

X2

Edge Computing Gateway



Overview

X2 is a new high-performance edge computing gateway developed by Hongdian for the industrial Internet of Things. Its powerful chip enables devices to achieve fast computing capability, efficiently analyse the data and quickly response to the processing results of users' field equipment, optimizes the management of field equipment. It features high efficiency, safety and stability and make business smarter. With abundant data interfaces, modular hardware, flexible combination, strong expansibility, support CAT18 LTE maximumly and super high-speed data channel, it can meet the needs of various professional IoT application market.

OS

HongdianOS

4G

CAT18



SDK

Features

Data Collection

- Multi-interfaces: RS232/RS485/WAN and other 10kinds of interfaces
- Compatible with mainstream industrial protocols, COAP/MQTT/HTTPS/CAN/MODBUS/PROFINET, etc

Edge Computing

- Data storage, data management, data pre-analysis, data pre-processing
- Embedded Data Processing Model, Predictive Analysis Model and Local Control Strategy

Open System Architecture

- Third-party SDK supportable
- Secondary development of C and python

Devices Networking

- Available with Cable, WiFi, 3G, 4G, 5G-ready
- Securer: virtual private network/private network, device identification and identity authentication, link detection and link failure self-recovery, watchdog

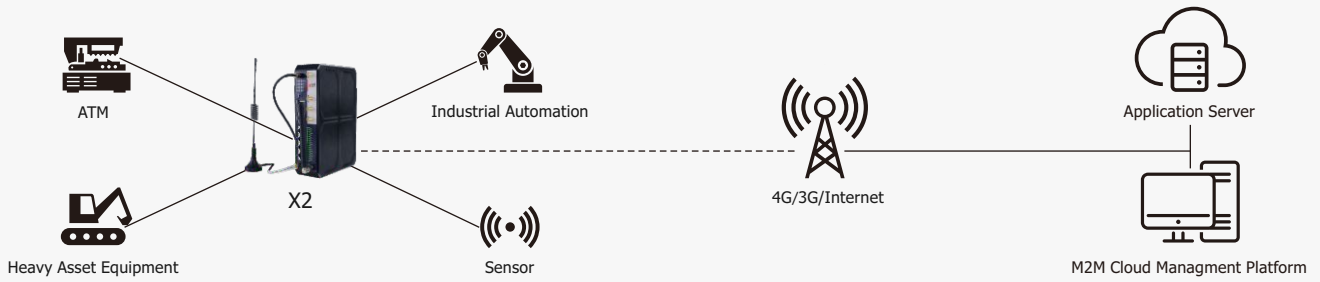
Cloud-based Management

- Access Management, Status Monitoring, Upgrade Maintenance, Troubleshooting, User Authentication
- Data Center+Analysis and Decision Platform

Industrial Grade

- IP30 Protection Level, EMC4
- Temperature and humidity test, Shockproof test, etc.

Diagram Scheme



Specification

Function Management			
Connection Management	Timed management, effectively controls Internet traffic and time, data triggering online, and idle offline		
Broadband Management	Bandwidth allocation, IP and port speed limit		
Route Management	Static routing, source address policy routing, RIP/OSPF dynamic routing		
Domain Management	DNS proxy, DYDNS and other dynamic domain name resolution		
Clock Management	RTC+NTP		
Stability			
Wired/Wireless Backup	Wired and wireless access to the Internet, wired and wireless dual backup		
Link Detection	Multi-level link detection and link fault self-recovery such as LCP, ICMP, interface traffic, and heartbeat packets.		
Hardware Watchdog	Device running status self-test to prevent program from infinite loop		
Safety			
Data Security	Operator private network APN/VPDN, supports IPSec, PPTP, L2TP, GRE and other protocols for virtual private network access		
Protection Safety	DMZ, port mapping, virtual server, MAC, IP, domain name filtering, DoS, APR and other attack protection functions		
WiFi Function			
Operating Mode	AP mode, Station mode, Repeater mode	Encryption	WEP, WPA-PSK, WPA-PSK2 security encryption
Industrial Application			
Protocol Compatibility	PROFINET, Modbus/TCP	Secondary Development	C and Python development environment
Third-party Platform	WMMP, MQTT, CoAP		
Equipment Management			
Configuration Method	Local WEB configuration, remote HTTP, HTTPS, Telnet, SSH configuration, platform remote configuration		
Upgrade Method	<ul style="list-style-type: none"> Local and remote log output Local upgrade, remote WEB/TFTP/FTP upgrade, platform upgrade 		
System Log	WAN wired access, static IP, DHCP, PPPOE and other connection methods		
Device Restart	<ul style="list-style-type: none"> Remote restart and scheduled restart Timed management, effectively controls Internet traffic and time, s data triggering online, and idle offline 		
Network Diagnosis	Ping detection, tracking detection, platform network signal, delay, network type, base station switching, etc.		
Network Interface			
Network	3G/4G	Wired	Gigabit port
Network Access			
Wireless Access	2G/3G/4G full Netcom, compatible with TD-LTE/FDD-LTE/TD-SCDMA/HSPA+/EVDO/GSM/GPRS/EDGE, CHAP/PAP authentication		
Wired Access	WAN wired access, static IP, DHCP, PPPOE and other connection methods		

Specification

Program Specification			
CPU	High performance CPU	RAM	512MB extendable
Storage	8GB extendable	Extended Memory	TF, USB, SATA
Intranet Interface			
Ethernet Port	4×GE	Serial Port	1×RS232+1×RS485
IP Port	2DI/2DO	USB Port	1×USB
WiFi Port	802.11bgn+802.11AC	CAN Port	2×CAN
Working Environment			
Temperature	-30 ~ +75°C	Humidity	5% ~ 95% without condensation
Powered by	+9V~+48V DC		

Appearance Dimension

