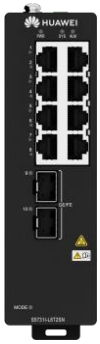
Huawei CloudEngine S5731I-L Series Industry Switches Brochure

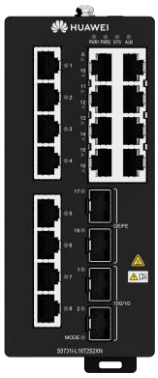
Huawei CloudEngine S5731I-L series industry switches provide all-GE downlink ports and 1/10GE optical uplink ports, Plug-and-play, simple and flexible.

Product Overview

CloudEngine S5731I-L series industrial switches (S5731I-L for short) are next-generation Layer 2 industrial switches that can be controlled independently. The switches provide flexible GE access ports and GE/10GE uplink ports, and adopt strict industrial-grade design.It can be installed in an outdoor cabinet. Compared with traditional switches without a management system, the S5731I-L supports local web-based management and has a simplified architecture, implementing plug-and-play and simplified and flexible networking to meet differentiated network management requirements of different industries. It can be widely used in smart manufacturing, smart mining, smart transportation, safe city, electric power and other industries.

Models and Appearances

Models and Appearances	Description
 CloudEngine S5731I-L8T2SN	• 8 x 10/100/1000Base-T ports, 2 x 100M/1G SFP port, 1 x DI/DO • Single DC power supply or adapter power supply • Forwarding performance: 15 Mpps • Switching capacity: 98 Gbps
 CloudEngine S5731I-L8T2S2XN	• 8 x 10/100/1000Base-T ports, 2 x 100M/1G SFP port, 2 x 1/10G SFP+ port, 1 x DI/DO • Dual DC power supply or adapter power supply • Forwarding performance: 45 Mpps • Switching capacity: 98 Gbps

Models and Appearances	Description
 CloudEngine S5731I-L8P2S2XN	• 8 x 10/100/1000Base-T ports, 2 x 100M/1G SFP port, 2 x 1/10G SFP+ port, 1 x DI/DO • Dual DC power supply or adapter power supply • PoE+ • Forwarding performance: 45 Mpps • Switching capacity: 98 Gbps
 CloudEngine S5731I-L16T2S2XN	• 16 x 10/100/1000Base-T ports, 2 x 100M/1G SFP port, 2 x 1/10G SFP+ port, 1 x DI/DO • Dual DC power supply or adapter power supply • Forwarding performance: 57 Mpps • Switching capacity: 98 Gbps

Features and Highlights

Industrial Quality

- Natural heat dissipation, long-term operating temperature range up to -40 ~ 75°C.
- IP40 protection level.
- Isolated power protection, wide voltage input 9.6V~60V.
- Provides multiple protection mechanisms, such as reverse connection prevention, overtemperature protection, and overvoltage protection.
- Complies with multiple certification standards, meets higher EMC requirements, and meets strict certification requirements in the electric power, transportation, and rail transportation industries.

Highly Reliable and Flexible Networking

- Supports STP and RSTP to ensure network-level reliability.
- Supports link aggregation, achieving link-level reliability.
- Supports automatic high-priority forwarding of mainstream industrial protocols such as PROFINET and GOOSE.
- Plug-and-play, auto-sensing ports, automatic identification of industrial protocols, configuration-free VLAN and ring network, and normal power supply after devices are connected to the power grid.

Simplified architecture and Easy Maintenance

- S5731I-L supports simplified architecture, can be used as an expansion module of the central switch to implement simplified and efficient networking.
- Web O&M: Users can perform convenient and visualized management operations on devices through the web GUI.

PoE power supply

- Fast PoE: When a switch is powered on or restarts after a power failure, the switch can provide power for PDs in seconds, which greatly shortens the power-off time of PDs.
- Perpetual PoE: When the switch restarts (for example, during a software upgrade), it provides uninterrupted power supply for connected PDs, ensuring uninterrupted PoE power supply.

