Sales Pitches for Huawei eKitEngine S310 Series Switches

Product Overview

Huawei eKitEngine S310 series switches (S310 for short) are Layer 3 GE/10GE switches designed for the SMB market. They include eight models, such as those with 24 GE downlink electrical ports (PoE/non-PoE ports), and 48 GE downlink electrical ports. 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 as core switches (on a small network) or aggregation switches (on a midsize or large network) in scenarios such as economic hotels, factories, primary and secondary education, shelter hospitals, and building security.

In addition to traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), S310 supports the latest Ethernet Ring Protection Switching (ERPS) standard. Among those protocols, S310 supports the Smart Link function, which implements backup of uplinks. In this way, one switch can connect to multiple aggregation switches through multiple links, improving link reliability.

Additionally, S310 supports multiple security authentication modes, such as MAC address authentication, 802.1X authentication. This product series also supports intelligent stack (iStack), which combines multiple stacking-capable switches into a logical switch. Member switches in a stack back up each other to improve device reliability. This technology also facilitates port number expansion and improves the bandwidth and processing capabilities of the stack. iStack simplifies device configuration and management. After a stack is set up, multiple physical switches are virtualized into one logical device. You can log in to any stack member switch to manage all the member switches in the stack.

Product Specifications

Product Model	Product Appearance	Port Description	Key Parameters
eKitEngine S310-24T4X		24 x GE ports, 4 x 10GE SFP+ ports	• Switching capacity: 128 Gbps • Packet forwarding rate: 95 Mpps • Standard rack model • Air cooling, intelligent fan speed adjustment
eKitEngine S310-24P4X		24 x GE ports (PoE+), 4 x 10GE SFP+ ports	• Switching capacity: 128 Gbps • Packet forwarding rate: 95 Mpps • PoE power: 400 W • Standard rack model

Product Model	Product Appearance	Port Description	Key Parameters
			• Air cooling, intelligent fan speed adjustment
eKitEngine S310-48T4X		48 x GE ports, 4 x 10GE SFP+ ports	• Switching capacity: 176 Gbps • Packet forwarding rate: 131 Mpps • Standard rack model • Fanless, natural heat dissipation
eKitEngine S310-48P4X		48 x GE ports (PoE+), 4 x 10GE SFP+ ports	• Switching capacity: 176 Gbps • Packet forwarding rate: 131 Mpps • PoE power: 380 W • Standard rack model • Air cooling, intelligent fan speed adjustment
eKitEngine S310-48P4S		48 x GE ports (PoE+), 4 x GE SFP ports	• Switching capacity: 104 Gbps • Packet forwarding rate: 77 Mpps • PoE power: 380 W • Standard rack model • Air cooling, intelligent fan speed adjustment
CloudEngine S310-48T4S		48 x GE ports, 4 x GE SFP ports	• Switching capacity: 104 Gbps • Packet forwarding rate: 77 Mpps • Standard rack model • Air cooling, intelligent fan speed adjustment
CloudEngine S310-24T4S		24 x GE ports, 4 x GE SFP ports	• Switching capacity: 56 Gbps • Packet forwarding rate: 42 Mpps • Standard rack model • Air cooling, intelligent fan speed adjustment
CloudEngine S310-24P4S		24 x GE ports (PoE+), 4 x GE SFP ports	• Switching capacity: 56 Gbps • Packet forwarding rate: 42 Mpps • PoE power: 400 W • Standard rack model • Air cooling, intelligent fan speed adjustment

Target Markets

Currently, the target markets of Huawei eKitEngine S310 series switches are SOHO enterprise office, primary and secondary education, small- and medium-sized hospitals, economic hotels, factories, and building security. Scenarios such as wireless coverage, video security, and office network construction are mainly involved. S310 switches are usually deployed at the aggregation layer and core layer of a network.

