

# Micro Tracker

# maestro



empowering wireless

## Low-profile, intelligent tracking device... out of the box

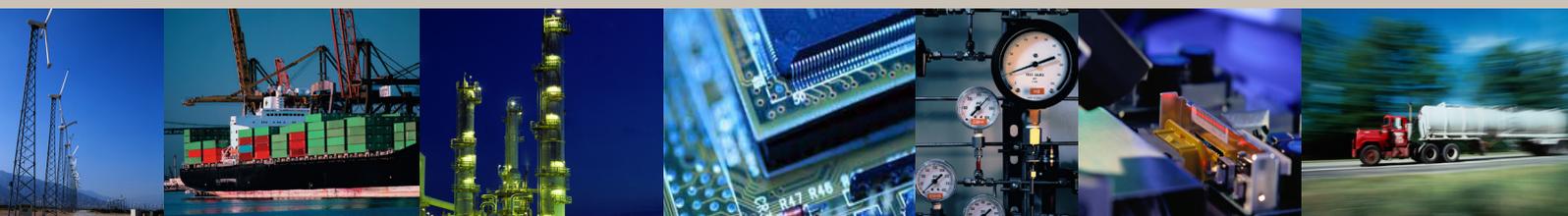
The Maestro Wireless Solutions MicroTracker combines GSM/GPRS and GPS technologies in an industrial, compact grade design. Its exceptionally small footprint featuring embedded antennas and a single port connector make it easy to fit into places where space is limited in vehicles. The Maestro MicroTracker interface and embedded application provides key connectivity and alert needed in a wide range of in-road, off-road fleet management and driver monitoring related application. The MicroTracker also provides intelligent device management features and functionality, including firmware and software upgrades as well as GPS and vehicle diagnostics.

## Key Features :

- Easy to conceal, light, compact, industrial grade design
- Embedded GSM and GPS antenna
- Single 10-pin connector
- Embedded accelerometer
- Device generated alert to reduce operational cost
- A-GPS and Extended Ephemeris support
- GPRS & GPS LED status indicator for visual checking during installation and service
- Optional external battery back-up supporting harsh temperature
- Intelligent device management over the air

## Save on operational cost

To provide a fully functional product out of the box and help its customers to quickly build the link from the tracking unit to their application server, all MicroTracker are shipped with a market proven application. Alerts are device generated and send through SMS, or UDP to reduce operational cost and achieve maximal ROI in a minimum time.





GENERAL FEATURES
- Model: MT-01 (rev.3)-A (with accelerometer)
- Temperature range:
- Functional: -30°C to +80°C
- Storage: -40°C to +85°C
- Functional with battery back up: -30°C to +75°C
- Casing: PC/ABS material UL94V-0 flammability
- Shock and Vibration : SAE J1211
- Dimensions: 58.6 x 60 x 13mm
- Weight: 45g

ELECTRICAL CHARACTERISTICS
- Supply voltage range: 6-32V DC
- Current consumption during idle: 35mA - Typical at 12V DC
- Current consumption during transmission: 78mA - Typical at 12V DC
- Current consumption during power saving: 20mA - Typical at 12V DC

GSM / GPRS
- Frequency band: 850 / 900 / 1800 / 1900 MHz
- Built-in antenna
- SIM card interface 1.8/3.0V
- SIM card holder: Flip type; SIM card is accessible under the lid

GPS
- Positioning Accuracy : 2.5 m CEP - 2.0 m CEP SBAS
- A-GPS: Embedded Extended Ephemeris and Ephemeris Push support
- High sensitivity: -163dBm Tracking and -160dBm Navigation
- TTFF typically <1s when hot and <35s from cold (outdoors)

### Ordering Information for model MT-01 (rev.3) - A

ex: **MT-01(rev.3) - A (B)**

MicroTracker Item code

Bundle Selection:\*

- B - Bundle
- ⊞ - Leave blank for tracker only

\* Bundle includes: MT-01 (rev.3) - A, battery back-up and complete cabling with relay

ACCESSORIES ORDERING INFORMATION
- MT-OTH01: Relay 12V normally closed to switch car engine
- MT-OTH02: Optional 700 mAh extended temperature Super Li-ion battery back-up. Operating Range : -40°C to +75°C Storage Temperature : -10°C to +35°C Certification : CE, MSDS, RoHS, EN62133
- MT-OTH03: developer serial port adapter for test, debug, upgrade
- MT-CA01: Cable: Molex connector 10 pin sheathed wire harness, with relay socket, ferrites, fuse, molex connector for battery backup., L=500mm
- MT-OTH006: 24V Load dump protection according to ISO 7637-2-2004 Pulse 5

COMMUNICATION WITH BACK-END
- Embedded software for faster time to market Or Customizable OpenAT application
- GSM / GPRS (TCP or UDP) or SMS communication channels

STATUS INDICATORS
- One red color LED indicating GPS position fix
- One green color LED indicating GSM registration

ELECTRICAL INTERFACE
- 10-pin connector
<b>Connection for :</b>
- Power supply
- Open collector output (able to drive external LED/relay 250mA) x2
- Digital input x2 : active between 6v to 32V DC
- Analog input x1 : max 12V

FUNCTION AND FEATURES
- Device Generated Alert: Wired or Virtual Ignition ON/OFF Direction change Speed Mileage Low battery - battery disconnect HeartBeat / Power up Tow
- Programmable alert for usage outside specified time / area
- Disable/Enable ignition - engine
- Configurable alert messages for overspeed, geofence, ignition, etc.
- Device generated rectangular/polygonal/circular geofences
- Software/Firmware upgrade over the air
- Device diagnostic status
- GPS engine status
- Power saving mode
- Initialize/set odometer
- I/O read - open/close - threshold alert set
- Embedded profile to connect to demo.maestro-wireless.com for demo and quick implementation

SERVICE PORT
- Accessible from outside after removing a plastic lid
- Serial port at logic 2.8V TTL level + other electrical test point
- Using external RS232 transceiver for connection to a PC, for diagnostic & software upgrade

COMPLIANCE
- ISO 7637-2-2004 up to Pulse 4

Maestro Wireless Solutions Ltd  
9th Floor, Wing Cheung Factory Building  
121 King Lam Street, Cheung Sha Wan  
Kowloon, Hong Kong  
Tel.: +852 3955 0222  
Fax: +852 3568 4833  
contact@maestro-wireless.com  
www.maestro-wireless.com

