



**TrackingTheWorld**  
GPS Tracking Solutions



# Enduro Plus 3G

## Data Sheet

### Multi-Purpose WCDMA/GSM Tracking Device

The water resistant Enduro Plus 3G is a powerful GPS locator designed for lone worker, vehicle, pet and asset tracking applications. The thumb sized button makes this device ideal for applications requiring rapid notification of emergency alert or regular setting of geo-fences based on current location. Its built-in GPS receiver has superior sensitivity and fast time to first fix. Its WCDMA allows the Enduro Plus 3G's location to be monitored in real time or periodically tracked by a backend server and mobile devices. Its built-in 3-axis accelerometer allows motion detection and extends battery life through sophisticated power management algorithms. System integration is straightforward as complete documentation is provided for the full featured @Track protocol. The @Track protocol supports a wide variety of reports including emergency, geo-fence boundary crossings, low battery and scheduled GPS position.

### Highlights

- Thumb Sized Button Allowing Easier Emergency Alert or Instant Geo-fence Setting
- Vibration Feedback Confirming Successful Button Operation
- Water Resistant
- Full Power Management
- Available in 2 internal battery sizes: 1700 mAh and 2600 mAh

### Advantages

- Water resistant
- Triple band frequencies UMTS/HSDPA 850 (Band V)/1900 (Band II)/2100 (Band I) MHz and quad band GSM/GPRS 850/900/1800/1900 MHz
- Embedded full featured @Track protocol
- Internal u-blox chipset
- Internal WCDMA/GPS antennas
- Thumb sized button allowing easier emergency alert or instant geo-fence setting
- Internal 3-axis accelerometer for power saving and motion detection
- Full power management, can be connected to external DC power or battery
- CE/FCC certified

## Enduro Plus 3G

### Multi-Purpose Tracking Device



#### RF Specification

|                          |                                                                                                                                                                                                        |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency                | GSM: 850/900/1800/1900 MHz<br>UMTS: 850/1900/2100 MHz                                                                                                                                                  |
| Transmitting Power       | Class 4 ( $33 \pm 2$ dBm) for GSM 850 and EGSM 900<br>Class 1 ( $30 \pm 2$ dBm) for DCS 1800 and PCS 1900<br>Class 3 ( $24+1/-3$ dBm) for UMTS 850/1900/2100                                           |
| GSM/GPRS Data Features   | GPRS:<br>Support GPRS multi-slot class 12 (10 by default)<br>Coding scheme: CS-1, CS-2, CS-3 and CS-4<br>Maximum of four Rx time slots per frame                                                       |
| Transmission Data        | HSDPA R5: Max 3.6 Mbps (DL)<br>WCDMA R99: Max 384 kbps (DL)/Max 384 kbps (UL)<br>GPRS: Max 85.6 kbps (DL)/Max 85.6 kbps (UL)                                                                           |
| HSDPA and WCDMA Features | HSDPA data rate corresponds with 3GPP R5. 3.6 Mbps on downlink<br>WCDMA data rate corresponds with 3GPP R99/R4. 384 kbps on downlink and 384 kbps on uplink<br>Support both 16-QAM and QPSK modulation |

#### GPS Specification

|                         |                                                                                              |
|-------------------------|----------------------------------------------------------------------------------------------|
| GPS Chipset             | 56-channel u-blox All-In-One GPS receiver                                                    |
| Sensitivity             | Autonomous: -147 dBm<br>Hot start: -156 dBm<br>Reacquisition: -160 dBm<br>Tracking: -162 dBm |
| Position Accuracy (CEP) | Autonomous: < 2.5m<br>SBAS: < 2.0m                                                           |
| TTF (Open Sky)          | Cold start: 27s average<br>Warm start: 27s average<br>Hot start: 1s average                  |

#### Interfaces

|                                         |                                                                                                                |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Digital Inputs                          | Two digital inputs<br>One positive trigger for ignition detection<br>One negative trigger input for normal use |
| Power Button                            | Power on and power off, can be disabled by the air interface protocol                                          |
| Function Button With Vibration Feedback | Emergency alert or instant geo-fence                                                                           |
| UMTS/HSDPA and GSM Antennas             | Internal only                                                                                                  |
| GPS Antenna                             | Internal only                                                                                                  |
| Indicator LED                           | CEL, GPS and power                                                                                             |
| Mini USB Interface                      | For external power and configuration                                                                           |

#### General Specification

|                          |                                              |
|--------------------------|----------------------------------------------|
| Dimensions               | 77.8mm*39.6mm*21.7mm or 77.8mm*39.6mm*26.7mm |
| Weight                   | 72g or 93g                                   |
| Internal Battery         | Li-Polymer 1700 mAh or 2600 mAh              |
| Water Resistance         | IPX5 compliant                               |
| Charging Voltage         | 5V DC                                        |
| External Battery Voltage | 3.5V to 4.2V DC                              |
| Operating Temperature    | -20°C ~ +55°C                                |

#### Air Interface Protocol

|                     |                                                               |
|---------------------|---------------------------------------------------------------|
| Transmit Protocol   | TCP, UDP, SMS                                                 |
| Scheduled Report    | Report position and status according to preset time schedules |
| Geo-fence           | Support up to 5 internal geo-fence regions                    |
| Power On/Off Report | Report when the device is powered on or off                   |
| Low Power Alarm     | Alarm when battery is low                                     |
| SOS/Emergency Alarm | SOS alarm when function key is pressed                        |
| Special Alarm       | Special alarm based on digital input                          |
| Motion Detection    | Motion alarm based on internal 3-axis accelerometer           |



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[www.TrackingTheWorld.com](http://www.TrackingTheWorld.com)

1633 Bayshore Hwy, Suite 390, Burlingame, CA. 94010

Sales: (650) 692-8100

Technical Support: (650) 692-2876