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**LENTICUS***rugged*

Technical specification

Version 1.02

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[support@lostnfound.com](mailto:support@lostnfound.com)

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## Device Connectors & Wire Assignment

Device		
1	GPS LED	LED Indicator
2	GSM LED	LED Indicator
3	GPS conn.	SMA Connector for external GPS Antenna
4	Cables	Cable harness
5	SIM-Card	Do not remove until advised by LnF Customer Service



### Cable harness

Color	Signal Name	Description	I/O	Remark
Red	DC IN	Power supply input	I	DC Vin = +8 ~ +30V
Black	GND	Signal ground	—	
Brown	Ignition	Ignition (ACC) Input	I	DC Vin = +30 ~ +7V (Active high)
Orange	Output 1	Open-Collector	O	Imax = 300mA
Gray	Output 2	Open-Collector	O	Imax = 300mA
Yellow	Input 1	Negative Trigger	I	DC VIN = +6V ~ 0V (Low Active)
Green	Input 2	Positiv Trigger	I	DC Vin = +30 ~ +7V (Active high)
Blue	Analog input 1	Analog Input	I	DC VIN = +30V ~ 0V
USB	Service	Do not use until advised by LnF Customer Service		

**GPS LED Indicator**

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

**GSM LED Indicator**

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

## Technical Specification

### Characteristics

Dimensions (L x W x H) 72mm x 90mm x 33mm

Weight 165g

Ingress Protection IP67 (waterproof)

### 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 Internal

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

Power / IO Connector 8 Wires / 1x USB

Input Ports Positive Triggers: 2 (incl. Ignition)  
Negative Trigger: 1  
Analog Input: 1 (0~30V, 12 Bits)

Output Ports 2 max. current 300mA

### Electrical

Power Source DC 8V to 30V

Power Consumption 72mA @ 12V (Operating Mode)  
8mA @ 12V (Standby Mode)  
6mA @ 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 900mAh

## 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.

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