



FS-125 (compatible to the Digital Fuel Sensor)

DATA SHEET

Name	FleetStakes FS-125
Technology	GSM/GPRS/GNSS/BLUETOOTH
GNSS	
GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
Receiver	33 channel
Tracking sensitivity	-165 dBm
Position accuracy	< 2.5 CEP
Velocity accuracy	< 0.1m/s (within +/- 15% error)
Hot start	< 1 s
Warm start	< 25 s
Cold start	< 35 s
Cellular	
Technology	GSM
2G bands	Quad-band 850 / 900 / 1800 / 1900 MHz
Data transfer	GPRS Multi-Slot Class 12 (up to 240 kbps), GPRS Mobile Station Class B
Data support	SMS (text/data)
Power	
Input voltage range	10 - 30 V DC with overvoltage protection

Module



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Internal Back-up battery

170 mAh Li-Ion battery 3.7 V (0.63 Wh)

Power Consumption

At 12V < 6mA	Ultra Deep Sleep
At 12V < 6.5mA	Deep Sleep
At 12V < 7mA	Online Deep Sleep
At 12V < 12mA	GPS Sleep
At 12V < 38 mA	Nominal with no load

Bluetooth

Specification	4.0 + LE
Supported peripherals	Temperature and Humidity sensor, Headset, OBDII dongle, Inateck Barcode Scanner, Universal BLE sensors support

Physical specification

Dimensions	65 x 56.6 x 20.6 mm (L x W x H)
Weight	52 g



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Operating environment

Operating temperature (without battery)	-40 °C to +85 °C
Storage temperature (without battery)	-40 °C to +85 °C
Operating humidity	5% to 95% non-condensing
Ingress Protection Rating	IP41
Battery charge temperature	0 °C to +45 °C
Battery discharge temperature	-20 °C to +60 °C
Battery storage temperature	-20 °C to +45 °C for 1 month -20 °C to +35 °C for 6 months

Interface

Digital Inputs	1
Digital Outputs	1
Analog Inputs	1
CAN Adapter Inputs	1
1-Wire	1
RS232	1
RS485	1
GNSS antenna	External (SMA connector) / internal (optional)
Cellular antenna	Internal GSM High Gain
USB	2.0 Micro-USB
LED indication	2 status LED lights
SIM	Dual SIM
Memory	128MB internal flash memory

Features

Sensors	Accelerometer
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Scenarios	Green Driving, Over Speeding detection, Jamming detection, GNSS Fuel Counter, DOUT Control Via Call, Excessive Idling detection, Immobilizer, iButton Read Notification, Unplug detection, Towing detection, Crash detection, Auto Geofence, Manual Geofence, Trip
Sleep modes	GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep
Configuration and firmware update	FOTA Web, FOTA, FleetStakes Configurator (USB, Bluetooth), FMBT mobile application (Configuration)
SMS	Configuration, Events, DOUT control, Debug
GPRS commands	Configuration, DOUT control, Debug
Time Synchronization	GNSS, NITZ, NTP
Fuel monitoring	LLS (Analog), RS232/485 Fuel sensor, LV-CAN200, ALL-CAN300, CAN-CONTROL, OBDII dongle
Ignition detection	Digital Input 1, Accelerometer, External Power Voltage, Engine RPM (CAN Adapters, OBDII dongle)
RS232 Modes	Log Mode, NMEA, LLS, LCD, RFIH HID/MF7, Garmin FMI, TCP ASCII/Binary
RS485 Modes A or B pin (common-mode voltage)	Log Mode, NMEA, LLS, TCP ASCII/Binary RS485 input voltage range on -7V to +12V
RS232 input voltage range (common-mode voltage)	+/-15V
RS232 input voltage range (maximum operational voltage)	+/-25V
