Datasheet
(GL-X300B-BLE / GL-X300B-GPS / GL-X300B-RS485)

Meet Collie
- Industrial 4G LTE Router

GL-X300B-RS485
GL-X300B-BLE

GL-X300B-GPS

Collie (GL-X300B) is a 4G LTE wireless gateway designed for industrial environments. It has an aluminum alloy exterior for protecting against physical hazards, and is also highly efficient in dissipating heat, making it suitable to operate under high temperatures. Collie is perfect for machine-to-machine communications between electrical devices, and is especially effective in maintaining reliable network communication in high electrical noise scenarios.

Collie GL-X300B has a GL-X300B-BLE version that includes a BLE module for machine-to-machine communication, and a GL-X300B-GPS version that includes a GPS module for providing location tracking data and GL-X300B-RS485 version that includes an RS485 module for providing connectivity to multiple transmitter/receiver nodes.

Highlights

Aluminium Alloy Exterior

Collie is built with an aluminum alloy exterior to protect its hardware when operating in hazardous environments. The alloy is also highly efficient in dissipating heat, making it suitable to work under high heat scenarios.

Mini PCIe Module

Remote Device Management

Collie GL-X300B comes with GoodCloud, our remote device management platform for remote monitoring client device data usage, accessing the device's terminal, batch update, view analytics, and more.

GL-X300B (BLE/GPS/RS485)
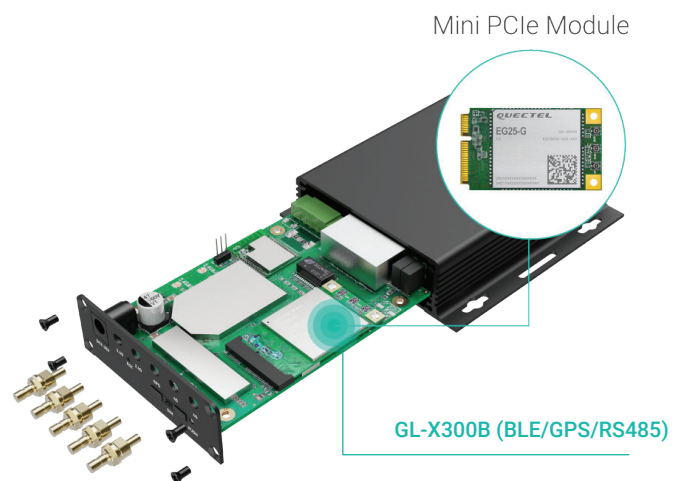
Secured Network

Collie is pre-installed with OpenVPN and WireGuard supporting 30+ VPN services, it supports acting as a VPN client or hosting VPN servers, and automatically encrypts all network traffic within the connected network. The network runs on the latest version of Internet Protocol IPv6, and It also supports Cloudflare DNS over TLS security protocol, ensuring a secure network.

BLE Module (Only on GL-X300B-BLE)

GL-X300B-BLE includes a BLE module with an external BLE Antenna. The module supports heavy-duty industrial machine-to-machine network communication for a wide range of applications including equipment management, HVAC configuration, and large-scale logistical management scenarios.

GPS Module (Only on GL-X300B-GPS)

GL-X300B-GPS includes a GPS module with an external GPS antenna. The module provides location data accessible on GoodCloud, and customisable to develop long-range asset tracking applications such as viewing public transport movement.

RS485 (Only on GL-X300B-RS485)

GL-X300B-RS485 includes an RS485 chip with RS485 interface. The module supports bi-directional data transmission of various devices in the field of industrial automation and IoT, thus realizing the functions of data acquisition, control and monitoring.

