

X1

4G Industrial Gateway



Overview

X1 4G Industrial Gateway is a 4G gateway with edge computing capability for IIoT. It adopts a fully industrial-grade hardware platform with powerful data collection, storage, analysis and processing capabilities. 4G wireless network and multiple bandwidth services provide stable and reliable internet access everywhere. With its excellent product quality and comprehensive security, it realizes equipment networking and provides solutions for true equipment informatization, manufacturing intelligence, edge computing and maintenance industrial internetization.

Highlights



Internet failover

4G/Wi-Fi/Ethernet can be configured as backup mode for auto failover between different links



Edge computing

Local real-time data analysis and intelligent processing



Rich interface

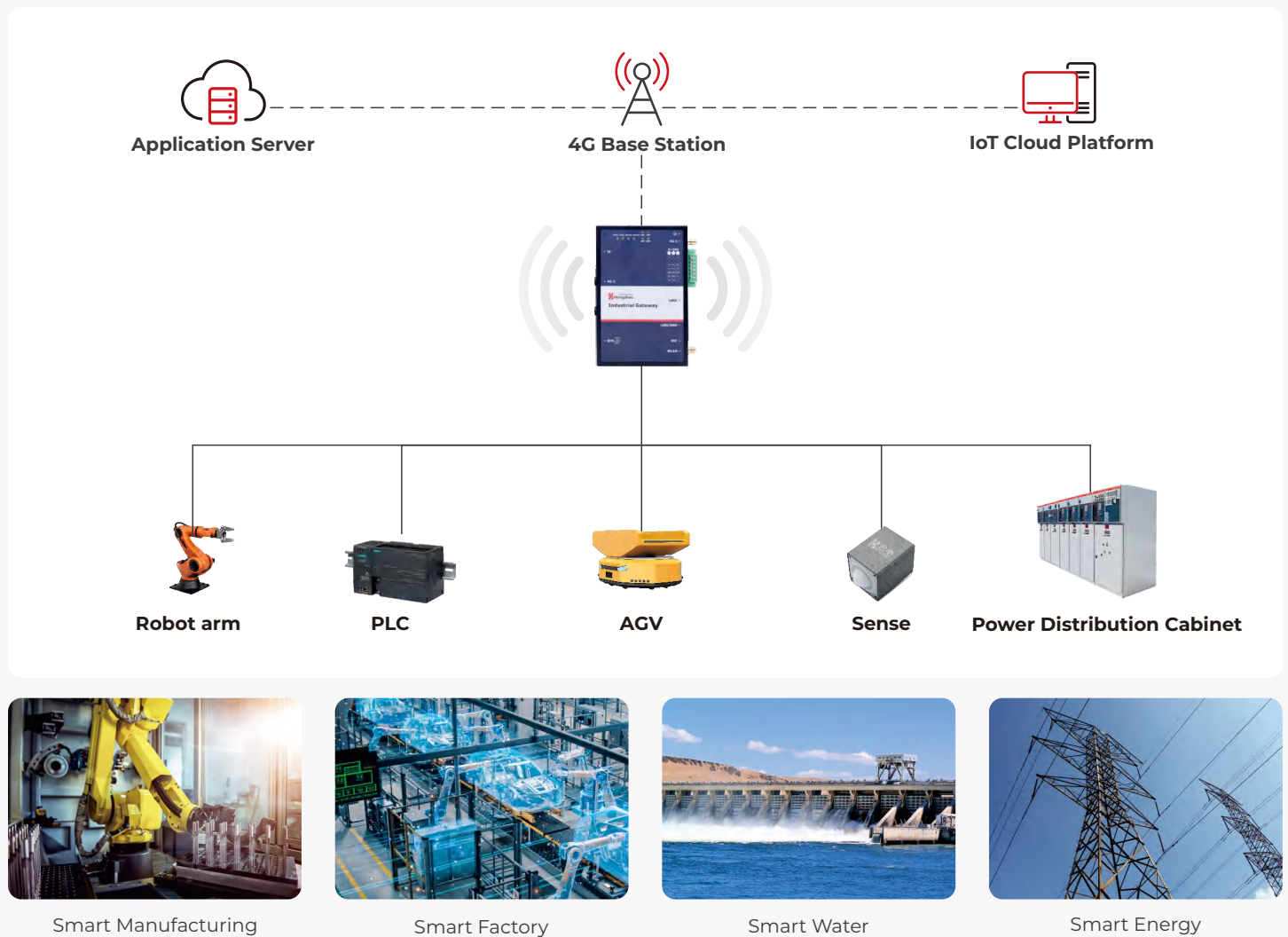
Supports RS485 ports, RS232 ports, RJ45 ports, and TF Card ports for different applications



