LOSTnFOUND® LENTICUS

LENTICUS*pro*

Technical specification

Version 1.0
July 1st 2013

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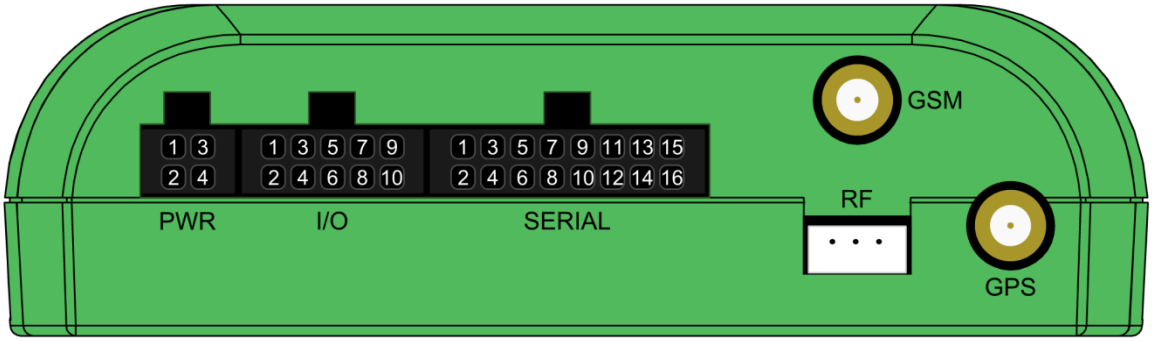
Device Connectors & Pin Assignment

Front View	
PWR	Power Connector for Car Battery
I/O	Input/Output Connector
SERIAL	Serial Connector
GSM	SMA Connector for external GSM Antenna
GPS	SMA Connector for external GPS Antenna
RF	RF Connector for RF Receiver



PWR Connector

Pin#	Signal Name	Description	I/O	Remark
1	DC IN	Power supply input	I	DC Vin = +8 ~ +30V
2	GND	Signal ground	—	
3	Ignition	Ignition (ACC) Input	I	DC Vin = +30 ~ +7V (Active high)
4	Output 1	Open-Collector Output 1	O	Imax = 300mA

