



Huawei CloudEngine S1710I Series Industrial Data Collection Gateway



Huawei CloudEngine S1710I series industrial data collection gateways are designed for harsh IoT environments and can be widely used in various sectors. They can meet network communication requirements in challenging environments with extreme temperature, humidity, and electromagnetic interference.

Product Overview

Huawei CloudEngine S1710I series has industrial-grade environment adaptability, can work in low power consumption mode, provides rich IoT ports, and supports O&M through Bluetooth. The series is applicable to various IoT scenarios, such as smart hydrological data collection, smart street lamps, and smart power distribution rooms.

S1710I series includes two models — CloudEngine S1710I-S16D6A-LTECN and CloudEngine S1710I-S16D6A.

Appearance of Huawei CloudEngine S1710I series products

Product Name	Description	Application Scenario
 <p>CloudEngine S1710I-S16D6A-LTECN</p>	<p>S1710I-S16D6A-LTECN host Industrial-grade IoT access and rich ports ARM: single-core @ 240 MHz, 512 KB memory LTE/3G/GSM, 2 x SIM cards for dual SIM standby (DSS)</p>	<p>Industrial-grade low-power-consumption data collection scenario</p>
 <p>CloudEngine S1710I-S16D6A</p>	<p>S1710I-S16D6A host Industrial-grade IoT access and rich ports ARM: single-core @ 240 MHz, 512 KB memory</p>	<p>Industrial-grade IoT data collection scenario</p>

Features and Highlights

Lightweight deployment, ensuring security and reliability

- 1) Open software and hardware resources as well as lightweight application deployment, greatly simplifying the secondary development of narrowband data services
- 2) Data communication encryption and lightweight application file encryption, ensuring device security and reliability

Industrial-grade design, delivering excellent quality

- 1) Fanless design, extended operating temperature range from -40°C to +70°C
- 2) Normal functioning under strong magnetic interference, meeting IEC 61000-4 and GB/T 17626 requirements

- 3) IEC 61850-3 compliant
- 4) 2 x SIM cards for DSS

Rich ports, supporting flexible expansion

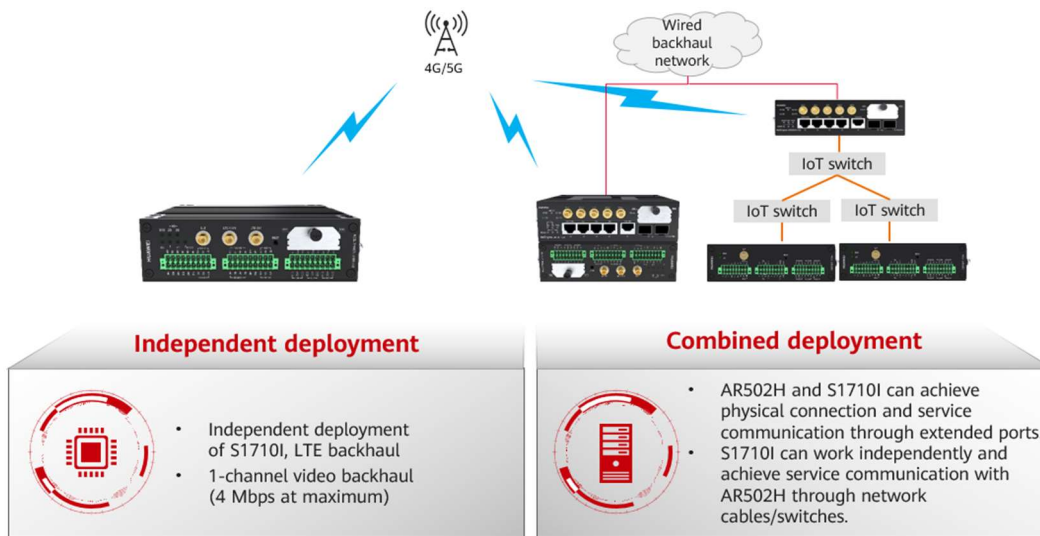
- 1) S1710I-S16D6A-LTECN: LTE, and compatibility with 3G/GSM
- 2) S1710I-S16D6A-LTECN: low power consumption mode, meeting battery endurance requirements (≥ 30 days) for hydrological data collection
- 3) Integration of FE, RS-232, RS-485, DI/DO, AI, and many other ports
- 4) S1710I-S16D6A: PoE power supply

Simplified deployment and easy O&M

- 1) AC-IoT for cloud management
- 2) Visualized configuration and more user-friendly GUIs
- 3) Application-based deployment and O&M through Bluetooth, meeting near-device local O&M and deployment requirements

Flexible Deployment in All Scenarios

Huawei CloudEngine S1710I-S series products can be independently deployed or deployed as the I/O expansion module to work together with an edge computing gateway. You can flexible deploy them according to actual scenarios.