Industrial Standard Design

Wide temperature and input voltage range, IP43 protection level

Topology diagram



Features



LTE Cat1/Cat4 with industrial CPU



Data acquisition and edge processing



Support various industrial protocols

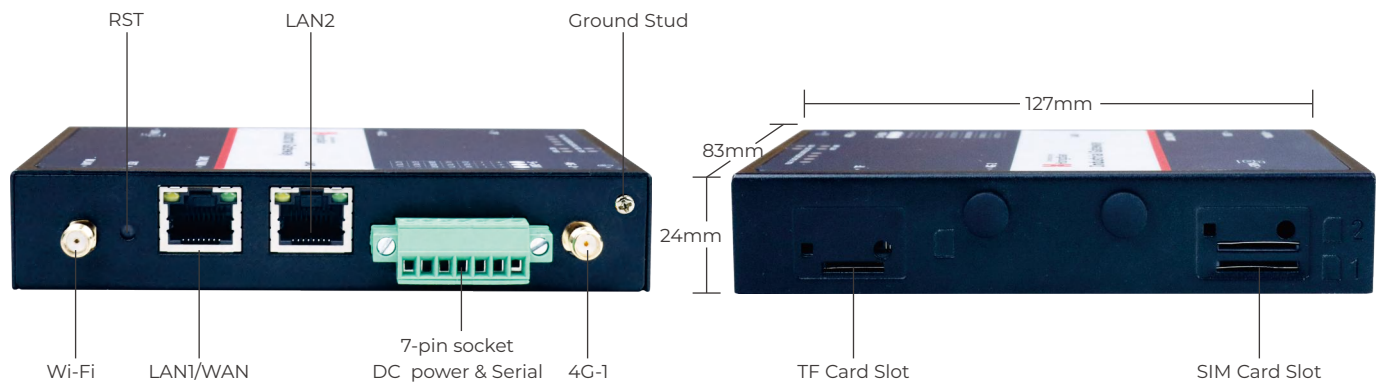


Programmable with C and python

Specification

Hardware			
CPU	ARM Cortex-A7, 900MHz		
RAM	512MB	FLASH	8GB eMMC
Cellular Interface			
Modem	1 × LTE Cat1/ Cat4	Number of Antennas	2
SIM	2 × Mini SIM (2FF)	Connector	SMA-K
Wireless Interface			
Standards	802.11b/g/n, AP or station modes	Frequency Bands	2.4 GHz
Speed	150Mbps	Security	WEP, WPA, WPA2
Encryption	64/128 AES, TKIP	Antennas	1
Connector	SMA-K		
Peripheral Interface			
Ethernet	1 × LAN 10/100Mbps + 1 × WAN/LAN10/100Mbps, Ethernet		
Serial Type	1 × RS-232 + 1 × RS-485 serial port	Socket Form	1 × 7-pin 3.5 mm female socket
Signal Definition	RX, TX, GND (RS-232) , A+, B-, GND (RS-485)	SD Card	TF Card Slot
Baudrate	RS-232 (300-115200bps), RS-485 (300-115200bps)		
Software			
Auto Fail-over	Between: Cellular and WAN, Cellular and Wi-Fi (station mode), WAN and Wi-Fi (station mode)		
Network Protocols	PPP, PPPoE, TCP, UDP, IPv4, IPv6, SSL, DHCP, ICMP, NAT, HTTP, HTTPS, DNS, ARP, NTP, Telnet, SSH, DDNS, etc.		
Routing	Static Routing, Policy routing, RIP, OSPF and BGP, etc		
Firewall	NAT, PAT, DMZ, Port Forward IP/Domain/MAC Filter, Access Control List		
VPN	PPTP/L2TP/GRE/IPSec/OpenVPN/DMVPN		
Remote Management	HTTP, Telnet, SSH, Hongdian Sandora Cloud Platform		
Serial Ports Function	Transparent, Modbus RTU, etc		
Industrial Protocol			
Common Protocols	OPC-UA Client&Server, BACnet/IP Client&Server, Modbus RTU/TCP/ASCII, Modbus Master, BACnet/IP, Ethernet/IP, IEC101/104, IEC61850-modbus, etc.		
PLC Support	Siemens, Mitsubishi, Omron, Allen-Bradley, Delta, Shineider, etc 200+ PLCs & Meters		
Cloud Integration	MQTT, HTTPS, Hongdian HMP, TCP/UDP, etc.	Configuration Tool	HD Gateway Manager
Power Supply and Consumption			
Connector	2 pin socket	Voltage Input	+5V~+36V DC
Power Consumption	Idle: 180mA@12V DC, Data transceiving: 300mA@12V DC		
Others			
Reset Button	Yes	Hardware Watchdog	Yes
LED Indicators	4 × indicators for SIG, SYS, NET, Wi-Fi, 4 × indicators for PLA1, PLA2, TX1, Tx2		
Physical Characteristics			
Ingress Protection	IP43	Housing & Weight	Metal, 285g
Dimension	127 × 83.0 × 24(mm)	Installations	Desktop, wall mounting and DIN rail mounting
Operating Temperature	-30 ~ +75 °C	Storage Temperature	-40 ~ +85 °C
Relative Humidity	5 ~ 95%		

Appearance



Ordering info

Part No.	Modem	Band	Region*	RS-232	RS-485	Wi-Fi	Ethernet	TF Slot
X1-L4EA-CS-rW	LTE Cat4	LTE FDD: B1/3/5/7/8/20 LTE TDD: B38/40/41 WCDMA: B1/5/8 GPRS/EDGE: B3/8	EA	1	1	802.11n 1×1 MIMO	2	1
X1-L4EU-CS-rW	LTE Cat4	LTE FDD: B1/3/5/7/8/20/28 LTE TDD: B38/40/41 WCDMA: B1/5/8 GPRS/EDGE: B3/8	EU	1	1	802.11n 1×1 MIMO	2	1
X1-L4NA-CS-rW	LTE Cat4	LTE-FDD: B2/4/5/12/13/14/66/71 WCDMA: B2/4/5	NA	1	1	802.11n 1×1 MIMO	2	1
X1-L4LN-CS-rW	LTE Cat4	LTE-FDD: B1/2/3/4/5/7/8/28 LTE-TDD: B40 WCDMA: B1/5/8 GPRS/EDGE: B3/8	LN	1	1	802.11n 1×1 MIMO	2	1

* EA-EMEA(Europe, the Middle East, Africa)/APAC, EU-EMEA(Europe, the Middle East, Africa)/APAC(Non-CN/JP)/Brazil, NA-North America, LN-Latin America / Australia and New Zealand.

Packing list



Packing Box



X1 4G Industrial Gateway



4G Antennas



Wi-Fi Antennas



Ethernet Cable



Mounting kits