Product Name: 4G Industrial Gateway

Model: G9306 Series

Datasheet

Overview

G9306 series is a high speed, compact size and industrial gateway. It uses wireless cellular network as the bearer network, supports all-network 4G/3G/2G network, has powerful edge data collection capability, realizes data optimization, real-time response, and intelligent analysis at the IoT edge nodes, and supports multiple VPN protocols (IPsec, L2TP/PPTP, N2N, GRE) to ensure the security of data transmission.

G9306 series 4G industrial gateways meet the needs of industrial users and can seamlessly dock to various PLC industrial groups, and the devices are characterized by versatility, stability and scalability.

G9306 series 4G industrial gateway, with C/C++ secondary development, according to the user's own business to achieve customized applications, reflecting the value of customer use, can meet a variety of industrial application scenarios.

Features

Industrial-grade design to meet the needs of industrial users

● Industrial-grade chip design, suitable for harsh industrial site operating environment

● Fanless design, to meet the harsh environment of industrial sites, durable

● Protection level up to IP40, shell and system safety isolation, suitable for industrial control applications

● Low power consumption, support +6~48VDC wide voltage power supply, applicable to various field power supply methods

Highly reliable design to ensure stable operation of the equipment

● Embedded watchdog technology, fault self-recovery, to ensure stable operation of the device

● Multi-level link detection and anti-drop mechanism to ensure the device is permanently online

● Support multiple VPN protocols (IPsec, L2TP/PPTP, N2N, GRE) to ensure data transmission

Security

- Single card, single antenna design to enhance the wireless signal and ensure stable operation of various field networks

Simple to use and easy to manage

- Support cellular network, wired and wireless access

- Support WEB configuration interface, extremely easy to deploy

- Support local and remote firmware upgrade, saving manpower and material resources

- Support UOTEK Device Manager Cloud device management cloud platform, batch operation, centralized management

Full-featured, fast experience the convenience of wireless communication

- Support 4G/3G/2G, WiFi, Ethernet, WLAN wired multi-network access at the same time to ensure faster and more stable network operation

- Equipped with high-performance processor for data optimization, real-time response, and powerful edge computing performance

- Support 2.4G WiFi, full signal coverage

- Support a variety of industrial interfaces, RS232/RS485/USB.

Application
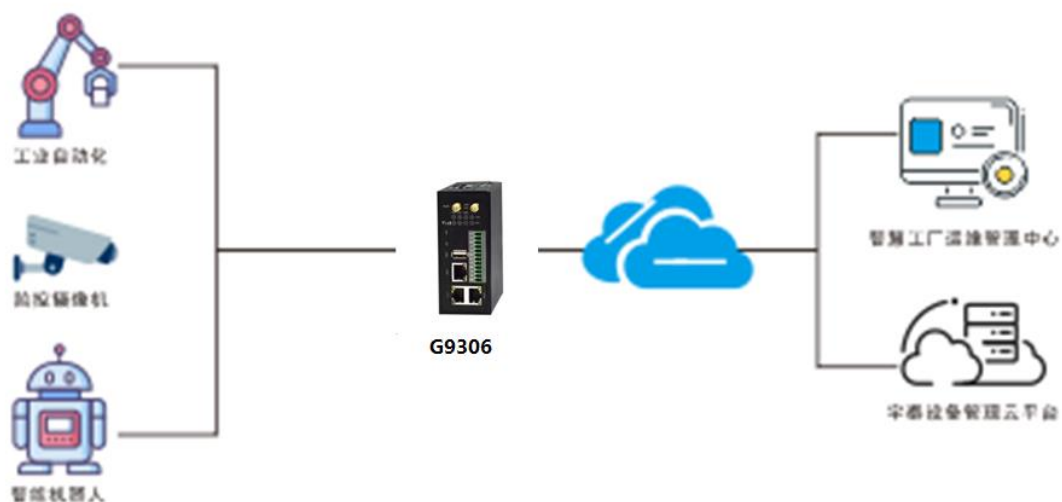
G9306 series 4G industrial gateway, supporting 4G/3G/2G, WiFi, wired network and other access methods, can realize local real-time data pre-processing, data analysis. And

through the device management cloud platform for remote configuration and management, real-time alarm notification and fault diagnosis and analysis, to achieve visualization, remote operation and maintenance management system solutions, widely used in smart medical, smart factory, smart water conservancy, robot inspection, industrial control and other fields.

