



SOLLATEK DATA SHEET NO:

10910488

SOLLATEK GCR

MULTI-GNSS RECEIVER AND WI-FI SNIFFER MODULE FOR PRECISE GEOACTION ASSET TRACKING

Description

The GCR is a precise asset tracker module which combines a Multi-GNSS receiver and a Wi-Fi sniffer to provide accurate asset positioning when connected to a Sollatek host device such as FFA and GCMCO.

GCR receives multiple satellite signals simultaneously from different navigation systems such as GPS, GLONASS and Galileo which provides accurate positioning.

The GCR also sniffs for nearby Wi-Fi network and collects information without connecting to it, to further enhance the position from GNSS or to provide a location when GNSS is not available.

Via the GSM module in the host device, the Wi-Fi information is transmitted to the online portal where users can locate the GCR and therefore customer's asset.

The GCR can be easily retrofitted to a Sollatek host device via a connection cable. The GCR is powered from the host device.

Features

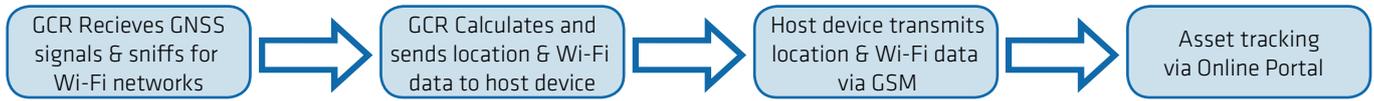
- Multi-GNSS receiver for GPS, GLONASS and Galileo and Wi-Fi sniffer module - does not connect to Wi-Fi network
- Highly sensitive GNSS receiver
- Precise asset tracking via the online portal
- Online portal provides details of location, device information, power status, and other performance information recorded from the host
- Connects to Sollatek FFA (EMD) and GCMCO (GSM Modem)
- Powered from host device
- Ultra low power consumption - sleep mode to minimise battery usage
- Easily retrofitted to a Sollatek host device via a connecting cable
- A secondary device such as a display can be connected to expand user interactions with the controller via the second micro USB port
- LED status indicator

Technical Specification

WiFi	2.4 GHz 802.11 b/g/n/e/i Support WiFi Direct (P2P) Support
GNSS	Multi-GNSS engine for GPSS, GLONASS, Galileo and QZSS 99 acquisition channels, 33 tracking channels GPS L1 Band Receiver: 1575.42MHz; GLONASS L1 Band Receiver: 1601.71MHz Ultra high sensitivity: -165 dBm @ Tracking mode; -148dBm @ Acquisition mode Time To First Fix (TTFF) @ -130dBm: Cold start <15s; ; Warm start <5s; Hot start <1s Horizontal position accuracy of less than 2.5m Circular Error probability (CEP) @ -130dBm Great anti-jamming (Multi-tone active interface canceler) Support Satellite based augmentation system (SBAS) including: WAAS, EGNOS, MSAS, GAGAN Embedded patch antenna and low noise amplifier
Connectors	GCR to host device using serial data via Micro USB connector GCR to Secondary device using serial data via second Micro USB connector
Power	Power from Host device Ultra-low power design
Mechanical	Mounting: 2x screws or double-sided adhesive pad (provided) Size: 52.0 x 34 x 22.3 mm Weight: 26 g Operating temperature: -40°C to 65°C IP rating: IP52*

* Not tested, subject to mounting orientation

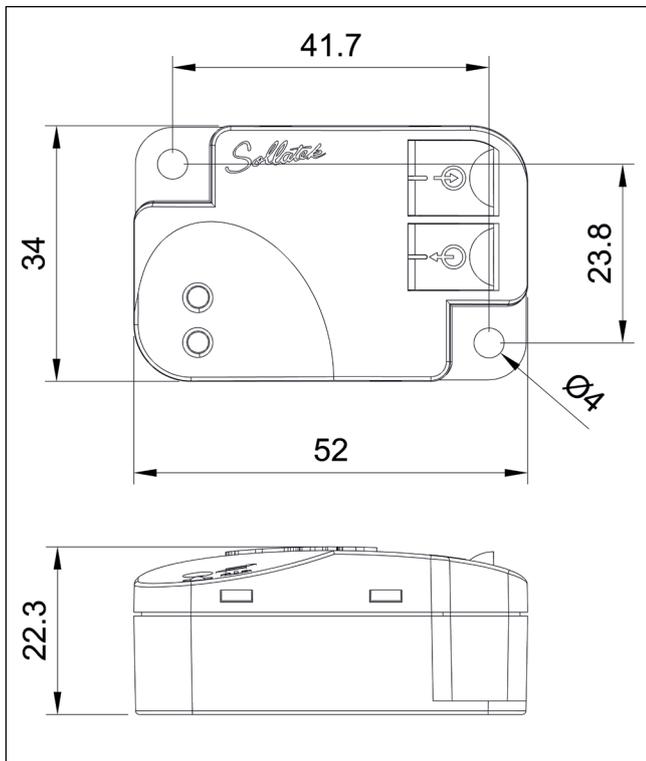
Typical application



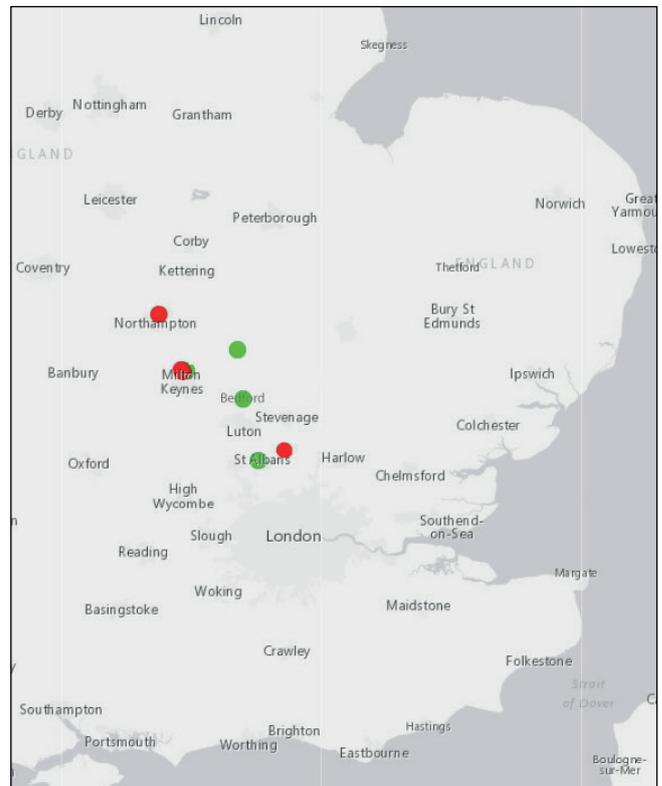
Application Diagram



Dimensions



Online Portal - Asset Location and Identification



Stock No	Description
9530CR10	GCR Wifi & GNSS Sniffer Module
8M293477	Cable 2x4 Way to uUSB 2M (GCR to GMCO)
8M291018	Cable 2x4 Way FFA to uUSB 0.5m (GCR to FFA)
8M291019	Cable 2x4 Way FFA to uUSB 2m (GCR to FFA)

For more information on the Sollatek product range visit www.sollatek.com

