AVL-600W Series
Data Sheet

Rechargeable Trailer Tracker

The AVL-600W Series are ruggedized waterproof GPS trackers specially designed for use in trailer, tanker, reefer and flatbed truck tracking. They include up to a 90-days standby time using an internal rechargeable 5200 mAh battery pack, and are able to dual external power sources for redundancy. The built-in GPS receiver has best in class sensitivity and fast time to first fix. Multiple I/O interfaces are available for monitoring or controlling external devices, including a 1-wire interface for monitoring temperature and multiple serial ports. Vehicle trackers within the series support Quad Band 2G GSM/GPRS and multiple 3G variants with Global or Regional Applicability. System integration is straightforward as complete documentation is provided for the full-featured @Track protocol. The @Track protocol supports a wide range of reports including position report, geo-fence alarm, low power alarm and more.

Highlights

- Ruggedized, designed for use in harsh heavy trucking environments, sealed against common fuel oils and other hazardous chemicals
- Multiple I/O interfaces for monitoring and controlling including composite inputs, ignition detection and serial port options
- 1-wire interface for temperature sensors monitoring
- Low power consumption, 90-day long standby time with internal batteries
- Waterproof IP67 compliant

AVL-600W Product Series

Model No.	Region	Technology	Operating Band	Certificate
AVL-628W	North America	UMTS/HSPA/GSM	GSM/GPRS: 850/1900 UMTS/HSPA: 850(B5)/1900(B2)	FCC/PTCRB/AT&T
AVL-648W	Worldwide	UMTS/HSPA/GSM	GSM/GPRS: 850/900/1800/1900 UMTS/HSPA: 850(B5)/850(B6)/900(B8)/1900(B2)/2100(B1)	

AVL-600W Series

Rechargeable Trailer Tracker

RF Specification

	AVL-628W	AVL-648W
GSM Frequency (MHz)	850/1900	850/900/1800/1900
GSM Data Transmission	GPRS multi-slot class 12 EDGE multi-slot class 12	
UMTS/HSPA Frequency (MHz)	850(B5)/1900(B2)	850(B5)/850(B6)/ 900(B8)/1900(B2)/ 2100(B1)
HSPA Data Rate	5.6Mbps upload / 7.2Mbps download	
HSPA Fallback	EDGE/GPRS/GSM quad band; EDGE MCS1 – MCS9; 3GPP Release 6	

GNSS Specification

GPS Chipset	u-blox All-In-One GPS receiver
Sensitivity	Cold start: -148 dBm Tracking: -162 dBm
Position Accuracy (CEP)	Autonomous: < 2.5m
TTFF (Open Sky)	Cold start: 29s average Hot start: 1s average

Interfaces

Digital Inputs	One positive trigger for ignition detection
Analog Inputs	One analog input (0 ~ 30V)
1-Wire	Support 1-wire temperature sensor
Power Output	3.3V voltage output for external device
Digital Inputs/Outputs	Four negative trigger inputs for normal use or Four open drain outputs 150 mA max drive current
Communication Ports	One TTL ports, one RS232 port
Cellular Antennas	Internal antenna
GPS Antenna	Internal antenna
Indicator LED	CEL, GPS, power
Connectors	18 pin waterproof connector

General Specification

Dimensions	135mm*62mm*38mm
Weight	189g
Operating Voltage	DC 8V to 32V
Internal Battery	Li-ion, 3.7V, 5200 mAh 18650 battery pack
Standby Time	90-day standby time with 15 minutes online and position reported once per day
Waterproof	IP67 Compliant
Operating Temperature	-20℃ ~ +60℃ -20℃ ~ +60℃ for storage

Air Interface Protocol

Transmit Protocol	TCP, UDP, SMS
Scheduled Timing Report	Report position and status at preset intervals
Geo-fence	Geo-fence alarm and parking alarm, support up to 20 circular and 20 polygon geo-fence regions
Low Power Alarm	Alarm when backup battery is almost exhausted
Power On Report	Report when the device is powered on
Special Alarm	Special alarm based on the digital/analog inputs, speed or G-sensor
Remote Control	OTA control of digital outputs

TrackingTheWorld
GPS Tracking Solutions

www.TrackingTheWorld.com

1633 Bayshore Hwy, Suite 390, Burlingame, CA. 94010
Sales: (650) 692-8100
Technical Support: (650) 692-2876

TrackingTheWorld.com