

F1 Fleet Management System

About the F1 FMS

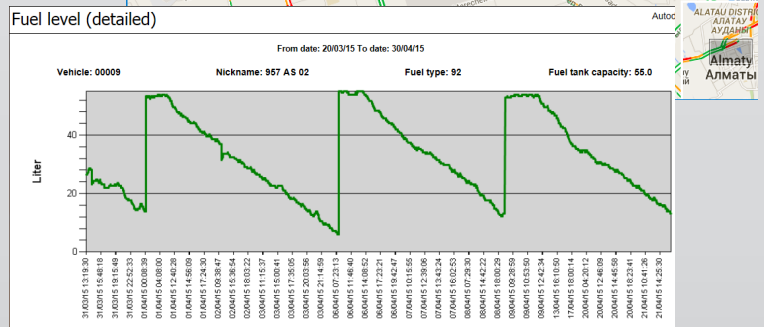
The F1 automotive grade fleet management solution is for public, military, commercial and private sector applications that require robust performance.



The F1 is available with an internal 2G or 3G modem with support for an external LTE modem as well as for an Iridium satellite network fallback option. The F1 includes on-board CAN Bus J1939 support as well as support for a large selection of proprietary CAN Bus protocols to provide a robust set of vehicle and driver behavior events and alerts.

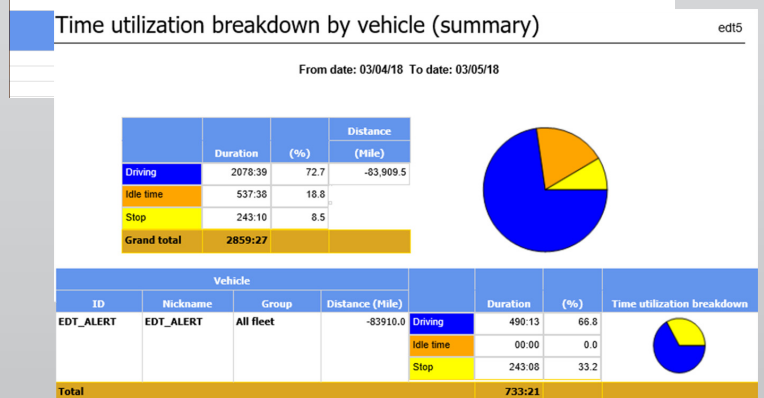
F1 FMS Main Features

- » Internal 2.5G, 3G GSM/GPRS, and external 4G LTE communications options. Supports optional Iridium satellite network modem
- » Supports five digital inputs + ignition, three digital outputs, and two A/D inputs.
- » On-board functions include CAN Bus transceiver, immobilizer, buzzer, and accelerometer.
- » F1 includes LIN Bus and RS232 interfaces to support a variety of driver ID types including Dallas key, magnetic card reader, RFID, and keypad with private/business trip type
- » Fully integrated with WorldFleetLog to generate hundreds of reports



WorldFleetLog

EDT's WorldFleetLog cloud-based tracking and monitoring solution to provide real time vehicle status and driver behavior data. With hundreds of ad hoc and automatically generated reports based on user-defined parameters. The F1 Fleet Management System makes a significant contribution to improved fleet management in any economic sector.



F1

Technical Specifications

Communications

- 2G Quad Band GSM/GPRS UBlox SARA-G350 02A
- 3G: HSPA 5-band, GSM UBlox SARA-U201-04A - 800 MHz, 850 MHz, 900 MHz, 1900 MHz, 2100 MHz; with automatic fallback to 2G 850 MHz, 900 MHz, 1800 MHz, 1900 MHz
- Supports user-initiated wake-up call and user-initiated SMS commands to activate or deactivate alerts
- LIN Bus Transceiver
- RS-232 interface
- WiFi based on WLAN microcontroller 802.11 (option)
- Supports external Iridium network satellite fallback

GPS Module

- Receiver Type: UBlox M8030-KT 72-channel u-blox M8 engine
- Sensitivity: Tracking & Navigation -167 dBm; Reacquisition -160 dBm; Cold start -148 dBm; Hot start -157 dBm
- Acquisition: Cold starts: 26 s, Aided start: 2 s, Hot start: 1 s;
- GPS Patch Antenna, 1575MHz Center Freq 1575MHz +/- 3MHz Bandw 10 MHz, supports antenna disconnect and short circuit detection
- Built-in spoofing protection
- Anti Jamming: Active CW detection and removal
- Multi-GNSS Assistance: AssistNow Online; AssistNow Offline (up to 35 days); AssistNow Autonomous (up to 6 days)
- Horizontal Position Accuracy: 2.0 m CEP
- Navigation update rate up to 18 Hz for single GNSS, 10 Hz for 2 concurrent GNSS

Input/Output

- 5 Discrete external inputs + IGN
- 3 external outputs: open drain (1A)
- 2 external analog inputs with an A/D range from 0 to 30 VDC
- 1 pulse input for odometer or RPM
- Two LED outputs
- Dallas iButton

Feature Set Summary (Partial)

- Start Trip/End Trip Messages
- Start/End Idle Event Alert
- Vehicle and BuB-related Alerts:
- Driving Without Permission
- Buzzer Alert for Next Service
- Emergency Button
- Acceleration/Deceleration Event Alert
- Shock (Theft) Alert
- Parking Alert
- Movement Event Alert
- Over Speed Event and Buzzer Alerts
- Accident Alert
- Curve Acceleration Alerts
- GPS Driven Events
- Fuel Alerts
- Jamming Alerts
- Next Service Engine Hours
- Next Service Odometer
- Points of Interest
- CAN Bus: Includes parameters and parameter management
- Diagnostic Events

On-board Functions

- MCU ARM 1048Kb flash
- 256Kb SDRAM
- Flash memory 64Mb
- High Speed CAN transceiver
- Immobilizer
- Accelerometer
- Buzzer
- Undervoltage Detection
- Over voltage protection

Current Consumption

- Vehicle Battery Operating Voltages: 12 VDC nominal [9-18 VDC]; 24 VDC capability
- Backup Battery Operating Voltage and Capacity: 3.7 VDC rechargeable 2000 mA Lithium Ion-Polymer battery
- Current Consumption from Vehicle Battery: Maximum (GPRS On): 128 mA
- Maximum (Backup Battery Charging): 228 mA; Full Power Mode: (GPRS Off): 63 mA; Standby Mode: 2.12 mA

Physical Characteristics

- Operating temperature range: -40°C to +85°C
- 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
- Dimensions: 100 x 57 x 32 mm (without bracket)
- Weight: 161 grams (without bracket)