

PRODUCT FACT SHEET

FM4310i

OVERVIEW

The FM 4310i is sold as part of the FM Protector package and includes an internal GPS and GSM/GPRS modem to record GPS positions together with trip information for real-time tracking and communication between office and vehicle.

As a security measure, the FM 4310i is equipped with a backup battery which starts to operate when the supply to the main battery is cut. Tracking continues without interruption. The FM 4310i has various built-in security features such as theft and tow-away detection.

Other features include a child-proof remote control with alert button as well as a speaker for voice prompts.

Unit installation is quick and non-intrusive.



FEATURES

VEHICLE TRACKING	
Real-time Tracking and Historical Trip Replay	Track the vehicle's position in real-time, or view and replay historic routes on detailed street level or Google Maps (high resolution satellite imagery).
GPS Data Recording	A variety of information is recorded with every GPS position such as Mobile Device Date & Time, Longitude, Latitude, Speed (km/h), Heading, Altitude (Meters), HDOP, VDOP, PDOP, Satellites visible, Age of reading (minutes).
Manage Geofence Locations	Add, delete or edit geofence locations to mark supplier locations, no-go zones etc. Configure entry, exit, start and stop events to immediately notify selected recipients by SMS / email. Geofencing can be circular, rectangular, polygon or polyline.
Active Events	Immediate event notifications can be sent via SMS / email whenever a set event is triggered. Such events include entering, exiting, stopping or starting in a geofenced location, alert button pressed, over speeding, theft detect and more.
Backup Battery	For additional security the FM 4310i is equipped with a backup battery, making tracking possible even if the vehicle's main battery has been disconnected. The backup battery starts to operate as soon as the supply to the main vehicle battery is cut.

VEHICLE AND PASSENGER SAFETY	
Theft Detect	Built-in sensors detect unauthorised vehicle movement and ignition tamper. On activation automatic theft detect alerts are sent via SMS / email. Live tracking can be done via the website or cell phone.
Tow Away Detect	Built-in sensors detect when the vehicle is tilted at a pre determined angle or when the vehicle is moved, for example when it is being towed away. Sensitivity and tilt angle can be adjusted.
Child-proof Remote Alert Button	The remote alert button enables activation from up to 10m away. Activation requires a dual action involving the shift button (spring loaded slider), preventing false activation. The alert button event can be configured to send immediate SMS / email notifications to selected recipients.

COMMUNICATIONS	
Downloading from / Uploading to Vehicle	The GSM modem is used to download data from and upload data to the FM 4310i. This allows for real-time active tracking and immediate SMS event notifications. It is possible to upgrade firmware or update operational settings remotely over-the-air using the GSM modem, thus reducing the need to remove the vehicle from duty when performing maintenance.
Voice Prompts	Real voice prompts optionally provide the driver with trip and status notifications. Included is a high-power speaker enabling optimum sound reproduction. One of three levels may be selected using the remote control unit: Silent, Voice and

Special Installation Aids	Diagnostics. Voice assistance facilitates the best placement of the unit which internally houses the GSM and GPS antennas, enabling optimum reception.
Remote Control	Used for interactive services, to activate functions and includes a child-proof alert button. User can pair additional remote controls. Packaged with a mounting bracket to "dock" unit inside vehicle.
Self Testing	Test unit status at anytime from your cell phone, our website or your remote control. Test results can be sent via an SMS notification or a comprehensive email test report may be selected.

VEHICLE AND DRIVER MANAGEMENT

Trip Data Recording	The following data is recorded: date and time, distance travelled, trip duration, vehicle speed, departure / arrival time, locations entered / exited and start / stop locations.
Driving Violations	The following standard violations are recorded: over speeding, theft and tow-away detect, driving during restricted times, locations entered, exited, stopped and started.

TECHNICAL SPECIFICATIONS

Power Supply	12V
Over Voltage Protection	12V support, 9V min and 16V max level, must be uninterrupted and always on
Reverse Polarity Protector	< minus 16V level, continuous reverse will cause damage
Current Consumption (3 Modes)	Drive Mode: 80mA, consumption depends on instantaneous conditions Sleep Mode: <15mA, unit wakes up at periodic intervals Alarm Mode: <12mA, consumption depends on chosen USM & options
In-line Fuse Protection	5 Amp inside holder, standard automotive blade-type
Backup Battery	A Li-Ion backup battery enables the FM 4310i to continue functioning for approximately 4 hours in the absence of vehicle battery power. Different operation conditions affect the operating time.

REMOTE CONTROL

RF Transmitter Frequency	433.92MHz support, +/-0.10MHz, ICASA compliant design but not yet certified
RF Transmitter Range	25m support, depends on receiver position
Internal Battery	CR2032, non-rechargeable

ENVIRONMENT

Temperature	(Storage) -20°C to +70°C (Operating) -20°C to +55°C (Charging) 0°C to +45°C GSM functionality extends to -25°C and +70°C
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