Product Specifications

Specification	CloudEngine S1710I-S16D6A-LTECN	CloudEngine S1710I-S16D6A
Hardware Parameters		
Case	Die-casting metal	
Processor	ARM: single-core @ 240 MHz	
Memory	512 KB	
Flash	66 MB	
Fixed Ethernet port	1 x FE electrical port, 10 Mbit/s and 100 Mbit/s auto-sensing	

Specification	CloudEngine S1710I-S16D6A-LTECN	CloudEngine S1710I-S16D6A
Fixed console port	2 x RS-232 ports, 4 x RS-485 ports	
Alarm port	6 x DI ports (passive contact input, isolated) 2 x DI ports (passive contact input, non-isolated) 6 x DI ports (relay output, normally open or closed)	
Analog port	2 x AI ports (0 V DC to 5 V DC voltage input, 4 mA to 20 mA current input)	
Console port	1 (RJ45)	
SIM card	2 x SIM cards	N/A
Reset/Configuration	Reset/Configuration button: used to manually restore factory settings You can press and hold down the button for at least 5 seconds to restart the device and restore its factory settings. You can press and hold down the button for less than 5 seconds to reset the device.	
LED indicator	DC x 1, SYS x 1, FE x 1, 2G x 1, 3G x 1, RSSI x 3	DC x 1, SYS x 1, FE x 1
Hibernation wake-up mode	Supported	N/A
Power supply	DC: 9.6 V to 60 V (industrial terminal) (The device is sensitive to the fluctuation of the input high voltage. It is recommended that the device be used with the maximum input voltage being derated by 95% to avoid device damage caused by voltage fluctuation.)	
Dimensions (H x W x D)	55 mm x 150 mm x 133 mm	44 mm x 150 mm x 133 mm
Net weight	0.82 kg	0.74 kg
Typical power consumption	< 3.7 W	
Installation mode	DIN rail-mounted/Workbench-mounted/Wall-mounted	
Storage temperature	-40°C to +85°C	
Operating temperature	-40°C to +70°C	
Operating humidity	5% RH to 95% RH (non-condensing)	
IP rating	IP40	
EMC standards compliance	EN 55032/CISPR 32/GB 9254, CLASS A IEC 61000-4, GB/T 17626	
Security compliance	IEC/EN/UL 60950-1 IEC/EN/UL 62368-1 GB 4943.1	
Network access license issued by MIIT	Compliant	N/A
SRRC certification	Compliant	

Specification	CloudEngine S1710I-S16D6A-LTECN	CloudEngine S1710I-S16D6A
Software Parameters		
Basic features	IPv4/IPv6 (LTE & FE), TCP/UDP, ICMP, ARP, DHCP, DNS, NTP, MQTT, HTTP	
Security and reliability	SYN flood attack defense, PKI, communication encryption (HTTPS and MQTTS), application file encryption, key component management, and partition-based configuration file backup	
Configuration maintenance	Menu maintenance, user operation logs, system status monitoring, NCE-IoT remote management, and Bluetooth-based deployment	
Firmware management	Local and remote upgrade	
Event alarm	System logs and alarms	
Secondary development	Lightweight secondary development of JavaScript applications, secondary development guidance	

Ordering Information

Model	Description
Host	
S1710I-S16D6A-LTECN	Router,S1710I-S16D6A-LTECN 2*RS232,4*RS485,6*DI(Isolated)+2*DI(Non-isolated),6*DO,2*AI(Non-isolated),1*FE(10M/100M RJ45),1*LTE,9.6~60VDC
S1710I-S16D6A	Router,S1710I-S16D6A 2*RS232,4*RS485,6*DI(Isolated)+2*DI(Non-isolated),6*DO,2*AI(Non-isolated),1*FE(10M/100M RJ45),9.6~60VDC
Power Module	
PAC60S12-AN	Function Module,AC Adapter,PAC-60WB,60W AC Power Module(No Fan)
4G Antenna	
SL10653N	Omni-directional Antenna,698MHz-960MHz/1710MHz-2690MHz,1.0dBi(698MHz-960MHz)&3dBi(1710MHz-2690MHz),10W,SMA-J,Without Bracket,LTE Indoor Remote Antenna,Magnetic Catche mounted
SL10951A	Omni-directional Antenna,698MHz-960MHz/1710MHz-2700MHz,1.5dBi/2.5dBi,20W,N50SF,Without Bracket,LTE Outdoor Antenna

More Information

For more information, visit <https://e.huawei.com/en/> or contact us in the following ways:


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Huawei technical support: <https://support.huawei.com/enterprise/en/index.html>

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