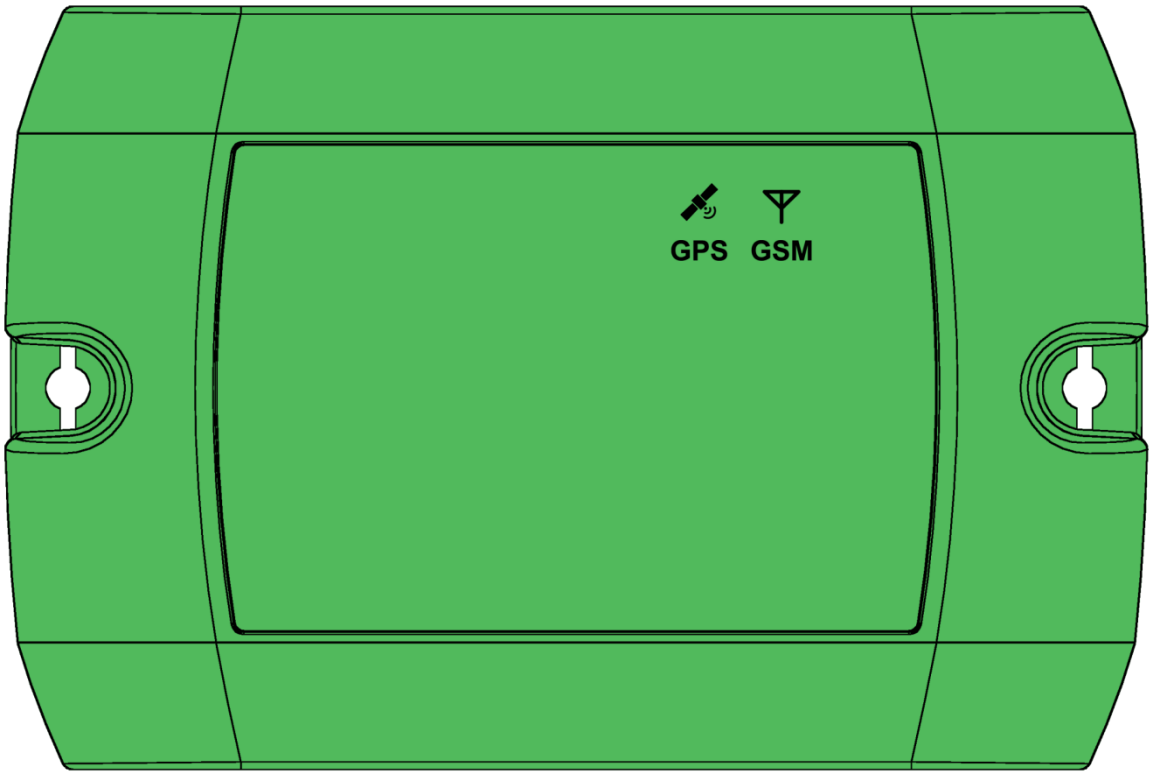
I/O Connector

Pin#	Signal Name	Description	I/O	Remark
1	Analog Input 2	Analog Input 2	I	DC VIN = +30V ~ 0V
2	Input 3	Positive Trigger Input 3	I	DC VIN = +30V ~ +7V (Active high)
3	Input 1	Negative Trigger Input 1	I	DC VIN = +6V ~ 0V (Low Active)
4	Input 2	Negative Trigger Input 2	I	DC VIN = +6V ~ 0V (Low Active)
5	Analog Input 1	Analog Input 1	I	DC VIN = +30V ~ 0V
6	GND	Signal ground	—	
7	Output 2	Open-Collector Output 2	O	Imax = 300mA
8	Output 3	Open-Collector Output 3	O	Imax = 300mA
9	NC	Not Connected		
10	NC	Not Connected		

Serial Connector

Pin#	Signal Name	Description	I/O	Remark
1	Vout 1	Supply voltage output	O	Vo = 5V (Vout 1+2 Total Imax=500mA)
2	GND	Signal Ground	—	
3	TX 1	RS-232 Data Output	O	
4	RX 1	RS-232 Data Input	I	
5	Vout 2	Supply voltage output	O	Vo = 5V (Vout 1+2 Total Imax=500mA)
6	GND	Signal Ground	—	
7	TX 2	RS-232 Data Output	O	
8	RX 2	RS-232 Data Input	I	
9	1-Wire®	1-Wire® Data input	I	
10	1-Wire®GND	Signal Ground	—	
11	NC	Not Connected		
12	NC	Not Connected		
13	SPK+	Audio output	O	
14	SPK-	Audio output	O	
15	MIC+	Microphone Input	I	
16	MIC-	Microphone Input	I	

Top view	
GPS	LED Indicator
GSM	LED Indicator



GPS LED Indicator

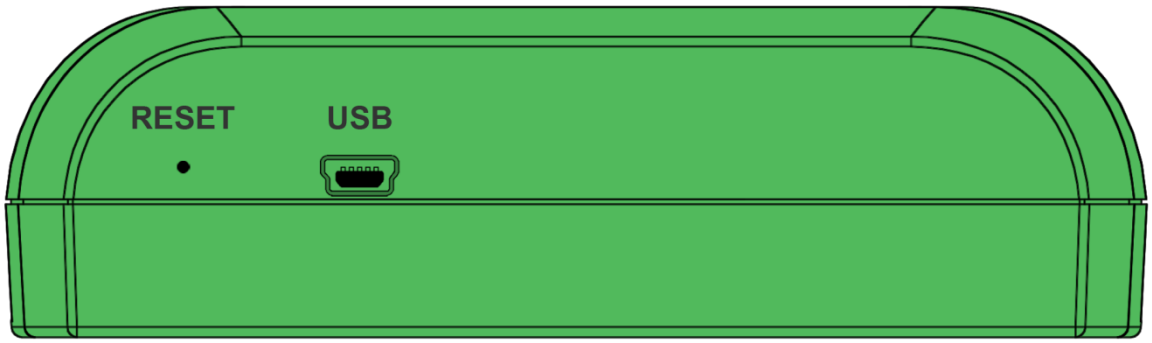
Power Mode	GPS Status	GPS LED
Power Off	N/A	Off
Low Power	N/A	Off
Full Power	Acquiring	Flash Red (5x / sec.)
Full Power	Tracking	Solid Red

GSM LED Indicator

Power Mode	GSM/GPRS Status	GSM LED
Power Off	N/A	Off
Low Power	N/A	Off
Full Power	Acquiring	Flash Red (3x / sec.)
Full Power	Registered	Solid Red

