

### 4.5. LED Indicators

The following figure shows the location of AL11's LEDs.



LED	Indication	Description
PWR (Green)	Solid On	In full operation mode
	1 blink (0.1 sec.) in every 8 sec.	In sleep mode
	1 sec. On, 1 sec. Off	GPS module off, external power lost, running on backup battery
GPS (Red)	0.7 sec. On, 0.7 sec. Off	Searching for GPS signal
	Solid On	Position fixed
WWAN (Blue)	Off	WWAN module off
	0.7 sec. On, 0.7 sec. Off	Searching for WWAN signal
	0.2 sec. On, 2 sec. Off	Registered to WWAN network
	2 blinks in every 2 sec.	Connected to WWAN network
	Continuous blinking	SIM PIN Error

**Note:** In the case of SIM PIN Error, the device will check the AT\$SPIN every 10 minutes and try to access the SIM again. The PIN will be validated 3 times and if it fails the 3<sup>rd</sup> attempt, including the first inserting time, the SIM card will be locked. Once the SIM is locked, you need to contact your GSM carrier for the PUK in order to unlock the SIM card using your cell phone.

### 4.3. Power I/O Connector

The following table describes the function of each bare wire.

Power I/O Connector				
Pin#	Function	Color	Designation	Note
1**	General Input2 General Output1 (Default) Analog Input	Blue	IN2/O1/A1/	Positive trigger input Open collector output (Max.300mA) Analog input (DC0V~40V)
2**	General Input1 1-Wire Protocol Input	Green	IN1/1W	Negative trigger input 1-Wire Data input
3**	General Input3 General Output2 (Default)	Yellow	IN3/O2	Negative trigger input Open collector output (Max.300mA)
4	Main power input	Red	PWR	DC 8V~40V DC input
5	Power ground	Black	GNT	Ground
6	ACC Input	White	ACC	Ignition status positive trigger input

\* 1-Wire® Protocol supports up to three 1-Wire™ devices simultaneously, which means you can have one iButton® sensor (DS1990A) and two 1-Wire™ temperature sensor probes (DS18B20).

\*\* You may configure the [AT\\$IQCG](#) command to change these specific I/O pins to any of those functions mentioned as above. **Note: Please do not connect a positive voltage to any output pin !.**

\*\*\*\*\* **WIRING SUMMARY FOR CONNECTING WIRING FOR STANDARD TRACKING** \*\*\*\*\*

**MAIN POWER (+RED ) & (- BLACK) - CONNECT TO DIRECT CONSTANT POWER SUPPLY**

**BLUE WIRE - CONNECT TO (+) FEED ( RED WIRE)**

**WHITE WIRE - CONNECT TO - IGNITION FEED WIRE (NOT TO ACCESSORIES)**

**GREEN WIRE - ISOLATE**

**YELLOW - ISOLATE----"DO NOT CONNECT TO POWER " IT WILL BLOW THE UNIT**

**LOCATION OF GPS UNIT- INSTALL UNIT INSIDE HIDDEN AREAS OF DASH OR BEHIND CLOVE BOX**

**WHERE POSSIBLE. PLACE UNIT WITH LED LIGHTS FACING OUT \*\*\* AVOID PLACING UNIT UNDER**

**CLOSE METAL SUFACES \*\* GPS SIGNAL WILL NOT TRAVEL THOUGH STEEL.**

**IT WILL HOWEVER TRAVEL THROUGH NON FERROUS MATERILS EG: GLASS. PLASTICS,**