by the central switch based on user access policies to ensure terminal access security.

Ultra-Low Power Consumption

- The 24-port PoE switches use the intelligent PID algorithm for fan speed adjustment. Other models are fanless and noise-free, ensuring ultra-low power consumption. The average maximum power consumption of a single port on some models is less than 1 W, saving 30% power compared with traditional switches.

Diversified Security Control

- The switches can defend against DoS and user-targeted attacks.

PoE Power Supply

PoE-capable models provide the following capabilities:

- Fast PoE: A 24-port PoE switch 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 as soon as it is powered on, without waiting until it completes the restart. This greatly shortens the downtime of PDs.
- Perpetual PoE: When a switch reboots, the power supply to connected PDs is not interrupted.

Rich PoE Compatibility

PoE switches are compatible with more than 100 types of non-standard PoE terminals and can supply power to common non-standard PoE terminals.

Smart Upgrade

- Leveraging Huawei Online Upgrade Platform (HOUP), the switches support smart upgrade. They obtain the version upgrade path from the HOUP and download the new system software, achieving automatic one-click upgrade. In addition, this feature supports system software pre-loading, which greatly shortens the upgrade time and reduces the service downtime.
- 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 standardizes the upgrade path, which greatly reduces the risk of upgrade failure.

Forwarding First

- The model with the Forwarding First silkscreen on the front panel supports the Forwarding First function. This function is available on ports 1 to 8. With this function, traffic on ports 1 to 8 is preferentially forwarded when traffic congestion occurs on uplink ports.

Cloud Management

- HUAWEI eKit App and Huawei eKit SME Network Center (SNC) allow users to configure, monitor, and inspect switches on the cloud, reducing required on-site deployment and O&M workforce and network OPEX.

Product Specifications

Item	eKitEngine S210-8T	eKitEngine S210-8T2J	eKitEngine S210-8LP2J
Port description	8 x 10/100/1000BASE-T ports	8 x 10/100/1000BASE-T ports (PoE+), 2 x 100M/GE/2.5GE SFP ports	8 x 10/100/1000BASE-T ports (PoE+), 2 x 100M/GE/2.5GE SFP ports
Chassis dimensions (H x W x D)	35 mm x 195 mm x 130 mm	35 mm x 195 mm x 130 mm	43.6 mm x 195 mm x 160 mm
Weight without packaging	0.81 kg	0.95 kg	1.35 kg
Installation mode	Desktop-mounted or wall-mounted	Desktop-mounted or wall-mounted	Desktop-mounted or wall-mounted
Power supply type	Power adapter	Power adapter	Power adapter
Rated voltage	100 V AC to 240 V AC; 50/60 Hz	100 V AC to 240 V AC; 50/60 Hz	100 V AC to 240 V AC; 50/60 Hz
Maximum power consumption	8.90 W	10.93 W	Without PoE: 15.59 W (device + adapter) Full PoE load: 55.82 W (PoE: 32 W)

Item	eKitEngine S210-8T	eKitEngine S210-8T2J	eKitEngine S210-8LP2J
Operating temperature	–5°C to +45°C	–5°C to +45°C	–5°C to +45°C
Storage temperature	–40°C to +70°C	–40°C to +70°C	–40°C to +70°C
Relative humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (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	±6 kV in differential mode, ±6 kV in common mode
Heat dissipation mode	Fanless, natural heat dissipation	Fanless, natural heat dissipation	Fanless, natural heat dissipation

Item	eKitEngine S210-8P2J	eKitEngine S210-24T2J	eKitEngine S210-24P2J
Port description	8 x 10/100/1000BASE-T ports (PoE+), 2 x 100M/GE/2.5GE SFP ports	24 x 10/100/1000BASE-T ports, 2 x GE/2.5GE SFP ports	24 x 10/100/1000BASE-T downlink ports (PoE+), 2 x GE/2.5GE SFP ports
Chassis dimensions (H x W x D)	43.6 mm x 195 mm x 160 mm	43.6 mm x 442 mm x 160 mm	43.6 mm x 442 mm x 220 mm
Weight without packaging	1.6 kg	2.06 kg	2.88 kg
Installation mode	Desktop-mounted or wall-mounted	Desktop-mounted, wall-mounted, or rack-mounted	Desktop-mounted, wall-mounted, or rack-mounted
Power supply type	Power adapter	AC Built-in	AC Built-in
Rated voltage	170 V AC to 240 V AC; 50/60 Hz	100 V AC to 240 V AC; 50/60 Hz	100 V AC to 240 V AC; 50/60 Hz
Maximum power consumption	Without PoE: 17.59 W (device + adapter) Full PoE load: 161.02 W (PoE: 128 W)	18.90 W	Without PoE: 32.42 W Full PoE load: 482.68 W (PoE: 400 W)
Operating temperature	–5°C to +45°C	–5°C to +45°C	–5°C to +45°C
Storage temperature	–40°C to +70°C	–40°C to +70°C	–40°C to +70°C
Relative humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Power port	±4 kV in differential	±6 kV in differential mode,	±6 kV in differential mode,

Item	eKitEngine S210-8P2J	eKitEngine S210-24T2J	eKitEngine S210-24P2J
surge protection	mode, ±4 kV in common mode	±6 kV in common mode	±6 kV in common mode
Heat dissipation mode	Fanless, natural heat dissipation	Fanless, natural heat dissipation	Built-in fan module, intelligent fan speed adjustment

Service Feature

Feature	Description
Performance	Maximum number of MAC addresses: 8K Maximum number of VLANs: 32
Interface basics	Jumbo frame Port Up/Down detection Port auto-negotiation Uplink port link aggregation
Security features	Secure boot Broadcast, multicast, and unknown unicast storm control Port isolation Blackhole MAC address Macsec
Ethernet basics	VLAN Port types: access and trunk Port-based VLAN assignment Automatic MAC address learning Automatic MAC address aging Static MAC address entry
Routing features	ARP DNS client
QoS	Port queue scheduling Traffic rate limiting on ingress ports Congestion avoidance
User access	DHCP client
Configuration maintenance	Restoration of factory settings
Reliability	Software in active/standby mode ERPS
Device	Management via web, HUAWEI eKit App, and HUAWEI eKit SNC

Feature	Description
management	SNMP v1/v2/v3
Device maintenance	Ping、Tracert detection Port mirroring Virtual cable test (VCT)

More Information

For more information about Huawei eKitEngine switches, visit https://ekit.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
- Sending an email to the customer service mailbox: support_e@huawei.com

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