



VL863

LTE Vehicle GNSS Terminal

The VL863 is a versatile GPS tracker designed to efficiently manage fleets of passenger vehicles, trucks, and public buses. It not only rapidly locates fleet vehicles but also boasts a robust interface set with multiple TTL (RS232-compatible) and RS485 interfaces, as well as digital inputs and outputs, for more demanding applications. With 4G connectivity and 2G fallback, it ensures a stable connection worldwide. Real-time alerts for events like harsh braking, speeding, tampering, or unexpected vibrations offer valuable insights into the status of your fleet. As an added benefit, the GNSS and Bluetooth antennas can be customized to be mounted externally, providing more deployment flexibility.



Bus Fleet Management



Vehicle Tracking



Truck Fleet Management



LTE & GSM Network

Enable data transmission within the coverage of 4G and 2G networks



GPS & BDS & GLONASS Positioning

A synergy of multiple positioning systems ensures that the locations are accurately displayed on the cloud platform.



Remote Cut-Off (Fuel/Power)

Immobilize a vehicle by cutting off its power source/fuel supply via the relay, which can be either external or built-in (command-triggered) based on your specific requirement.



Onboard CAN

Supports both J1939 and OBD-II protocols, ensuring compatibility with a wide range of vehicle types including SUVs, heavy-duty trucks, construction vehicles, agricultural machinery, and buses.



Multiple Inputs & Outputs

Equip with 4 digital I/Os (2 configurable) and 2 analog I/Os for flexible function expansion, such as ACC detection, SOS alert, buzzer, and fuel sensor.



Bluetooth Accessory Support

Enable the device to communicate with various Bluetooth sensors such as the K7800 environmental sensor.



Multiple Expansion Interfaces

Allows access to external accessories such as RS485 RFID readers, temperature sensors, and fuel sensors to expand device functionality. Also supports TTL, RS232, and 1-Wire interfaces.

Standard Configuration

Positioning & Location

Technology	GPS, BDS, GLONASS
Accuracy	< 2.5m CEP
Tracking sensitivity	-165dBm
Acquisition sensitivity	-148dBm
TTF (open sky)	Avg. hot start ≤ 2sec; Avg. cold start ≤ 38sec

Cellular

Technology	LTE Cat 1, 2G (GSM) VL863P_LA: LTE-FDD: B1/B2/B3/B4/B5/B7/B8/B28 GSM: B2/B3/B5/B8
Frequency	VL863P_EM: LTE-FDD: B1/B3/B7/B8/B20/B28 LTE-TDD: B34/B38/B39/B40/B41 GSM: B2/B3/B5/B8

Power

Battery	1000mAh
Input voltage	9-36VDC
Power consumption	< 16mA

Operating environment

Operating temperature	-20°C to +70°C
Operating humidity	5% to 95%, non-condensing
IP rating	N/A

Physical specification

Dimensions	115,0 x 69,0 x 28,0mm
Weight	172g

Interface

LED indication	GNSS (Blue), Cellular (Green), Power (Red)
SIM	Micro-SIM
Digital I/Os	4 (with 2 configurable): ACC detection, panic button, relay, and door detection
Analog I/Os	ADC_1: 0-5V; ADC_2: 0-36V
Memory capacity	3000 GPS data entries
USB	Type-C (for configuration)
GNSS antenna	Internal
Bluetooth antenna	Internal 3*TTL (TTL3 can be replaced by CAN); 1*RS485;
Serial ports	1*1-Wire 1*RS232 (which can multiplex with TTL2)
CAN	1

Feature

Sensors	Accelerometer Vibrating alert, Speed alert, SOS alert, Tamper alert, Geo-fence entry/exit alert,
Scenarios	Remote immobilization, Power disconnection alert, Low internal battery alert, Door status detection, Audible alert (via onboard buzzer)
Driving behavior analysis (DBA)	Harsh acceleration, Harsh braking, Harsh cornering, Collision
Bluetooth	BLE 5.0
Configuration support	PC Tools SMS, Tracksolid Pro, Bluetooth
Certification (planning)	CE, FCC

Optional Configuration*

2000mAh Battery	Instead of 1000mAh internal battery
External GNSS antenna	Instead of internal antenna
External Bluetooth antenna	Instead of internal antenna
Accessories	K7800 environmental sensor, RFID reader, Temperature sensor, Fuel level sensor, MIC/SPK

*Optional Configuration required to be customized or purchased separately.