

Enfora GSM2358 (MT-Gu with FOTA): Advanced Mobile Tracking Platform

Overview

The MT-Gu is based on the latest-generation Enabler IIIIG chipset and features battery backup and enhanced serial connectivity with Accutest and Garmin devices to provide a complete vehicle diagnostics or fleet management system.

The Enfora Spider MT family is a certified quad-band integration platform that provides complete GSM/GPRS functionality for mobile tracking applications. These small, economical devices also include integrated GPS capabilities. To address a variety of applications, onboard GPS data can be transmitted to centralised operations centres, web pages, localised computers or mobile data terminals.



Hardware Features:

- Very small form factor
- Integrated rechargeable battery
- All push-fit connectors
- Enhanced GPS sensitivity
- GPS Antenna Monitor
- Integrated Heartbeat Monitor
- Multiple mounting options
- Audio headset connectivity
- Diagnostic / Status LEDs

Software Features:

- Retains compatibility with existing MT products
- ACCUTEST Connectivity & interoperability
- GARMIN For Fleet FMI Connectivity & interoperability
- Supports Jamming Detection
- Supports GSM Positioning
- FOTA (Firmware Over-The-Air) Enabled
- User Variable control
- Configurable by SMS without need for \$SMSDA
- New extended Event Engine functionality



GSM2358 Accessories

Cable Options



(1) MTGU-CAB-98

2m power & ignition cable plus 20cm Garmin* or Accutest connectivity (requires additional cable (available as a kit))

(2) MTGU-CAB-99

2-Metre programming & 2-Metre power and ignition cable

(3) MTGU-CAB-04

2-Metre 3-Core MT-Gu power and ignition cable

Garmin FMI Cable Solutions

FMI-CAB-001

- Power & serial connectivity to Garmin devices requiring the HRS 18-pin connector.
- *NOTE: this is unterminated but can be provided terminated as part of a kit

FMI-CAB-002

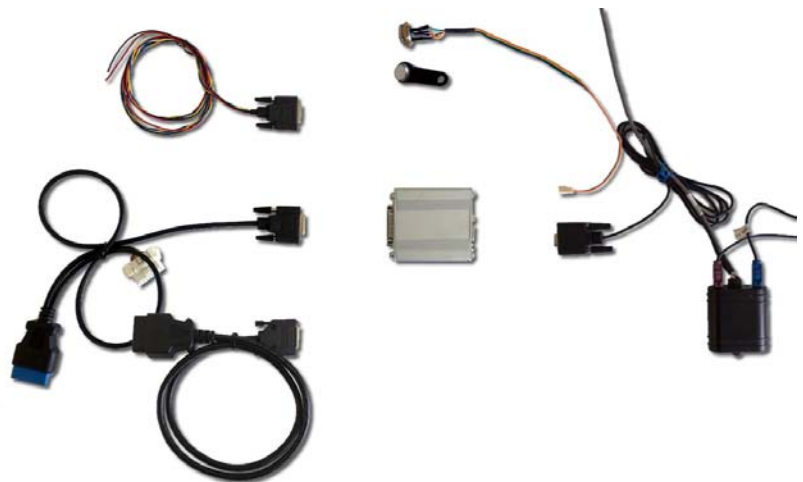
- Serial connectivity to Garmin devices requiring the Mini-USB connector
- *NOTE: this is unterminated but can be provided terminated as part of a kit



Accutest Vehicle Diagnostic Solutions

The AVG540s and AVG550s from Accutest incorporate a two-box solution alongside the Enfora GSM2358-00 (MT-Gu) Mobile Tracker to provide a universal diagnostics interface suitable for cars and derived vans, light, and heavy goods vehicles.

A typical connection setup using an Accutest AVG540s and Enfora MT-Gu:
This demonstrates an AVG540s receiving diagnostic information via its serial input, with the data then transferred by GPRS via the Enfora MT-Gu, which also receives power/ignition statuses using its I/O functionality.



Antenna Options

ANT-GSM-GPS-701 (30cm)

ANT-GSM-GPS-702 (3M)

Combined GSM and GPS 'wedge' antenna, available in 30cm or 3M.

ANT-GSM-GPS-KIT-MU:

- ANT-GSM-TBAR-018

- ANT-GPS-MAG-006

An antenna kit containing a 3M GSM TBAR antenna and 3M adhesive mount GPS antenna (available separately)



Driver ID Solution

The MTiD solution provides a seamless driver ID capability with integrated LED annunciation to the MT-Gu .

Application integration is simplified by using the standard Enfora UDP messaging protocol.



Specifications

Physical

Dimensions (L x W x H)	64.8 x 61 x 25.6 mm
Housing	Rugged Plastic Enclosure

Radio Performance

Frequency (MHz)	850/900/1800/1900
Transmit Power	Class 4 (2W@850/900 MHz) Class 1 (1W@1800/1900MHZ)

Packet Data

Mode	Class B, Multislot 10
Protocol	GSM/GPRS Rel 97 AMR Rel 99
Coding Schemes	CS1-CS4
Packet Channel	PBCCH/PCCCH

GSM Functionality

Voice	AMR, EFR, FR & HR
CS Data	Asynchronous; Transparent and Non-Transparent up to 14.4 kb
GSM SMS	Text, PDU, MO/MT, Cell Broadcast

GPS Functionality

Connector	FAKRA
Antenna	3.3 V active
GPS Protocols	NMEA, TAIP, Binary
Buffered GPS Message Feature	Yes

Over-The-Air Commands

I/O Control, GPS TX internal, binary reporting, alarm reporting, maximum speed exceeded, status change reports, GPS content, event reporting, distance reporting, geofencing and virtual odometer. FOTA (Firmware Over the Air) Enabled

SIM / Interface / I/O

SIM Access	External
Audio	2.5mm headset
GSM Antenna	FAKRA
I/O Connector	8-pin molex 2 GPIOs: Input 0-40V, Output 0-3V 1 Output 0-40V
Serial Data I/O	Yes
Ignition Sense	Yes

Interface

Host Protocols	AT Commands, UDP API, CMUX, PPP
Internal Protocols	PPP, UDP API, TCP API, UDP PAD, TCP PAD
API Control / Status	AT Commands, UDP API, TCP API, AT Commands over SMS

Environment

Operating: -30°C to 85°C	Vibration: in accordance with SAE J1211
Storage: -40°C to -85°C	Humidity: Up to 95% non-condensing

Power

DC Voltage: 7-40 V

Rechargeable Lithium-Ion battery
(1 hour use)

Band	Mode	Avg (mA)	Peak A
GSM 850/900	1TX/1RX	230	2.1
	Idle	< 45	
GSM1800/1900	1TX/1RX	175	1.5
	Idle	< 45	

Certifications

FCC Parts 15,22, & 24 / GCF Version 3.27.0 / PTCRB Version 3.12.0 / CE Mark, E Mark, Industry Canada & RoHS Compliant