Specification

G9306 Series

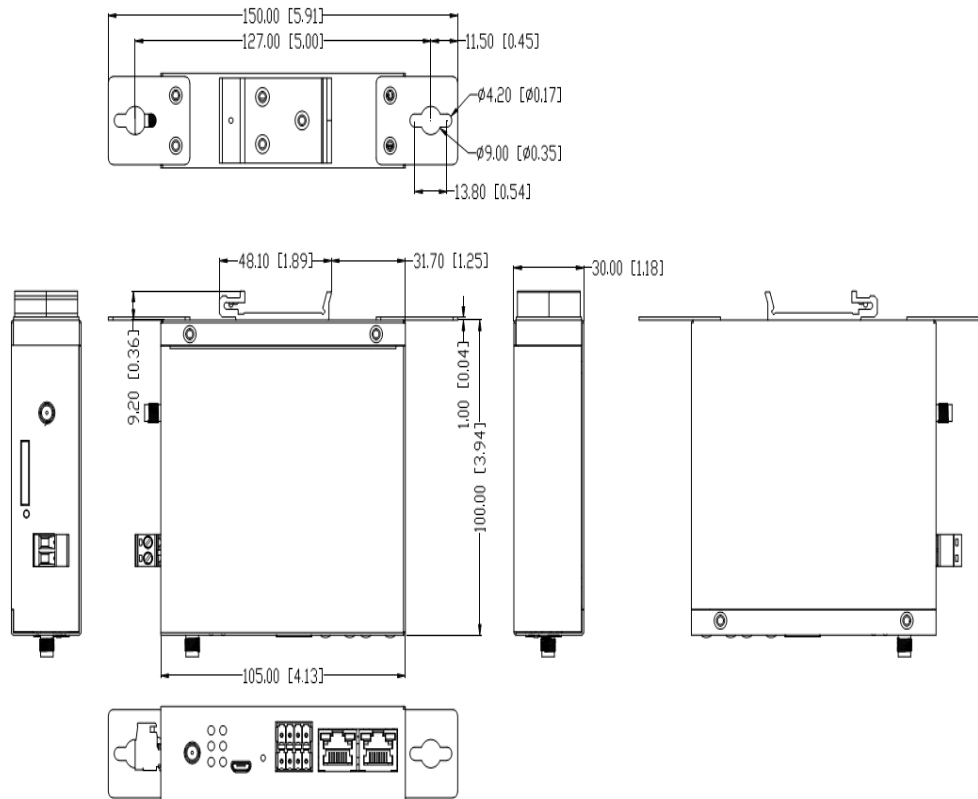|	G9306-FS
Specification Name	Hardware Specification
CPU	580MHz 32-bit
NOR FLASH	16MB(Expandable up to 64MB)
NAND FLASH	128MB
Operating System	Deep customization based on Linux
4G	FDD-LTE: B1/B3/B5 TDD-LTE: B38/B39/B40/B41
3G	WCDMA: B1 CDMA2000 EVDO: 800MHz TD-SCDMA: B34/B39
2G	EDGE/GPRS/ GSM: 1800MHz/900MHz CDMA2000 1X: 800MHz
SIM/UIM Interface	Support 1.8V/3V SIM/UIM card Built-in 15KV ESD protection 1* drawer type card holder
Industrial Serial Interface RS232/RS485	1*RS232/RS485, 1XRS232 terminal interface Built-in 15KV ESD protection
Antenna Interface	2 external antenna connectors, 50 Ohm characteristic impedance SMA female connector, 1 4G antenna connector, 1 WIFI & GPS antenna connector
Indicator light	1*PWR Power Indicator 1*VPN Indicator 1*NET Network Indicator 3*SIGNAL network signal indicator
Power supply interface	The use of terminal power supply, built-in protection against reverse connection, to avoid positive and negative connection error damage equipment
Standard power supply	DC12V/1A, support overload protection, reverse connection protection
Reset button	The configuration of the device parameters can be restored to factory values

