



EROAD

EROAD ETrack G70

Robust, high precision GPS tracking device



The G70 is a robust, and feature-rich vehicle, trailer or heavy equipment tracking device that operates on the LTE-M/NB-IoT networks.

The G70 comes complete with configurable inputs and outputs to cater for the most demanding tracking applications. Its housing is IP65 rated to withstand harsh environments, without sacrificing tracking and communications performance.



KEY FEATURES

- High-precision GPS/GLONASS tracking device
- Hardwired to permanent power for real-time tracking
- IP65 housing with compact and ergonomic design
- Internal backup battery in case of loss of power or tampering
- 1 x Analog Input, 3 x Digital Inputs, 1 x Ignition Digital Input, 1 x Switched Ground Digital Output
- On-device Odometer Readings and Run Hour Monitoring
- Keep track of your assets via the MyEROAD cloud platform

APPLICATIONS

- Fleet management
- Real-time vehicle tracking
- Trailer tracking
- Run hour monitoring
- Preventative maintenance

See www.eroad.co.nz/products, or call **0800 4 EROAD** for more information.

TECHNICAL SPECIFICATIONS

Connectivity

LTE-M / NB-IoT	Nordic nRF9160 Modem operates on all major global LTE-M and NB-IoT bands.
	Supported LTE bands: LTE-M (Cat-M1): B1, B2, B3, B4, B5, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B66 NB-IoT (Cat-NB1/NB2): B1, B2, B3, B4, B5, B8, B12, B13, B17, B19, B20, B25, B26, B28, B6
SIM Size & Access	Internal Micro 3FF SIM
Location	
GNSS Module	uBlox EVA-M8Q
Constellation	Concurrent GPS / GLONASS / Galileo / BeiDou
Channels	72 Channel High Sensitivity Receiver
Tracking Sensitivity	-167dBm industry-leading tracking performance
GNSS Assistance	GNSS almanac and ephemeris data for greater sensitivity and position accuracy
Low Noise Amplifier	GPS signals are filtered and boosted by a SAW filter and low-noise amplifier (LNA) allowing operation where other units fail
Cell Tower Location	Cell tower location fallback for positioning when GPS can't get a fix
Mechanics/Design	
Dimensions	L 125 x W 80 x H 25 mm
Housing	IP65 housing
IP Rating	IP65 rated housing ensures device can withstand fine dust and is protected against jets/sprays of water. Limited water ingress is permitted, but not immersion in water.
Installation	10 wire harness 1m Length
Operating Temperature	-30°C to +60°C (connected to external power) At < 0°C and > +40°C the internal backup battery will not be charged as a safety precaution due to the dangers associated with charging batteries at extreme temperatures
GPS Antenna	Internal
Cellular Antenna	Internal
3-Axis Accelerometer	3-Axis Accelerometer to detect movement, acceleration, high G-force events and more
Diagnostic LED	Diagnostic LED signifies operation status
Flash Memory	Store weeks of records if device is out of cellular coverage. Storage capacity for over 10 days of continuous 30-second logging
On-Board Speed & Heading	The device continuously monitors speed and heading, allowing for over-speed alerts as well as updates on speed and heading changes
On-Board Temperature	The device reports internal temperature and prevents the internal battery charging in extreme temperatures. Internal temperature provides an indication of ambient temperature but may not always be precise
Power	
Input Voltage	8-36V DC (max)
High-Performance Automotive Power Supply	Built-in self-resetting fuse makes installation easy and safe. Stringent automotive power "load dump" tests are conducted to ensure operation in the harshest electrical systems.

Operating Current	≈50mA when moving + ≈60mA while internal battery charging
Sleep Current	<1mA
Back-up Battery	1100mAh LiPo internal backup battery pack
Interfaces	
Digital Inputs	3 x Digital Inputs with configurable pull-up/down 0-48V DC input range On/Off thresholds: Pull-up enabled: low at 0.4V, high at 1.9V Pull-down enabled: low at 0.8V, high at 2.2V
Digital Outputs	1 x Switched Ground Digital Output Easily wired up to switch external lights, relays, buzzers, etc. Can be used to immobilize a vehicle
Ignition	1 x dedicated ignition digital input 0-48V DC - 2.2V on/off threshold Can be used as a digital input if not required
1-Wire or iButton	1-Wire or iButton can be used to read Driver ID tags Readers available to suit multiple card formats
Warranty	
Manufacturer's Warranty	Two-year manufacturer's warranty
Smarts	
Auto-APN	Auto-APN allows the device to analyse the SIM card and select the correct APN details from a list that is pre-loaded in the device's firmware
Accident Detection*	Configure accident alerts triggered by extreme changes in velocity and orientation of vehicle or equipment. Accidents are detected using 2D (horizontal) changes in velocity of 7Km/h over 120ms, or rollover when the vehicle's angle to the "normal" horizontal plane exceeds 65 degrees. In the event of an accident, the organisation's key contact, such as its fleet manager, receives an alert thereby enabling them to take appropriate action quickly.
Run Hour Monitoring	Calculate run hours and distance travelled (odometer) to understand and optimise asset utilisation
Tamper Alerts	Instant alert if the device is disconnected from its power source

Warning: Please dispose of the unit correctly. Risk of explosion if the device is exposed to extreme high temperatures or fire.

*Disclaimer – Accident Detection:

In addition to the terms and condition in our Standard Terms (available on our website), EROAD does not guarantee that the Accident Detection functionality will be continuous, fault free or available at any particular location. In addition, the Accident Detection functionality:

- does not replace the need for the Customer to ensure emergency services have been contacted directly in the event of an emergency by dialling the appropriate emergency services number;
- may be unavailable at times due to maintenance, modifications, faults or outages of EROAD services or hardware; and
- performance depends on availability and proper performance of third-party services, systems and networks, such as mobile networks and email services.