Product Specifications

Item	CloudEngine S5731I-L8T2SN	CloudEngine S5731I-L8T2S2XN	CloudEngine S5731I-L8P2S2XN	CloudEngine S5731I-L16T2S2XN
Fixed port	8 x 10/100/1000Base-T ports, 2 x 100M/1G SFP port, 1 x DI/DO	8 x 10/100/1000Base-T ports, 2 x 100M/1G SFP port, 2 x 1/10G SFP+ port, 1 x DI/DO	8 x 10/100/1000Base-T ports, 2 x 100M/1G SFP port, 2 x 1/10G SFP+ port, 1 x DI/DO	16 x 10/100/1000Base-T ports, 2 x 100M/1G SFP port, 2 x 1/10G SFP+ port, 1 x DI/DO
Dimensions (H x W x D)	133x150x44	133x150x44	133x150x44	133x150x66
Chassis weight	1.34kg	1.34kg	1.35kg	1.70kg
Installation methods	DIN rail	DIN rail	DIN rail	DIN rail
Power supply type	60 W AC power adapter or external DC power supply, single power input	60 W AC power adapter or external DC power supply, supporting 1:1 hot backup	240 W AC PoE power adapter or external DC power supply, supporting 1:1 hot backup	60 W AC power adapter or external DC power supply, supporting 1:1 hot backup
Rated voltage range	DC input: 12V DC～48V DC	DC input: 12V DC～48V DC	DC input: 56V DC	DC input: 12V DC～48V DC
Maximum voltage range	DC input: 9.6V DC～60V DC	DC input: 9.6V DC～60V DC	DC input: 54–57 V DC (PoE/PoE+) or 48 V DC (PoE)	DC input: 9.6V DC～60V DC
Maximum power consumption	12.6W @60V 10.44W @12V	16.2W @60V 13.2W @12V	• 16.24 W (without PD) • 257.6 W (with PD, PD power consumption of 240W)	22.2W @60V 19.8W @12V
operating temperature	0-1800 m altitude, industry-level optical modules: -40°C to +65°C (installed in a sealed cabinet) -40°C~+70°C (Installed in a fume hood with a minimum ventilation rate of 40LFM (Line Feet Minute)) -40°C~+75°C (Installed in a fume cupboard with a fan,	0-1800 m altitude, industry-level optical modules: -40°C to +65°C (installed in a sealed cabinet) -40°C~+70°C (Installed in a fume hood with a minimum ventilation rate of 40LFM (Line Feet Minute)) -40°C~+75°C (Installed in a fume cupboard with a fan, the ventilation air speed is	0-1800 m altitude, industry-level optical modules: -40°C to +60°C (installed in a sealed cabinet) -40°C~+70°C (Installed in a fume hood with a minimum ventilation rate of 80LFM (Line Feet Minute)) -40°C~+75°C (Installed in a fume cupboard with a fan, the ventilation air speed is	0-1800 m altitude, industry-level optical modules: -40°C to +65°C (installed in a sealed cabinet) -40°C~+70°C (Installed in a fume hood with a minimum ventilation rate of 40LFM (Line Feet Minute)) -40°C~+75°C (Installed in a fume cupboard with a fan, the ventilation air speed is at least 200LFM)

Item	CloudEngine S5731I-L8T2SN	CloudEngine S5731I-L8T2S2XN	CloudEngine S5731I-L8P2S2XN	CloudEngine S5731I-L16T2S2XN
	the ventilation air speed is at least 200LFM)	at least 200LFM)	at least 200LFM)	
Storage temperature	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C	-40°C to +85°C
Relative humidity	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)	5% to 95% (non-condensing)
Surge protection specification (service port)	±6 kV in common mode	±6 kV in common mode	±6 kV in common mode	±6 kV in common mode
Surge protection specification (power port)	• Differential mode: ± 1 kV • Common mode: ± 2 kV	• Differential mode: ± 1 kV • Common mode: ± 2 kV	• Differential mode: ± 1 kV • Common mode: ± 2 kV	• Differential mode: ± 1 kV • Common mode: ± 2 kV
Heat dissipation	No fans,Natural heat dissipation	No fans,Natural heat dissipation	No fans,Natural heat dissipation	No fans,Natural heat dissipation

Service Features

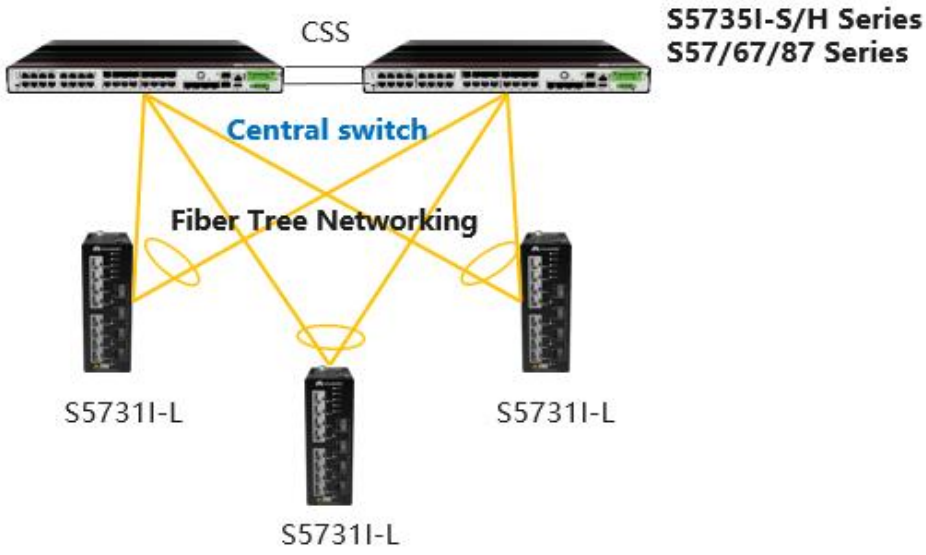
Features	Feature description
Interface Basics	VLANs Jumbo frames Port UP/DOWN detection Port auto-negotiation Link aggregation
Security	Secure boot Storm suppression Port Isolation
Ethernet Basics	128 VLANs Access/Trunk access mode Port-based VLAN assignment MAC address auto-learning Automatic MAC address aging Static MAC address entries
Qos	Ingress port traffic rate limiting Port queue scheduling PROFINET（0x8892）, GOOSE（0x88B8） Mainstream Industrial Protocol Forwarding
User access	DHCP client
Configuration and Maintenance	Web-based NMS Simplified architecture(CloudEngine S12700E/S12700/S7700/S6700/S5700 Series Switches Central Switch Management) Restoring Factory Settings

