

GPSI-5000 GPS Tracking Device

Ideal use-case for this device: Heavy-Duty Vehicles and e-Logs



The GPSI-5000 is a next-generation telematics gateway designed to support enterprise applications requiring a robust set of fleet features. Equipped with built-in ECU (Engine Control Unit) vehicle interface technologies for both light and heavy duty vehicles

Key Features

- High sensitivity GPS (-162 dBm)
- Voltage monitoring and low battery notification
- UPD Packet Data and SMS-based messaging
- Built in, 3-axis accelerometer for driver behavior, impact detection, motion sensing, and tilt detection

Options

- Driver ID available
- I/O Wiring Harness available
- Wi-Fi 802.11 a/g/b/n client mode available
- 200mAh Lithium-Ion back-up battery available

GPSI-5000 Specifications

GPS

Location Technology	GPS
Enhancement Technology	SBAS: WAAS, EGNOS, MSAS
Receiver Type	55 channels
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-156 dBm (hot start) -148 dBm (cold start)
Location Accuracy	~2.0 m
Location Update Rate	Up to 4 Hz
AGPS capable	

CELLULAR

Operating Bands (MHz) North American Variant I:

4G LTE Cat-1	1900 (B2)/AWS 1700 (B4)/850 (B5)/ 700 (B12)
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3G HSPA/UMTS	850 (V)/1900 (II)
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Operating Bands (MHz) North American Variant II:

4G LTE Cat-1	AWS 1700 (B4)/700 (B13)
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Global Variant:

3G HSPA/UMTS	800 (VI)/850 (V)/900 (VIII)/ 1800 (III)/1900 (II)
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GSM/GPRS	850/900/1800/1900
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Data Support	SMS, TCP, CalAmp Telematics Cloud API or UPD Packet Data
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COMPREHENSIVE I/O

Ignition Inputs	1 (fixed bias)
Digital Inputs	4 (high/low bias selectable 0-30 VDC)
Digital Outputs	3 (open collector relay 150mA)
Analog Inputs	2 external ADC inputs
Accelerometer	3-axis (*see details on page 1)
1-Wire Interface	1 (driver ID/temperature sense)
Power Output	1 switched VIN
Status LEDs	4 (GPS, cellular, VBUS, LAN)
Serial Interface	2 TTL ports
Integrated Buzzer	Programmable audible alert
External ADC Inputs	2 (reference voltage - 3.3V)

ENVIRONMENTAL

Temperature	-30° to +60° C (connected to primary power) -10° to +60° C (operating on internal battery) -20° to +25° C ≤ 6 months (long term storage with battery)
Humidity	95%RH at 50° C non-condensing
Shock and Vibration	U.S. Military Standard 202G, SAE J1455
EMC/EMI	SAE J1113-13 (4 KV Limit)

ELECTRICAL

Operating Voltage	12/24 VDC Vehicle Systems 9-30 VDC (start-up, operating) 7-32 VDC (momentary)
Power Consumption	450uA @ 12V (deep sleep) 15mA @ 12V (radio-active sleep) 100mA @ 12V (active tracking w/GPS and cell enabled)
Backup Battery	Lithium-Ion; Up to 1000mAh

PHYSICAL

Dimensions	5.7" x 2.1" x 1.3" (145 x 53 x 33 mm)
Weight	0.3 lbs (142 g)

INTERFACE STANDARDS

Bluetooth	Classic Bluetooth v2.1+EDR and BLEv4.0
Heavy Duty Truck Data	J1939, J1708
Light Duty Vehicle Data	J1850 PWM, J1850 VPW, SW-CAN ISO 9141-2, KWP 2000, ISO 15765 CAN

CERTIFICATIONS

Fully certified FCC, CE, IC, PTCRB, RoHS