Real-time clock	Built-in RTC function
Ethernet interface	1* 10/100/1000Mbit/s adaptive WAN port, configurable as Ethernet LAN port 1* 10/100/1000Mbit/s adaptive Ethernet LAN port with built-in 1.5KV electromagnetic isolation Isolation protection
USB interface	1*USB2.0
Power supply range	+6~48VDC (DC Model)
Dimension	WxDxH=105x100x29mm (antenna and mountings not included)
Idle current	220mA@12VDC
Peak current	1A@12VDC
Max. power consumption	4.8W
Operating Environment	Storage temperature: -40~85°C Operating temperature: -30~75°C Relative humidity: 5% ~95% (non-condensing)
Weight	290g
Housing	Metal housing design, protection class up to IP40
Installation method	Desktop, Rail Mount

G9306 Series

	G9306-FS
Specification Name	Software Specification
PPPOE Certification	PAP/CHAP/MS-CHAP/MS-CHAPV2
Network Protocol	Support ARP,Ethernet LAN protocol Support static IP,DHCP,PPPoE protocol
VLAN	Support VLAN management
Network Access	APN, VPDN
IP Application	Ping,Traceroute,DHCP server/Client,DNSRelay,DynamicDNS,Telnet,SSH,HTTP,HTTPS,TFTP,FTP,SFTP,NAT
IP Routing	Dynamic routing, static routing
Link detection	TCP/Ping heartbeat detection, VPN link detection, and support for automatic disconnection reconnection to ensure that the device is "permanently online"
Link Backup	Link switching for cellular networks, WIFI and wired Ethernet
Built-in watchdog	Support equipment failure self-recovery to ensure stable operation of equipment
Qos	Upstream and downstream bandwidth limits

VPN	OpenVPN，IPsec，L2TP\PPTP，N2N，GRE
DTU	Built-in software DTU, support 101/104 protocol conversion, support Modbus TCP/RTU conversion
Firewall	Support NAT, PAT, DMZ port mapping, IP, port, MAC filtering
Network Security	Support administrative user hierarchy: administrator, maintainer
Alarm event	System and Application Log
WLAN	Support IEEE 802.11n ac/a/b/g/n 2.4GHz and 5.8GHz AP, Client working mode System open, shared key, WPA/WPA2 authentication WEP/TKIP/AES encryption Portal access authentication
Timed task management	Support for setting timed reboot
SNMP	SNMP v1/v2
Traffic statistics	Real-time traffic, monthly traffic statistics, traffic limit setting
Management & Maintenance	Web management support Telnet and SSH terminals System status monitoring NTP client, support for device system clock network synchronization Support configuration file import and export Support local and remote firmware upgrade, save manpower and material resources Network tools: Ping, Tracert Support UOTEK Device Manager Cloud device management cloud platform, batch operation, centralized management
Open Platform	Support C/C++ development for custom development
Industrial Protocol	Support Modbus/S7/IEC101/IEC103/DLT645 etc.

Dimension

WxDxH=105x100x29mm

Appearance

UTEK TECHNOLOGY

Annex List

- 1*UOTEK G9306 Series 4G Industrial Gateway
- 1* Certificate of Conformity
- 1 *manual CD
- 1 * 2x4Pin 3.5 plug-in terminal block
- 1 * 12V/1A power adapter
- 1 * 1m 4G SMA cellular network suction cup antenna
- 1 * WiFi suction cup antenna

Accessories

- 1* 2mm one-piece screwdriver
- 2m/3m 4G SMA cellular network suction cup antenna
- 2m/3m WiFi suction cup antenna
- 3m/5m GPS antenna

Ordering

Specification

Model	<F>Communication Type & Module	<S> Serial port Type	<W> Wi-Fi	<G> GPS
G9306-FS	FDD-LTE: B1/B3/B5/B8 TDD-LTE: B38/B39/B40/B41	1*RS232/1*RS485/1*RS232	Wi-Fi	GPS<Optional>
G9306-GS	FDD-LTE: B1/B3/B5/B8 TDD-LTE: B38/B39/B40/B41	1*RS232/1*RS485/1*RS232	Wi-Fi	GPS

UTEK TECHNOLOGY