Specifications

HARDWARE	GL-X300B-BLE	GL-X300B-GPS	GL-X300B-RS485
CPU	Qualcomm QCA9531, @650MHz		
Memory / Storage	DDR2 128MB / NOR Flash 16MB		
Wi-Fi	802.11n, 150Mbps (2.4GHz)	802.11n, 300Mbps (2.4GHz)	
4G Module	CAT 4		
Other Module	BLE: Siliconlabs EFR32MG21	GPS: Included in 4G Module	RS485: SP3485EN-L
Hardware Watchdog	Hardware Watchdog Timer		
Wi-Fi Antenna (2.4GHz)	1 x External Wi-Fi Antenna	2 x External Wi-Fi Antenna	2 x External Wi-Fi Antennas
4G Antenna (LTE)	1 x External 4G LTE Antenna	2 x External 4G LTE Antenna	1 x External 4G LTE Antenna
BLE Antenna	1 x External Antenna	/	/
GPS Antenna	/	1 x External Antenna	/
Ethernet Speed	10/100 Mbps		
Power Consumption	Normal operating consumption: <3W Operating at full capacity: <4W		
Material	Aluminum Alloy Exterior		
Dimension / Weight	104 x 113 x 28mm (L*W*H) (Excluding Antennas) / 235g		

SOFTWARE	GL-X300B-BLE	GL-X300B-GPS	GL-X300B-RS485
Operating System	OpenWrt		
Network Mode	Routing, AP, Wireless Bridge, Wired Bridge		
Ethernet Dialing Mode	DHCP, Static, PPPoE		
Repeater Mode	Scans and connects to SSID Connects to hidden SSID		
4G Modem	Automatic / Manual setting Sets AT command Receives SMS		
BLE Module	Scans and receives BLE broadcasting signals	/	/
GPS Module	/	View current and historical location data	/
Wireless Configuration	Switching on and off wireless AP Modifying and hiding SSID Modifying encryption mode and password Channel modification Bandwidth modification Modifying transmission power Guest SSID		
Firewall Function	Port forwarding, open port, DMZ		
VPN	OpenVPN client & server WireGuard client & server Maximum OpenVPN Speed: 10Mbps Maximum WireGuard Speed: 38Mbps Policy routing		

System Function	Restart
	Restore factory settings
	Change IP address range on LAN side
	Change time zone
	MAC address clone
	Advanced DNS
	Cloud remote management
	Remote web management
	Remote SSH management
	Installing / uninstalling packages

INTERFACE	GL-X300B-BLE	GL-X300B-GPS	GL-X300B-RS485
Ethernet Port	1 x LAN, 1 x WAN		
SIM Card Slot	Standard SIM card (25mm x 15mm)		
LED Indicator	Power / Wi-Fi / 4G / WAN		
Reset Button	Press (>3s, <8s) restores network settings to device initial state Long press (>=8s) restores factory settings		
Power Port	9-35V wide voltage input 5.5 mm DC power connector or power supply via terminal block		

CERTIFICATION	GL-X300B-BLE	GL-X300B-GPS	GL-X300B-RS485
		• CE • FCC	• CE • FCC • IC • RoHS • UKCA • WEEE • CP65

ENVIRONMENT	GL-X300B-BLE	GL-X300B-GPS	GL-X300B-RS485
Operating Temperature	-20 ~ 55°C (-4 ~ 131°F) *(Power adapter supports 0 ~ 40°C (32 ~ 104°F).* *For -20 ~ 55°C (-4 ~ 131°F) environments, please purchase a suitable power adapter separately)*		
Storage Temperature	-30~70°C (-22~158°F)		
Operating Humidity	5%~95%, non-condensing		
Storage Humidity	5%~95%, non-condensing		

PACKAGE LIST	GL-X300B-BLE	GL-X300B-GPS	GL-X300B-RS485
	GL-X300B 4G Gatway 1 x Power Adaptor DC 12V/1A 3 x External Antennas (GL-X300B-BLE) / 5 x External Antennas (GL-X300B-GPS) 1 x Ethernet Cable 1 x Mounting Platform & Accessories 1 x User Manual		

