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**OPACUS**

**Technical specification**

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## Device Connectors & Pin Assignment

### Top View



### Connecting OPACUS

Pin#	Signal Name	Color	Description
1	Power	■ red	DC 8 ~ 30 V
2	GND	■ black	Ground
3	Input 1 / Ignition	□ white	Positive triggered (above 5V as trigger condition) <i>Used to detect sleep mode (Connect to ignition)</i>
4	Input 2	■ gray	Positive triggered (above 5V as trigger condition)
5	Input 3	■ green	Negative triggered (below 0.8V)
6	Input 4	■ violet	Negative triggered (below 0.8V)
7	Output 1	■ yellow	Negative triggered ( I <sub>o</sub> =160mA, I <sub>peak</sub> : 320mA)
8	Output 2	■ orange	Negative triggered ( I <sub>o</sub> =160mA, I <sub>peak</sub> : 320mA)
9	Output 3	■ brown	Negative triggered ( I <sub>o</sub> =160mA, I <sub>peak</sub> : 320mA)
10	Output 4	■ blue	Negative triggered ( I <sub>o</sub> =160mA, I <sub>peak</sub> : 320mA)

## Technical Specification

Characteristics	
Dimensions (L x W x H)	190mm x 155mm x 50mm
Weight	820g (incl. Battery/Cables)
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	66 Channels
Sensitivity (Tracking)	-165dBm
Antenna Type	External GPS Active Antenna
GPS Protocol	NMEA 0183 Ver3.0
Onboard Components	
MCU	32-bit Microcontroller
Data Memory	4MB Flash
Motion Sensor	3-axes Acceleration Sensor
Interface I/O	
I/O Connector	Cable / 10 Wires
Input Ports	Positive Triggers: 2 Negative Trigger: 2
Output Ports	Negative Triggers: 4
Electrical	
Power Source	DC 8V to 30V
Power Consumption	60mA @ 12V (Operating Mode) 20mA @ 12V (Standby Mode) 1mA @ 12V (Deep Sleep Mode)
Environment	
Operating Temperature	-20 °C to +55 °C
Battery	
Rechargeable Backup Battery	10.4 Ah / 3.7V support up to 60 days (based on data transmission every 6 hours)

## Disclaimer Notes

### General

This LOSTnFOUND® OPACUS 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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