



# Universal Unit 3

## Professional Fleet Management System

The Universal Unit 3 is a GPS/GSM/GPRS geographic locator designed for public or private fleet management applications where high performance and reliability are primary considerations.

The UU3 is delivered with a 2G modem as the standard option. A GSM+UTMS 3G modem is available under a separate part number and pricing.

Featuring internal antennas, the UU3 is a compact, easy-to-install vehicle tracking device. Designed for passenger vehicles and trucks, the UU3 provides real-time vehicle location and enhanced driver security features including automatically triggered hijack alerts.

The UU3 supports up to two RIM devices for enhanced anti-theft security, while WorldFleetLog can also support an additional tracking device hidden in the vehicle.

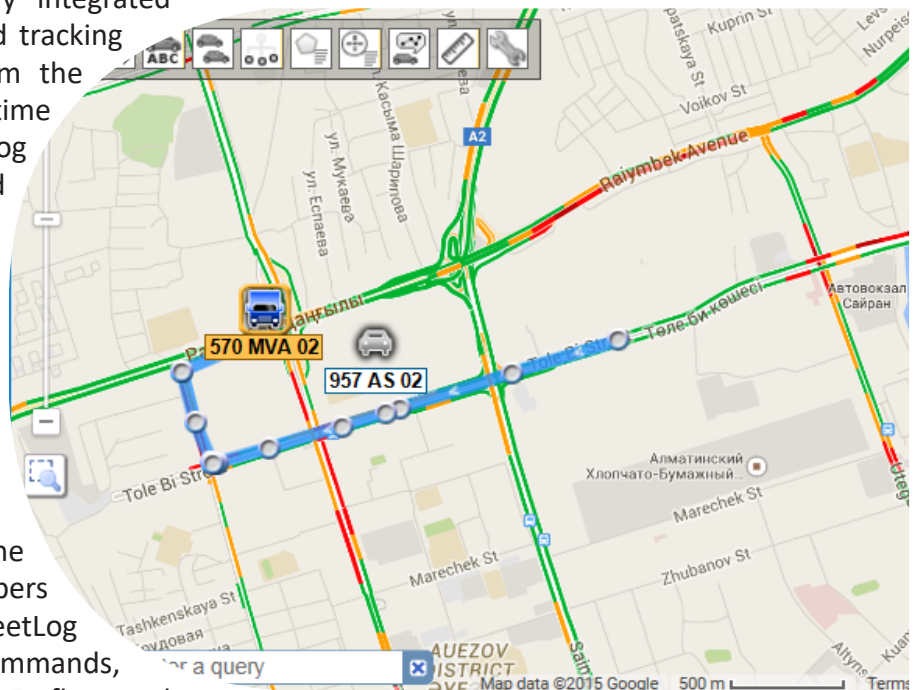
The Universal Unit 3 is completely integrated with EDT's WorldFleetLog Web-based tracking and monitoring solution. Input from the Universal Unit 3 displays the real-time on-map vehicle location. WorldFleetLog can then generate real time alerts and reports regarding vehicle location, driver behavior, and a wide variety of business management oriented reports.

Generated reports based on user-defined parameters are easily accessed by designated fleet managers.

The EDT mobile app also supports the UU3. World Fleet provides subscribers mobile access to EDT's WorldFleetLog application and supports SMS commands, vehicle location, and many other WFL fleet and driver management functions.

### Universal Unit 3 Key Features

- 24/7 Real-time Vehicle Location and Security
- All FMS events including driver behavior
- Supports vehicle tracking in Standby mode
- Park, movement, theft, idle, and battery alerts
- Supports remote vehicle immobilizing by external relay
- Remote buzzer activation
- iButton and RFID identification for drivers and passengers
- Define checkpoints, geo-fencing and route verification parameters
- Integrated SOS button to request assistance via SMS or Web alert
- Smart backup battery management
- Black box accident analysis based on accelerometer



# Universal Unit 3

## Technical Specifications

### Power Consumption and Specifications

- External Power Supply: 9 - 36 VDC
- Internal backup battery: 2000mAh Rechargeable LI-Polymer battery
- Power Consumption:
- Ignition On: 72.02 [mA] (Max); 47.41 [mA] (nominal)
- Ignition Off, Active Mode:
  - 70.42 [mA] (Max)
  - Standby Mode: 33.27 [mA]
  - Sleep Mode: 1.52 [mA]
  - Sleep Transportation Mode: 38.80 [uA]
- EMI Protection: Pi Filter

### Physical Characteristics

- 101x58x34 mm without cable and brace
- 160 grams
- ABS Plastic Box
- Operating temperature: -40°C to +85°C - industrial grade
- Environmental operating conditions: Meets, or exceeds automotive standards for humidity, corrosion, salt mist/fog test; salt spray, dust, drip water, and constant humidity under operation tests

### GPS Receiver

- 72-channel u-Blox M8 engine for GPS/QZSS L1 C/A, GLONASS L10F, BeiDou B1, SBAS L1 C/A: WAAS, EGNOS, MSAS

Horizontal position accuracy: 2 meters

Multi-GNSS Assistance:

- AssistNow Online
- AssistNow Offline (up to 35 days)
- AssistNow Autonomous (up to 6 days)

Time to first fix:

- Cold start: 26 s
- Aided start: 2 s
- Hot start: 1 s

GPS Antenna:

- Receiving Range Frequency: 1575.42 MHz  $\pm$  1.023 MHz
- Impedance: 50 ohm

### CPU

- 16 Kbyte SRAM memory
- 256 Kbyte Flash memory
- 4 UARTs
- 3 SPI / 3 I2C
- 4 MHz system clock

### External Memory

- EEPROM
  - Size: 512 Kbit
- Flash
  - Size: 8M bit

### GSM/GPRS/EDGE/UMTS/HSPA

Frequency Bands: Dual band (AGS2-X): GSM 900/1800MHz

- GSM Class: Small MS
- Output power:
  - Class 4 (+33dBm  $\pm$ 2dB) for EGSM900
  - Class 1 (+30dBm  $\pm$ 2dB) for GSM1800
- Data Transfer: GPRS:
  - Multislot Class 8 (dual band)
  - Full PBCCH support
  - Mobile Station Class B
  - Coding Scheme 1 – 4
- SMS

3G Modem (EHS5) available under a separate part number and pricing

Dual-Band UMTS (WCDMA/FDD)

- EHS5-E: 900 and 2100 MHz
- EHS5-US: 850 and 1900 MHz

Dual-Band GSM

- EHS5-E: 900 and 1800 MHz
- EHS5-US: 850 and 1900 MHz

### Communication Interfaces

- RS 232
  - Baud Rate: 9600—115,200 baud maximum
  - Connection: Simple null modem, Tx/Rx lines without handshaking
  - Signal Levels: -6V...+6V
- LIN Bus

### Input/Output

- External Digital Inputs:
  - Ignition Switch: Active high
  - Tampering: Active low
  - Discrete input 1: Active low
  - Discrete input 2: Active low
- 1 Analog to Digital Input
  - 0-30 VDC input range
  - Resolution: 10 bit (1024 levels)
- 3 Digital Outputs
  - Output 1: Active low
  - Output 2: Active low
  - Immobilizer

Each output has the following protections:  
Open drain; Clamping protection for inductive load;  
Short circuit, over current protection; Overvoltage,  
Over Temperature; Maximum current: 0.5 A