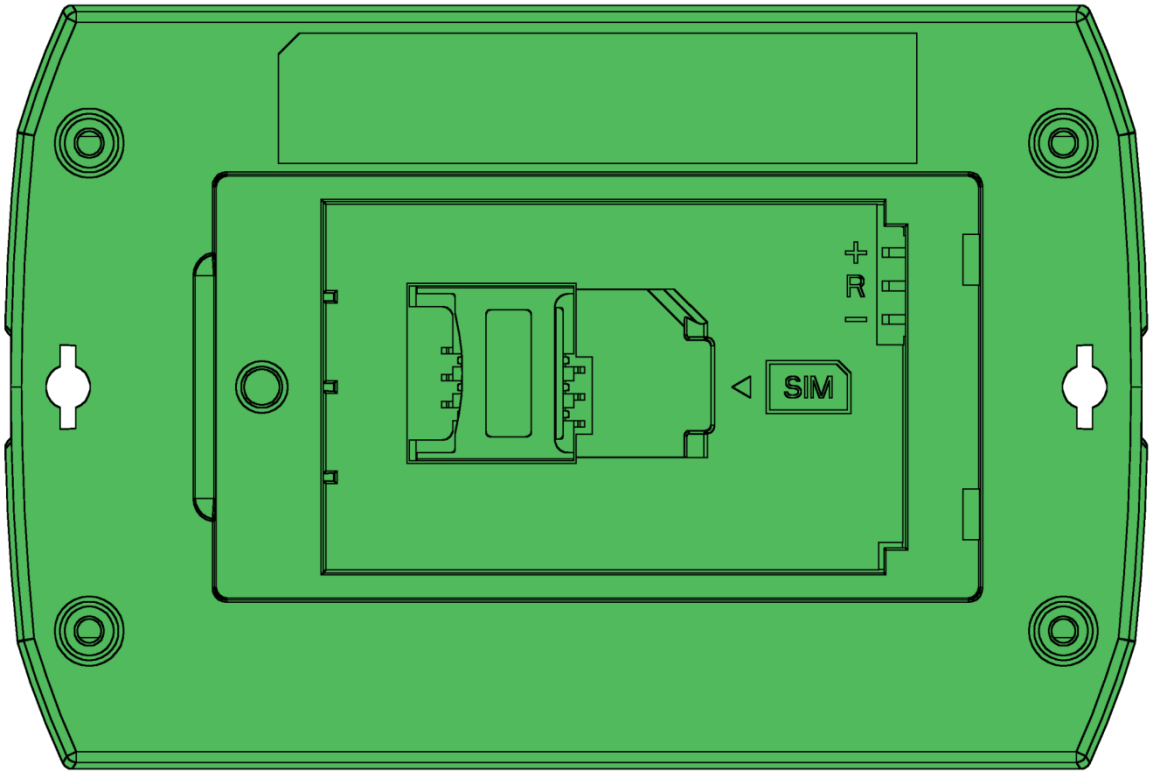
Rear View

Mini USB Connector	Do not use until advised by LnF Customer Service
RESET	Hardware Reboot Button (Pinhole)



Bottom view

SIM Card	Do not remove until advised by LnF Customer Service
Backup Battery	Compartment



Technical Specification

Characteristics	
Dimensions (L x W x H)	72mm x 108mm x 31mm
Weight	165g

Radio Performance	
Frequency	Quad-band 850/900/1800/1900MHz

GSM Functionality / GPRS	
GPRS Mode	Multi-slot Class 10
GPRS Coding Scheme	CS1,CS2,CS3 and CS4
GSM Antenna	External
SIM Interface	SIM Card 1.8V, 2.9V Supported

GPS Functionality	
Receiver	50 Channels
Sensitivity (Tracking)	-160dBm
Antenna Type	External GPS Active Antenna, 3.3V
Connector	SMA Female
GPS Protocol	NMEA 0183 Ver3.0

Onboard Components	
MCU	32-bit Microcontroller
Data Memory	8MB Flash
Motion Sensor	3-axes Acceleration Sensor
Led Indicator	GPS and GSM Indicator

Interface I/O	
I/O Connector	1 Connector, 10 Pins
Serial Connectors	2x RS-232 Ports (Configurable)
Input Ports	Positive Triggers: 2 Negative Trigger: 2 Analog Input: 2 (0~30V, 12 Bits)
Output Ports	Negative Triggers: 2 (500mA)

Electrical	
Power Source	DC 8V to 30V
Power Consumption	73mA @ 12V (Operating Mode) 13mA @ 12V (Standby Mode) 10mA @ 12V (Deep Sleep Mode)

Environment	
Operating Temperature	-20 °C to +70 °C (Without Backup Battery) -20 °C to +60 °C (With Backup Battery)

Battery	
Rechargeable Backup Battery	1150mAH , support up to 200 hours (based on data transmission every 4 hours)

Disclaimer Notes

General

This LOSTnFOUND® LENTICUS Series device works solely based on the GSM (Global System for Mobile Communication) & GPS (Global Positioning Satellites) Coverage. Thus, its functionalities solely rely on the availability of the network coverage. The manufacturer, its subsidiaries, authorized dealers, distributors and installers do not warrant the operation of this device will be not interrupted or error-free.

In no event will the manufacturer, its subsidiaries, authorized dealers, distributors, dealer and installers shall be liable for any general, special, incidental, or consequential damages and losses due to any cause of operation of the device or any failure of the device to perform, including any lost, expenses, cost incurred or suffered whether caused directly or indirectly or arising from the function or malfunction of the device.

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