

AVL-55 CDMA Data Sheet



CDMA2000 1xRTT Vehicle Tracking Device

The AVL-55 CDMA is a CDMA2000 1xRTT micro GPS tracker designed for a wide variety of vehicle tracking applications. It has multiple I/O interfaces that can be used for monitoring or controlling external devices. Its built-in GPS receiver has superior sensitivity and fast time to first fix. Its dual band CDMA2000 1xRTT allows the AVL-55 CDMA's location to be monitored in real time or periodically tracked by a backend server and mobile devices. System integration is straightforward as complete documentation is provided for the full featured @Track protocol. The @Track protocol supports a wide variety of reports including emergency, geo-fence boundary crossings, external power supply monitoring and scheduled GPS position.

Highlights

- Dual Band CDMA2000 1xRTT Frequencies 800/1900 MHz (BC0/BC1)
- Small Size Allowing Covert Installation
- Support Basic Tracking Functions
- Cost Effective Solution for Basic Tracking

Advantages

- Micro-sized device allowing easier and more covert installation
- Internal u-blox chipset
- Dual band CDMA2000 1xRTT frequencies 800/1900 MHz
- Embedded full featured @Track protocol
- Multiple I/O interfaces for monitoring and control
- Internal CDMA antenna
- Internal GPS antenna
- FCC/Verizon certified

AVL-55 CDMA

Vehicle Tracking Device



CDMA Specification

Frequency	Dual band: BC0/BC1 Compliant to CDMA2000 1xRTT
Max Data Rate	CDMA2000 1xRTT: 153.6 Kbps
Max Out RF Power	23 ~ 25 dBm
Min Out RF Power	< -50 dBm
Dynamic Input Range	-25 ~ -110 dBm
Receiving Sensitivity	BC0: -110 dBm BC1: -107 dBm
Max Frequency Error	800 MHz band: \pm 300 Hz 1900 MHz band: \pm 150 Hz

General Specification

Dimensions	73mm*50mm*13.2mm
Weight	45g
Operating Voltage	8V to 32V DC
Operating Temperature	-30°C ~ +80°C -40°C ~ +85°C for storage

GPS Specification

GPS Chipset	56-channel u-blox All-In-One GPS receiver
Sensitivity	Autonomous: -147 dBm
	Hot start: -156 dBm
	Reacquisition: -160 dBm
	Tracking: -162 dBm
Position Accuracy	Autonomous: < 2.5m
(CEP)	SBAS: < 2.0m
TTFF (Open Sky)	Cold start: 27s average
	Warm start: 27s average
	Hot start: 1s average

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 internal geo-fence regions
Power On Report	Report when the device is powered on
Special Alarm	Special alarm based on the digital inputs
Remote Control	OTA control of digital outputs

Interfaces

Digital Inputs	Two digital inputs One positive trigger for ignition detection One negative trigger input for normal use
Digital Outputs	One digital output, open drain, 150 mA max drive current
Latched Digital Outputs	One digital output with internal latch circuit, open drain, 150 mA max current drain
CDMA Antenna	Internal only
GPS Antenna	Internal only
Indicator LED	CEL, GPS and power
Mini USB Port	Mini USB port for upgrading and debugging

Tracking The World GPS Tracking Solutions

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