GV850 Series

4G High Performance Linux-Based Telematics Gateway with CANBus and Tachograph Data Reading

- LTE CAT 1 with 2G Fallback
- Programmable Linux OS
- CAN Data Reading - J1939/FMS/OBD CAN
- Remote Tachograph File (DDD) and Live Data Downloading
- Multiple Interfaces - I/O/RS232/RS485/1-wire
- Multi-Constellation GNSS Receiver
- BLE 5.2 Support



GV850 Series is a 4G programmable Linux-based telematics gateway. It provides a variety of interfaces, including multiple I/Os, serial ports, and BLE connectivity. The built-in CAN interpreter supports the most advanced CANBus data for various type of vehicles, including HGVs, LGVs, passenger cars and heavy machinery. Its open Linux-based platform provides fleet service provider and system integrators with complete control over the application, ensuring a seamless and tailored experience.









GV850 Series

	Region	Frequency Bands	Certification
GV850CEU	EMEA	LTE-FDD: B1/B3/B5/B7/B8/B20/B28 GSM:B2/B3/B5/B8	CE, E-mark
GV850CNA	NA	LTE-FDD: B2/B4/B5/B12/B13/B14/B66/B71	FCC

Front View



Rear View



Configuration and Upgrade Cable



Debug Cable

2-in-1 Debug Cable used for configuration and debug.

General Specification

Dimensions	123(L)*80(W)*21(H) mm 4.84(L)*3.14(W)*0.83(H) inch
Weight	137.2 g (0.3 lb)
Backup Battery	1100mAh, 3.7V, Li-polymer Rechargeable
Power Input	8 ~ 32V DC
Operating Temperature	-20 °C ~ +60 °C (-4 °F ~ 140 °F)
Storage Temperature	-40 °C ~ +85 °C (-40 °F ~ 185 °F)
Main Processor	STM32
Operating System	OpenSTLinux, Kernel over 5.15
RAM	128MB, DDR2
ROM	128M, Flash
Motion Sensor	3-axis G-sensor

BLE

Mode	BLE 5.2
Frequency	2.4GHz

GNSS

GNSS Type	GPS, GLONASS, Galileo, Beidou
Sensitivity	Autonomous: -148 dBm Hot start: -160 dBm Tracking: -167 dBm
Position Accuracy (CEP)	Autonomous: < 2.0 m
TTFF (Open Sky)	Cold start: 24s average Hot start: 1s average

Interfaces

SIM Card	1 x SIM card slot or eSIM
Button	1 x CAN synchronization button
LED Indicator	1 x GNSS, 1 x CEL, 1 x PWR, 1 x CAN
USB Port	Type C
CEL ANT	Internal antenna & optional external antenna (SMA)
GNSS ANT	Internal antenna & optional external antenna (SMA)
CAN Port	CAN1_H & CAN1_L: Support J1939 / FMS CAN2_H & CAN2_L: Support J1708/ OBD CAN (including DTC) / DDD file download
K Line	1 x K line (For Tachograph Live Data)
1 Wire	1 x 1-wire Data 1 x 1-wire VDD
5V Power Output	3 x 5V power output for external peripherals
RS232	2 x RS232
RS485	1 x RS485
Positive Input	1 x positive trigger input for ignition detection
Negative Input	5 x negative trigger inputs
Digital Output	5 x digital output, open drain, 150mA max drive current
Analog Input	4 x analog input (0 ~ 32V)