

MTX-65+G GPS Tracker

Enhanced GSM/GPRS + GPS Location Terminal/Modem

Powered by CINTERION Wireless Module TC65i rel.2
& GPS Trimble C1216



Sends GPS position
by GPRS

Sends telemetries
(digital & analog)

Flash Memory
6000 GPS positions

Transparent
RS232-GPRS

Remote control by
Telnet

Remote control by
SMS

Low Power
Consumption modes

Automatic AGPS for
fast TTFF

Accelerometer
driving mode

Easy and fast
configuration

MTX-65+G GPS Tracker

GENERAL DESCRIPTION

The MTX-65+G GPS Tracker is based on the Cinterion module TC65i Rel2 and the advanced GPS Trimble C-1216.

The MTX-65+G GPS Tracker is continuously reading the GPS position and the digital and analog inputs. Then, is able to send this data to a server through GPRS network.

FEATURES:

- Configuration: device with easy configuration by small configuration file.
- Flash storage: up to 6000 GPS position storage in flash memory in case of GPRS failure.
- Accelerometer: the device is able to send the accelerometer data in all transmissions, so is possible to know the driving style.
- Communications: terminal sends GPS positions and telemetries through raw TCP/IP sockets or though a HTTP GET to a WEB server.
- Full transparent GPRS/RS232 gateway: the terminal is able to make a full transparent GPRS-RS232 communication to control any serial device connected to the RS232 port.
- Remote control by Telnet: with Telnet you can check the GSM coverage, read in real time the digital inputs, get / set the internal settings ...
- Remote control by SMS: with SMS you can check the GSM coverage, read in real time the digital and analog inputs, get / set the internal settings ...
- AGPS: automatic Assisted-GPS allows a fast GPS position after power up. It uses a GPRS connection with Trimble AGPS Servers.
- GSM location: terminal can send information of the used BTS (GSM Station). This information can be used to get an approximate position in case of problems with GPS signal.
- Telemetry: the terminal is able to send the status of digital inputs when it detects any change in the value of any of them.
- Firewall: access to MTX-65+G Terminal only from authorized IPs.

General features:

- Quad-Band GSM 850/900/1800/1900 MHz
- GPRS multi-slot class 12
- Supply voltage range: 9 ... 28 V
- Power consumption (at 12 V):
 - Power down 5 mA
 - Sleep mode (registered DRX = 6) 50 mA
 - Speech mode (average) 360 mA
 - GPRS class 12 (average) 680 mA
- Temperature range
 - Operation*: -30°C to +85°C
- Dimensions. Excluding connectors: 78,1 x 66,8 x 37,2 mm
- Weight: < 190 g (without battery)

Interfaces:

- GSM FME M antenna connector
- GPS SMA F antenna connector
- Sub DB15 connector:
 - o 3 Opto isolated Inputs
 - o 3 Opto isolated Outputs
 - o 1 TTL input/output GPIO
 - o 2 Analog Inputs
 - o 1 x I2C/SPI bus
 - o 1 x 2-wires RS232 UART
- USB 2.0 port for debug
- 2 Operating status LED: GSM status and GPS status
- SIM card interface 3 V, 1.8 V

Processor and Memory

- ARM9© Core, Blackfin© DSP
- Memory: 400 KB (RAM) and 1.7 MB (Flash)
- Optional: 2MB (RAM) and 8 MB (Flash)

Specification for GPS

- Update rate: up to 5Hz
- Accuracy Position: 2m Altitude: <3m
- Support of SBAS (WAAS/EGNOS/MSAS) data
- GPS active antenna supply: 3.0 V
- GPS antenna fault detection
- A-GPS enabled
- Tracking sensitivity: -160 dBm (with external antenna)
- Velocity: 515m/s
- Start-up Time
 - Hot start: <2 s
 - Warm start: 35 s
 - Cold start: 38 s
- Protocols: NMEA (input & output)

Specification for GPRS data transmission:

- GPRS class 12
- Mobile station class B
- PBCCH support
- Coding schemes CS 1-4

Communications:

- GPS position & telemetries by GPRS using raw TCP socket or HTTP GET
- Until 6000 GPS positions for backup purposes
- Transparent RS232-GPRS pasarell
- Remote control & configuration by Telnet
- Remote control & configuration by SMS

Others:

- Accelerometer: 0-2g
- Internal battery 1600mA/h (8h aprox.)

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