Features	Feature description
Reliability	STP (IEEE 802.1d), RSTP (IEEE 802.1w) Software active/standby Configuring the active/standby
Time Management	SNTP client
Mode	Supports weak management mode (web management) and no management (Simplified architecture) mode

Networking and Applications

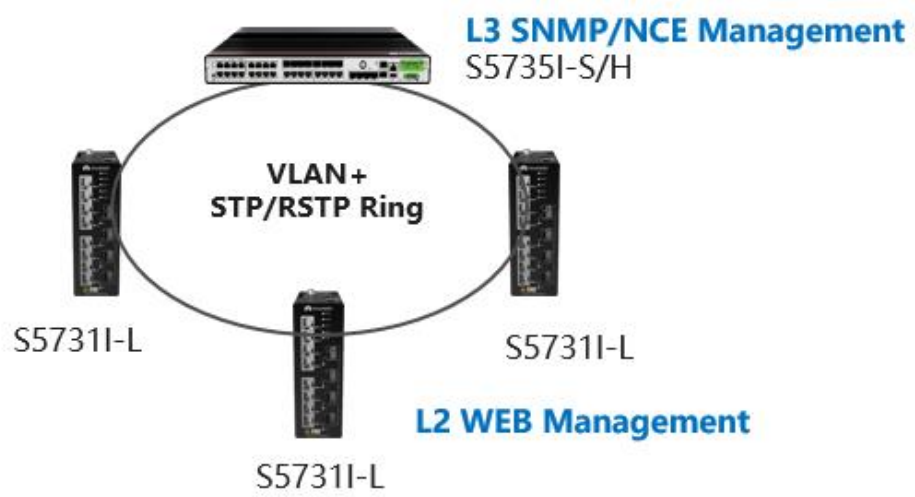
Simplified Architecture

CloudEngine S8700/6700/5700 series switches and S5735I-S/H switches are used as central switches in industrial parks, and S5731I-L switches are used as port extensions of central switches. They provide wired or wireless access services for terminals in industrial parks and can be widely used in energy and electricity industries. Manufacturing and other industries.



High-reliability Ring Network

CloudEngine S5735I-S/H aggregation switch and S5731I-L access switches form an STP/RSTP ring network to provide wired or wireless access services. Manufacturing and other industries.



Ordering Information

Model	Product Description
CloudEngine S5731I-L8T2SN	S5731I-L8T2SN,8*10/100/1000BASE-T ports,2*GE SFP ports, 1*DI/1*DO, DIN Rail Mounting, Single 10.8-60 V DC power ,Fanless
CloudEngine S5731I-L8T2S2XN	S5731I-L8T2S2XN,8*10/100/1000BASE-T ports,2*GE SFP ports, 2*10GE SFP ports, 1*DI/1*DO, DIN Rail Mounting,Dual redundant9.6-60 V DC power ,Fanless
CloudEngine S5731I-L8P2S2XN	S5731I-L8P2S2XN,8*10/100/1000BASE-T ports,2*GE SFP ports, 2*10GE SFP ports, 8*POE+,1*DI/1*DO, DIN Rail Mounting,Dual redundant9.6-60 V DC power ,Fanless
CloudEngine S5731I-L16T2S2XN	S5731I-L16T2S2XN,16*10/100/1000BASE-T ports,2*GE SFP ports, 2*10GE SFP ports, 1*DI/1*DO, DIN Rail Mounting,Dual redundant9.6-60 V DC power ,Fanless
PAC60S12-AN	60W AC Power Adapter
PAC240S56-CN	240 W AC PoE power adapter

More Information

For more information about Huawei Campus Switches, visit http://e.huawei.com or contact us in the following ways:

- Global service hotline: http://e.huawei.com/en/service-hotline
- Logging in to the Huawei 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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