TELTONIKA

FM5300 ®
GLONASS/GPS GSM/GPRS Terminal

FM5300:

- Multi system positioning engine
- Car tracking
- Parametrized operation (acquire & send)
- Integrated scenarios:
    - ECO driving (ratings of acceleration, breaking, cornering based on accelerometer)
    - Overspeeding
    - Authorized driving (50 iButton keys)
    - Immobilizer
- Online tracking
- Low energy consumption in deep sleep mode

APPLICATIONS:

- **International logistics**
- **Personal vehicle or van tracking**
- **Road assistance**
- **Track and trace**
- **Fuel consumption metering**
- **Fleet management**

FM5300 is an advanced terminal with GLONASS/GPS positioning and GSM/GPRS connectivity, which is able to get device coordinates and other data and transfer them via GSM network. This device is perfectly suitable for real time object location and parameters monitoring. So you can track your remote objects (trucks, cars etc.) quickly and easily.

In case of no GSM coverage FM5300 can store more than 16000 records and once the GSM connection is established stored data will be sent so you will not lose your data (coordinates, sensors data and etc.).

TECHNICAL DETAILS

GSM/GPRS:
- Quad-band 900/1800 MHz; 850/1900 MHz
- GPRS class 10 (up to 85,6 kbps)
- SMS (text/data)

GPS/GLONASS:
- NMEA-0183 protocol
- 32 channel receiver
- High sensitivity, not less than -160 dBm

Interface:
- 4 Digital Inputs for object status monitoring
- 4 Analog Inputs (switchable 10 V or 30 V range, 12 bit resolution)
- 4 Digital Open-drain Outputs (controlling external relays, LED, buzzers, etc.)
- 1-Wire® interface protocol
- CAN interface
- Power supply (+10...+30) V DC
- 2 Status LEDs
- USB interface
- 2x RS232 ports
- Configuration and firmware update (FOTA and via USB cable)
- External GSM antenna
- External GNSS antenna
- Optional internal (or external) rechargeable battery with charge controller
- Voice interface

Features:
- GPS/GLONASS coordinates and I/O data acquisition
- Real Time tracking
- Smart algorithm of data acquisition (time, distance, angle, ignition and event based)
- Sending acquired data via GPRS (TCP/IP and UDP/IP protocols)
- Smart algorithm of GPRS connections (GPRS traffc saving)
- Operating in roaming networks (configurable GSM providers list)
- Events on I/O detection and sending via GPRS or SMS
- Scheduled 24 coordinates SMS sending
- Multi geofence zones (rectangle or circle)
- Deep Sleep mode (saving vehicle's battery)
- FOTA (firmware updating via GPRS)
- Accelerometer
- Small and easy to mount case
- Roaming dependent operation (GPRS traffic saving in roaming zones)
- Acceleration detection (harsh breaking, acceleration and cornering)
- Operation mode presets
  - Advanced overspeeding detection
  - Driver behavior monitoring (acceleration/breaking/cornering notifications to minimize the vehicle exploitation costs)
  - Driver identification (1-Wire® iButton ID key)
- GPRS commands *
- RS232 peripherial device support: *
  - GARMIN FMI support
  - 2x LLS support
  - RFID protocol support

* - available from 01.xx.xx firmware

ADDITIONAL FEATURES

FM5300 has large internal Flash memory (16MB)

- The memory can save 47,615 records or up to 50 days data with the standard configuration (min. period = 10 min, min. distance = 1 km and all I/O elements enabled).

- You can disable Roaming and you never would lose data during the trip. Moreover the data can be downloaded to a server in home network or in cheap Roaming operation.

FM5300 can be used without a GSM connection

- Offline data logging allows collecting and storing up to 47,615 records or up to 50 days without GPRS data sending. Offline data logging allows to download acquired data from FM5300 using USB to PC and later to upload it to TAVL server when vehicle returns to base.

- This functionality helps to avoid high GSM bills caused by expensive roaming operators and keep your acquired data save until you need it.

FM5300 supports a remote logs reading

- FM5300 supports remote diagnostic logs functionality using GPRS. Possible issues resolving becomes more faster. Manufacturer can read logs remotely using SMS/GPRS to diagnose the FM5300 and timely respond to the fault.