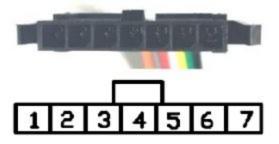
Version: 1.00

Terms and Abbreviations:

Abbreviation	Description			
RXD	Receive Data			
TXD	Transmit Data			
VIN	External DC Power Input			
IGN	Ignition			
OUT1/IN1	Output 1/Input 1			
OUT2	Output 2			
GND	Ground			

Pin Diagram:



Pin Description:

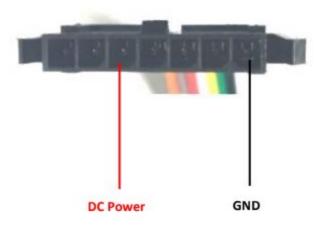
Index	Description	Comment	
1	RXD	UART RXD; TTL	
2	TXD	UART TXD; TTL	
3	VIN	External DC power input, 8-32V	
4	IGN	Ignition input, positive trigger	
5	OUT1/IN1	Digital output/input; Open drain,150mA max	
6	OUT2	Open drain, 150mA max	
7	GND	GND	

Wire Color Definition:

Definition	Color	Pin No.	Cable
RXD	Orange	1	
TXD	Gray	2	
VIN	Red	3	
IGN	White	4	
OUT1/IN1	Yellow	5	
OUT2	Green	6	
GND	Black	7	

Power Supply Connection:

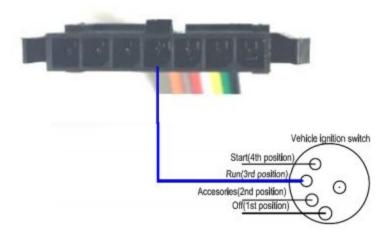
VIN (pin 3) and GND (pin 7) connect to the vehicle 12V battery. Input voltage range is 8V to 32V without the need for external transformers.



Ignition Detection:

IGN (pin 4) is used for ignition detection. It is recommended to connect to the "RUN" position of the vehicle ignition switch.

Logical State	Electrical Characteristics	
Active	5V to 32V	
Inactive	0V to 3V or Open loop	



Indicator LEDs:

The device has two status LEDs: CELL (Green color) and GPS (Red color).

CELL	Device is searching for CELL network.	Fast flashing
	SIM card needs PIN code to be unlocked.	ON
	Device has registered to CELL network.	Slow flashing
GPS	GPS is asleep.	OFF
	GPS is fixed.	ON
	Device is searching for GPS.	Fast flashing

Note:

1. Fast flashing intervals are about 100ms ON/200ms OFF.

2. Slow flashing intervals are about 200ms ON/1000ms OFF.