F2 LTE Advanced

The F2 LTE Fleet Management System features an internal NB/CatM modem with 2G fallback and support for additional external modems for Iridium satellite network fallback option, WiFi or RF communication options. F2 LTE includes an on-board CAN Bus J1939 transceiver and supports OBD II via external transceiver to provide a robust set of fleet management and driver behavior events and alerts.

The F2 LTE can log up to 400 days of messages based on an average 8-hour drive per day with tracking messages every 30 seconds.

F2 LTE Advanced Main Features

- » **Internal catM/2G modem with optional internal BLE / WiFi**
- » **Supports external Iridium satellite / WiFi / RF modems**
- » **On-board functions include CAN Bus transceiver and accelerometer.**
- » **Supports multiple driver ID types including magnetic card reader, RFID, and keypad with private/business trip type**
- » **Fuel Level and alerts by CAN Bus, and up to 2 fuel level sensors**
- » **I/O includes 3 RS232 ports, 2 pulse inputs for RPM and odometer, 6 discrete outputs, 2 Analog inputs, and Ignition + 3 discrete inputs**
- » **Fully integrated with EDT's proprietary WorldFleetLog cloud application to generate real-time dashboards and hundreds of reports.**

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F2 LTE Advanced
Technical Specifications

GSM Communications

- Cat M1: LTE-FDD:B1/B2/B3/B4/B5/B8/B12/B13/ B14/B18/B19/B20/B25/B26*/B27/B28/B66/B85
- Cat NB2: B1/B2/B3/B4/B5/B8/B12/B13/B18/ B19/B20/B25/B26*/B28/B66/B71/B85
- EGPRS: 850/900/1800/1900MHz
- Internal antenna

Optional Communications Interfaces

- Supports external Iridium network satellite modem
- Supports external WiFi and RF communication options
- Supports internal WiFi / BLE 5.0 modem

GNSS Module

- Receiver type supports multiple global positioning and navigation systems: GPS, GLONASS, Galileo, BDS and QZSS. The module also supports SBAS (including WAAS, EGNOS, MSAS and GAGAN) and AGNSS functions.
- Sensitivity: Tracking & Navigation –166 dBm; Reacquisition –159dBm; Cold start –148 dBm; Hot start –157 dBm
- Acquisition: Cold starts: 26 s, Aided start: 2 s, Hot start: 1 s;
- Patch Antenna, 1575MHz Center Freq 1575MHz +/- 5MHz 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: 1.5 m
- Navigation update rate: 1 Hz (Default); Max. 10 Hz

On-board Functions

- MCU: ST STM32F427VIT6TR (Default)
- Flash memory size: 32 MB
- Accelerometer: An internal 3 axis accelerometer
- On board buzzer
- Dallas Interface: Dedicated 1-Wire protocol
- Undervoltage Detection; Over voltage protection; Thermal shutdown with auto restart; Overload protection; Short circuit protection; Current limitation

Current Consumption

- Vehicle Battery Operating Voltages: 12 VDC nominal [9—28 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): 150 mA
- Maximum (Backup Battery Charging): 228 mA; Full Power Mode: (GPRS Off): 63 mA; Standby Mode: 1.8 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: 110 x 57 x 32 mm (without bracket)
- Weight: 161 grams (without bracket)

Input/Output F2 LTE Main Unit

- 2 pulse inputs for VSS and RPM
- Ignition + 3 discrete inputs
- 6 Discrete outputs
- 2 Analog inputs
- Supports OTA FW upgrade
- Supports 2 fuel level sensors
- Dallas 1-Wire
- 3 RS-232 Interfaces: One for device configuration and debug, and the others may for accessories
- Internal CANBus support for J1939 and generic CAN Bus support per specific vehicle models

Fuel Level

- Supports up to 2 fuel level sensors of all types

Supported Vehicle Types

- Diesel and petrol engine types
- Hybrid and electric vehicles
- Non-vehicle applications such as generators, tankers, and any other stationary or mobile equipment

F2 LTE Advanced Applications

Mining and HSE Mandated Areas | Semi Trailers | Cold Transport | Government Agencies & Military | Financial & Insurance Sector | Agriculture