# Specification

### **HUMIDITY** (non-condensing):

- 5% to 95% operating
- 5% to 95% storage

#### POWER:

- DC input steady state voltage range: 9-33 VDC (requires inline fuse for vehicle installations)
  - For 9-24 VDC installations, use a 3 A fuse
  - · For > 24 VDC installations, use a 2.5 A fuse
- Reverse polarity and transient voltage protection per ISO 7637-2
- Ignition sensing (automatic ON and time-delay OFF)
- Power consumption:
  - Idle: 4 W
  - WiFi Tx/Rx: 9 W
    LTE Tx/Tx: 6.25 W
  - · 12 VDC / 2 A adapter recommended

#### WIFI POWER:

- 2.4 GHz: 18 dBm conducted
- 5 GHz VHT20: 17.5 dBm conducted
- 5 GHz VHT40: 17 dBm conducted
- 5 GHz VHT80: 16.5 dBm conducted

**SIZE:** 4.6 × 4.5 × 1.2 in (118 × 113.5 × 29.3 mm)

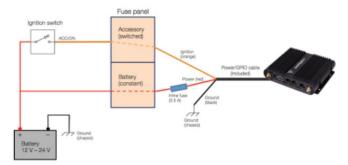
## Installation



Pin	Definition	Details	Wire Color
1	Ground	-	Black
2	Power	9–36 V DC	Red
3	Input	3 V input high threshold (36 V tolerant)	Orange
4	Output	capable of sinking 250 mA	Blue



The red wire (power) should connect to the positive (red) terminal of the battery, and the black wire (ground) should connect to the chassis. To enable ignition sensing functionality, connect the orange wire (input) to the ignition, or accessory, switch. The power and ignition wires can be attached directly or through the fuse panel.



The red power wire requires an inline fuse at 2.0 or 2.5 A. Either use an extra slot in the fuse panel for this fuse, or splice an inline fuse directly into the wiring. Here is an example of how to attach an inline fuse: http://youtu.be/RDOZT-dTITo.



Wire connections vary depending on the installation. Make sure your connectors are rated for the gauge of your wires (e.g., the included power/GPIO cable is 22 AWG). See the sample crimp connectors at right, and see this video example for how to attach a quick splice connector: http://youtu.be/zxt3LVpvjcw.

### Ignition Sensing

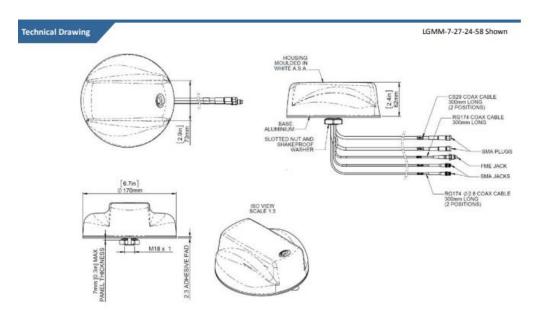
Ignition sensing allows you to set the router to power on when the ignition key is turned to ACC/ON, and then power off after the ignition key is turned off with a designated time delay. For example, set your router to remain on for an hour after the vehicle is turned off and then shut off. When the vehicle is turned on again, the router will also turn back on.

Edit these settings on the GPIO Connector administration page. Go to the configuration pages for your device or group in **NetCloud Manager (NCM)** or log into the local device administration pages and go to System > GPIOs. Refer to your product's User Manual for GPIO configuration instructions.



# Whale Antenna





Mechanical Data				
Dimensions	Height	2.4" (62mm)		
Dimensions	Diameter	6.7" (176mm)		
Operating Temp		-22*/176*F(-30*/+80*C)		
Colour		White (Black also available - add [B] suffix to part number e.g., LGMMB)		
Ingress Protection		IP66 (Certificate No. 45214)		
Approx. Weight (g)		480		

Mechanical Data			
Available Colours	White		
Height (mm)	62		
Diameter (mm)	176		
Operating Temperature	-40 / +80°C		
Mounting Data			
Mounting Type	Panel Mount		
Mounting Method	18mm (3/4") Mounting Bush		
Cable length	5m		

