

MTR-1-RF

Mobile Time Registration System with GPS* receiver and RFID reader

PRODUCT OVERVIEW

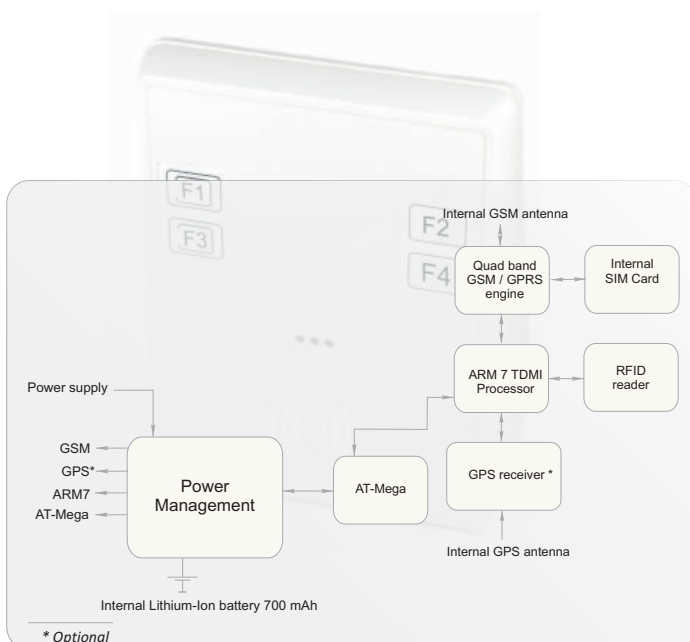
The FALCOM MTR-1-RF extends the application range of successful FALCOM AVL based devices into the field of time registration systems. With this unit it is possible to document and keep track of daily arrival and leaving times of the employees anytime and anywhere as well as with the help of optional GPS receiver it allows you to know the place of the device where it is installed.

This efficient and compact time registration system is a perfect solution for any type of organizations, and can be installed very easy and super fast. Employees simply clock in and out by holding their RFID card next to the device. This data is transmitted through TCP/IP over GPRS to a remote server, and you will have the essential details allowing you to optimally structure your business processes.

All of these features are perfectly integrated in a device concept which significantly reduces time-to-market and provides low cost time attendance and security solutions.



MTR-1-RF BLOCK DIAGRAM



PRODUCT HIGHLIGHTS

- Mobile time registration system
- GSM/GPRS technology for 2-way communication
- Latest GPS* technology for positioning
- Compact, low-cost and light-weight unit
- Standalone operation
- Manage user data and time records
- Exports data through TCP/IP over GPRS to a remote server
- Wide variety of events and states for sending reports
- Allows to create customized protocols
- Free configurable for different type of applications
- Backup battery to back up the main power supply
- Custom housing and packaging design possible
- Integrated RFID reader, ISO 14443, Type A/B
- Read RFID tags
- Internal GSM/GPS antennas

FIRMWARE FEATURES

- Embedded TCP/IP stack for client-server application
- FALCOM protocols: IOP, GSM, AREA, 3DP, BIN
- Supports SMS, CSD
- Locally and remotely firmware update
- Multi power-saving modes and wake up conditions
- 20 programmable Timers, Triggers, Counters
- 100 programmable Geofences and 32 Areas
- Programmable Geo-fencing and Parking alerts
- Forward messages from one channel to another
- Customized reports, sending intervals
- Report by distance, time and on demand
- Drivers Logbook / History / Trip management
- Locally/Remotely accessible via PFAL-Commands
- Device configuration via TCP and SMS
- Intelligent and flexible configuration alarms
- RFID-based application
- and many others

APPLICATIONS

- Mobile time registration system
- Manage user data and time records
- Reading of access control magnetic cards
- Fleet management / monitoring
- Real time satellite navigation
- Territory management / Theft protection
- Route verification
- Trip management / distance calculations
- Compatible with FALCOM trace4you server
(also configurable for most of TCP/IP server-based tracking applications)

TECHNICAL SPECIFICATION

General

Quad-Band GSM/GPRS engine
GSM frequency bands: 850/900/1800/1900 MHz
GPRS class 10, Class B
Internet (TCP/IP/UDP/HTTP/SMTP)

GPS receiver*

A-GPS offline/ Autonomous
Protocols: NMEA, FALCOM (binary)

Accuracy: Position: 2.5 m
SBAS: 2 m
Acquisition: Cold starts: 26 sec.
Sensitivity: Tracking: -162 dBm
Cold starts: -148 dBm

GPS Operational limits:

Velocity: 500 m/s (972 knots)
Altitude: 50.000 m
Update rate: 1 Hz

Electrical characteristics

Power supply: +12 VDC
Internal Lithium-Ion backup battery (700 mAh)¹⁾

Average Power Consumption

Normal operation: 86 mA
Power saving (IGN): 860 µA

Air humidity

5% up to 95% non-condensing

Environmental data

Operating temp.: -40 °C to +85 °C
Storage temp.: -40 °C to +85 °C
GSM** operating temp.: -40 °C to +85 °C
Battery¹⁾ discharging temp.: -20 °C to +60 °C
Battery¹⁾ discharging temp.: 0 °C to +45 °C

Physical characteristics

Dimensions (LxWxH): 125mm x 67mm x 167mm
Weight: approx. 318 g

Interfaces

4 x Push buttons free-configurable
3 x LED indicators free-programmable
Inside SIM card holder for 1,8/3 V SIM cards
5.5 mm DC Power supply jack connector
RFID reader, ISO 14443, Type A/B

GSM/GPS Antennas

Internal

Processor core

ARM7/TDMI
8 MB Flash (History / Firmware / Configuration)

Accessories

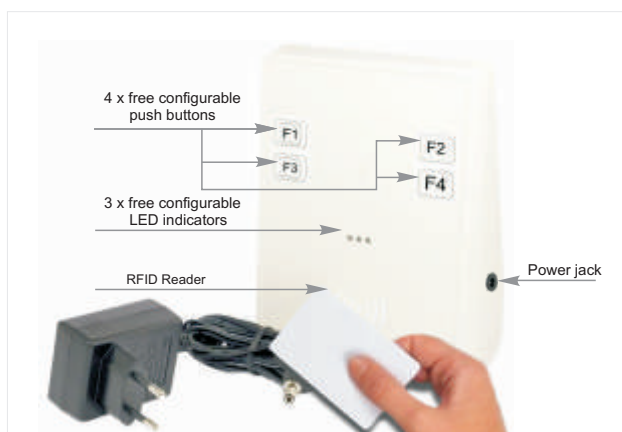
AC / DC Power Adapter (AC: 100-240 V; DC: 15V)

* Optional

** The GSM/GPRS module is fully functional (-30 °C to +85 °C meets ETSI specification)

¹⁾ Storage and using conditions of the device with battery option are limited to the battery temperature range

INTERFACES



CONTACT

FALCOM GmbH
Gewerbering 6
98704 Langewiesen
GERMANY

Phone: +49 (0)3677 8042 0 (no support)
Fax: +49 (0)3677 8042 256
e-Mail: contact@falcom.de

Internet: <http://www.falcom.de/>