PINOUT

GND | DC 9-35V | LAN | WAN

PWR LED
4G LED | GPIO15
WIFI LED | GPIO4
WAN LED | GPIO13

4G ANT

GPS ANT

IOT Module

LTE Cat -4/Cat-6 Module

GPIO9 | RXD
GPIO10 | TXD

2.4G&2

WIFI ANT

2.4G&1

MINI PCLE for LTE Cat 4

DC 9-35V

GL-X300B_V2.0

Reset KEY | GPIO3

SIM Card

Color	Category
	UART
	KEY
	Card
	Module
	Connector
	LED
	GPIO
	WAN/LAN
	Power Supply
	ANT
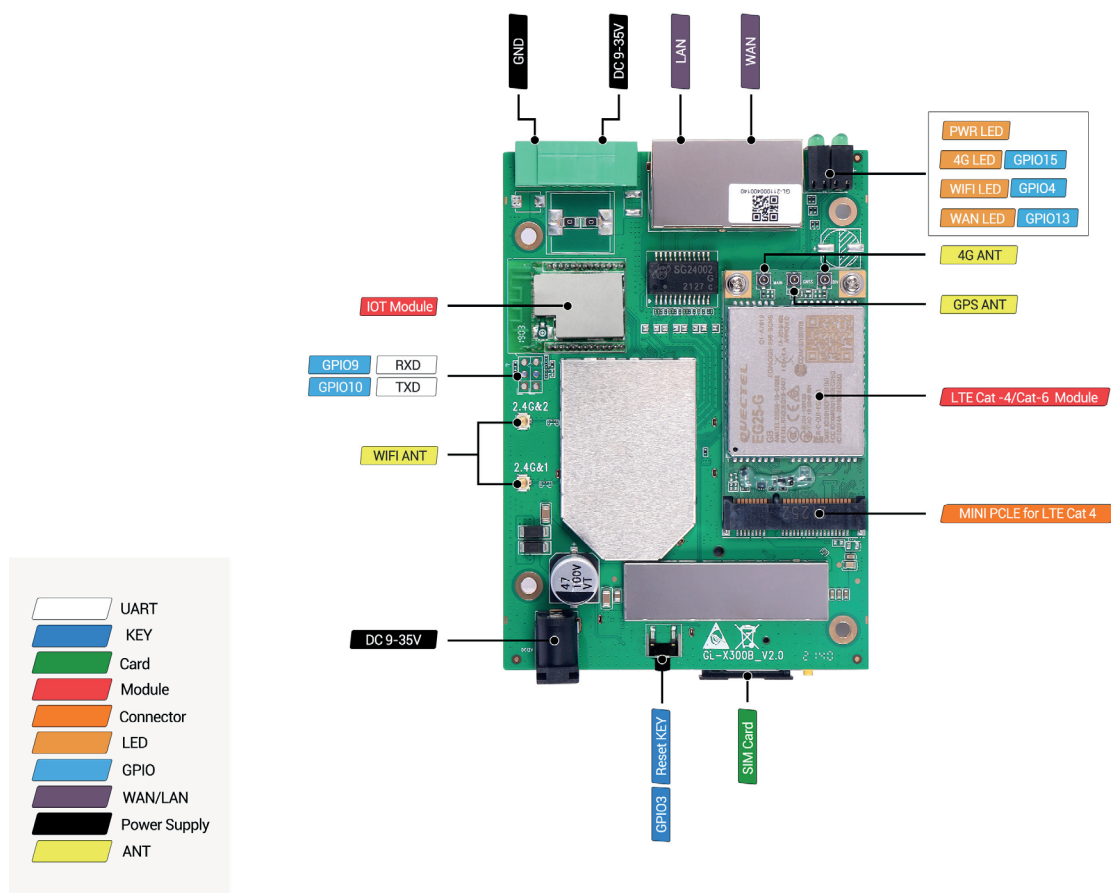
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