



**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

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- 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

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





## TECHNICAL SPECIFICATIONS

Connectivity	
	Nordic nRF9160 Modem operates on all major global LTE-M and NB-IoT bands. Supported LTE bands:
<b>LTE-M / NB-IoT</b>	<b>LTE-M (Cat-M1):</b> B1, B2, B3, B4, B5, B8, B12, B13, B14, B17, B18, B19, B20, B25, B26, B28, B66 <b>NB-IoT (Cat-NB1/NB2):</b> B1, B2, B3, B4, B5, B8, B12, B13, B17, B19, B20, B25, B26, B28, B6
<b>SIM Size &amp; Access</b>	Internal Micro 3FF SIM
Location	
<b>GNSS Module</b>	uBlox EVA-M8Q
<b>Constellation</b>	Concurrent GPS / GLONASS / Galileo / BeiDou
<b>Channels</b>	72 Channel High Sensitivity Receiver
<b>Tracking Sensitivity</b>	-167dBm industry-leading tracking performance
<b>GNSS Assistance</b>	GNSS almanac and ephemeris data for greater sensitivity and position accuracy
<b>Low Noise Amplifier</b>	GPS signals are filtered and boosted by a SAW filter and low-noise amplifier (LNA) allowing operation where other units fail
<b>Cell Tower Location</b>	Cell tower location fallback for positioning when GPS can't get a fix
Mechanics/Design	
<b>Dimensions</b>	L 125 x W 80 x H 25 mm
<b>Housing</b>	IP65 housing
<b>IP Rating</b>	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.
<b>Installation</b>	10 wire harness 1m Length
<b>Operating Temperature</b>	-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
<b>GPS Antenna</b>	Internal

<b>Cellular Antenna</b>	Internal
<b>3-Axis Accelerometer</b>	3-Axis Accelerometer to detect movement, acceleration, high G-force events and more
<b>Diagnostic LED</b>	Diagnostic LED signifies operation status
<b>Flash Memory</b>	Store weeks of records if device is out of cellular coverage. Storage capacity for over 10 days of continuous 30-second logging
<b>On-Board Speed &amp; Heading</b>	The device continuously monitors speed and heading, allowing for over-speed alerts as well as updates on speed and heading changes
<b>On-Board Temperature</b>	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	
<b>Input Voltage</b>	8-36V DC (max)
<b>High-Performance Automotive Power Supply</b>	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.
<b>Operating Current</b>	≈50mA when moving + ≈60mA while internal battery charging
<b>Sleep Current</b>	<1mA
<b>Back-up Battery</b>	1100mAh LiPo internal backup battery pack
Interfaces	
<b>Digital Inputs</b>	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
<b>Digital Outputs</b>	1 x Switched Ground Digital Output Easily wired up to switch external lights, relays, buzzers, etc. Can be used to immobilize a vehicle
<b>Ignition</b>	1 x dedicated ignition digital input 0-48V DC - 2.2V on/off threshold Can be used as a digital input if not required
<b>1-Wire or iButton</b>	1-Wire or iButton can be used to read Driver ID tags Readers available to suit multiple card formats

### About EROAD

EROAD develops technology solutions (products and services) that manage vehicle fleets, support regulatory compliance, improve driver safety and reduce the costs associated with driving. EROAD also provides valuable insights and data analytics to universities, government agencies and others who research, trial and evaluate future transport networks. This data enables those who use the roads to influence the design, management and funding of future transport networks.

See [www.eroad.co.nz/products](http://www.eroad.co.nz/products), or call **0800 4 EROAD** for more information.




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## Warranty

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<b>Manufacturer's Warranty</b>	Two-year manufacturer's warranty
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## Smarts

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<b>Auto-APN</b>	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
<b>Accident Detection*</b>	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.
<b>Run Hour Monitoring</b>	Calculate run hours and distance travelled (odometer) to understand and optimise asset utilisation
<b>Tamper Alerts</b>	Instant alert if the device is disconnected from its power source

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**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:

- a. 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;
- b. may be unavailable at times due to maintenance, modifications, faults or outages of EROAD services or hardware; and
- c. performance depends on availability and proper performance of third-party services, systems and networks, such as mobile networks and email services.

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