

ALK-1400

Waterproof 4G LTE CAT 1 Mobile Positioning Unit



AL3RT Powersports GPS



Key Advantages

The ALK-1400 family of mobile positioning units delivers a rich tracking feature set on the latest 4G cellular networks. This waterproof unit

comes equipped with a comprehensive set of inputs and outputs and backup battery to meet most utility trailer, motorcycle and power sport

applications. The ALK-1400 family features AL3RT GPS mobile adaptable firmware environment based on a lightweight JavaScript engine. •

The JavaScript engine enables developers to implement event based scripting quickly and easily using the most popular web language, bringing the power and security of the web eco-system to the ALK-1400 product. The data generated by the unit can be transmitted via TCP, UDP or SMS messages.

The ALK-1400 family is also managed, configured and updated Over-The-Air with AL3RT GPS's new Device Management system (DMAN), which assists to improve device up-time, productivity and customer satisfaction.

• **Waterproof 4G LTE operations with dual cellular antennas**

• **400 mAh backup battery**

• **Comprehensive I/O configurations**

• **Driver behavior, motion, and impact reporting**

• **Advanced power management**

• **Over-The-Air device sustainability**

• **Adaptable JavaScript Environment**

• **Cloud device management system**

Key Features

- IP67 rated waterproof sealed enclosure
- 4G LTE CAT 1 network connectivity with dual integrated cellular antennas
- High sensitivity GPS design
- 400 mAh battery backup limits workloads on smaller power sport main batteries and enables operation when power is disconnected
- 3-axis accelerometer for motion, driver behavior & impact detection
- Advanced power management capabilities enabling sleep and wake activities to reduce power needs
- IP67 sealed 4 wire harness with input/output
- Communications via TCP, UDP and SMS to send event reports (location, speed) to application server via the LTE (4G) cellular network
- Lightweight JavaScript Engine enables simple, flexible and rapid behavior modification of the device
- 1 serial UART interface to connect smart accessories including sensors, Magnetic/RFID readers, mobile data terminal and more
- 2K message storage log when out of coverage
- OTA (Over-The-Air) device management to update device configurations, update firmware, send alerts
- Optional built-in Piezo buzzer for audible alerting



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Specifications

CELLULAR TECHNOLOGY

Dual-Band LTE Cat 1: Bands 4, 13
Tri-Band LTE Cat 1: Bands 2, 4, 12
Throughput: 10 Mbps Downlink / 5 Mbps Uplink
Protocol: FTP/HTTP/HTTPS/SMTP/POP3/TCP/UDP/SMS

GPS TECHNOLOGY

Location Technology: 56 channel GPS (with SBAS)
Tracking Sensitivity: -162 dBm
Location Accuracy (open sky): +/- 2.5m (CEP)
Cold Start Acquisition: 29 seconds
Hot Start Acquisition: 1 second

ANTENNA

Internal dual 4G LTE cellular technology
Internal GPS patch antenna (25mm x25mm x 4mm)

INTERFACES, I/O, AND LED

1 Digital Input, 1 Digital Output
Piezo Buzzer (optional)
LED Status Indicators: Cellular, GPS
4 wire molded sealed harness

POWER

Input Power Range: 6-36VDC (12 V or 24 V vehicles)
Tracking Mode : avg 65mA @ 12VDC
Low Power Sleep Mode : avg 2mA @ 12VDC
Battery: 1500 mAh rechargeable Lithium-ion

ENVIRONMENT

Operating Temp: -30° C to 80° C (connected to main power) -20° C to 60° C (running on battery)
Storage Temp: -40° C to 85° C
Relative Humidity: Up to 95% non-condensing

CASE

Dimensions: 112mm x 54mm x 17mm
Weight: 100g
Mounting Options: adhesive or tie wrap

CERTIFICATIONS

NA: FCC, IC, PTCRB
ROW: CE, GCF, e-Mark, RoHS2
Applicable Carriers

Specifications are subject to change. Please see your AL3RT GPS contact for more details.