Unique Selling Points

Differentiators	Huawei eKitEngine S310 Series Layer 3 Fully-Managed Switches	Other Vendors' Layer 3 Fully-Managed Switches	Benefits
☆iStack	S310 can virtualize four physical devices into one logical device, improving device-level reliability, facilitating port number expansion, and enhancing bandwidth and processing capabilities. iStack simplifies device configuration and management. After a stack is set up, you can log in to any stack member switch to manage all the member switches in the stack.	Only a small number of other vendors' high-end models support the stacking function.	Benefits for users: meet customers' service development requirements over the next three to five years, facilitate capacity expansion, and protect customer investment. Benefits for installation partners: You can use this specification to make other vendors provide models of higher prices, improving the project success rate.
☆Cold and heat resistance, better environmental adaptability	• Operating temperature: –5°C to +50°C • Operating humidity: 5% to 95% • Applicable to various operating environments	Most other vendor's fully-managed switches: • Operating temperature: 0°C to 45°C/50°C • Operating humidity: 10% to 90% • Poorer environment adaptability	Benefits for users: Huawei eKitEngine S310 series switches support normal working in various complex indoor environments, such as in corridors without air conditioners or on airtight ceilings. Benefits for installation partners: easy product model selection without the need to consider the operating environment, simplified installation, and reduced subsequent maintenance costs.
☆Easy web management	Local deployment supports the expert mode and wizard mode. The wizard mode can be used to complete the configuration in four steps.	Wizard-based deployment is not supported	Benefits for installation partners: Easier deployment and O&M, saving time
☆Low fan noise, reducing power consumption	Switches use the intelligent PID speed adjustment algorithm, all-round monitoring, intelligent partitioning of the entire system, optimal system power consumption, and minimum noise	Other Vendors' Web-Managed Switches do not have this function	Benefits for users: Low noise, energy saving and environmental protection

Sales Pitches

1. What are the advantages of using Layer 3 fully-managed switches in SOHO enterprise office projects?

1) Layer 3 fully-managed switches support DHCP snooping, preventing enterprise employees from unauthorized router connections, as well as ensuring network security and stability.

2) These switches also help to isolate services of different enterprise service departments and implement cross-departmental communication, specifying a limited data access range to ensure information security.

2. The operating temperature of the S310 series ranges from –5°C to +50°C. What's the benefit of that?

1) The lowest operating temperature of the S310 series can reach –5°C. This ensures normal working in most areas

during winter. However, the lowest operating temperature of other vendors' devices is only 0°C, which may lead to frequent device faults in low-temperature environments. Additionally, if the devices are used in such environments for a long time, their service life will be severely reduced.

2) In summer, the temperature in corridors without air conditioners or in airtight ceilings may exceed 45°C and even reach 50°C, while the highest operating temperature of many other vendors' switches is only 45°C. In comparison, the S310 series can work properly in such scenarios, simplifying the after-sales services of the installation partners.

3) The extended operating temperature of the S310 series highlights the products' higher design standards and quality. The whole series uses better materials and workmanship, providing higher network reliability.

3. What are the improvements in reducing fan noise of the S310 series switches?

The S310 series switches adopt the exclusive intelligent PID speed adjustment algorithm, all-round monitoring, intelligent partitioning of the entire system, and PID smart brain to ensure reliable device operation. In addition, the system energy consumption is optimal, and the noise is minimized. The power consumption is 30% lower and the noise is 20% lower.

4. How about the reliability of the S310 series switches?

1) In addition to traditional Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP), and Multiple Spanning Tree Protocol (MSTP), eKitEngine S310 series switches support the latest Ethernet Ring Protection Switching (ERPS) standard in the industry. ERPS is defined in ITU-T G.8032. It provides millisecond-level protection switching based on traditional Ethernet MAC and bridging functions.

2) eKitEngine S310 series switches support the Smart Link function, which implements backup of uplinks. One switch can connect to multiple aggregation switches through multiple links, significantly improving reliability of access devices.

3) eKitEngine S310 series switches support iStack. Multiple switches that support stacking can be logically stacked into one virtual switch.

4) Three-partition software management, independent hardware watchdog, and never downtime.