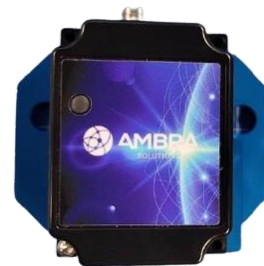# E02631
TECHNICAL DATASHEET
AMBRA SOLUTIONS LIGHT MODEM

The iPS Light Modem, product E02631, by Ambra Solutions is part of the overall LTE tracking and monitoring solution called iPS. The Light Modem is a CATM1 enabled IOT device capable of monitoring vehicle and assets on the field. It can monitor and interact via CAN bus, RS485, 4-20mA or plain GPIOs via the LTE connection. With it's intuitive mobile application, it's easy to configure and use. The Light Modem also interact with the iPS system by reporting BLE packet of GeoBeacon and sending information to the iPS core, allowing you to track the location and health of your equipment.
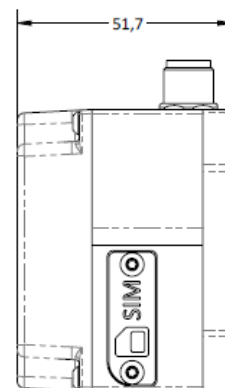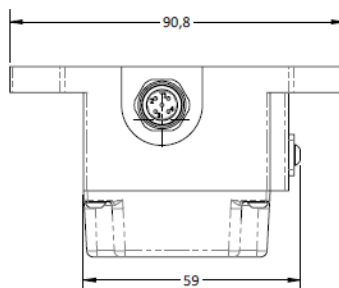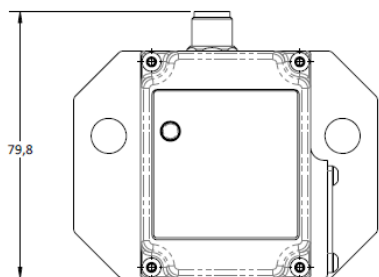
FEATURES AND BENEFITS

- LTE CATM1
- CAN bus, RS485, 4-20mA and GPIOs interface
- iPS ready for asset tracking indoor and outdoor
- Can be firmware reflashed over LTE
- Optional battery backup
- Mobile application configurable via BLE
- Rugged design compatible with harsh environments such as industrial, mining, forest industry

SPECIFICATIONS

Environmental		Mechanical		Connector	
Operating Temperature	-40°C to 85°C	Case Material	Aluminium/Plastic	Connector type	M12-5 43-01207
Storage Temperature	-40°C to 85°C	Dimensions (mm)	51,7 x 79,8 x 90,8		
Ingress Protection	IP54	Weight	1 lbs / 0.45kg		
Electrical				Mating connector	M12-5 TE 1838274-3
Operating Voltage	9VDC to 57VDC			Pinout	1: Ignition 2: Vcc 3: CANLO/RS485 B/GPIO 1/ 4-20mA IN 4: Gnd 5: CANHI/RS485 A/GPIO 0/ 4-20mA OUT
Interface *(*Can't be use at the same time)*	*CAN: 250kbps or 500kbps *RS485: Up to 115200 bauds *4-20mA reader *2x GPIOs: 12bits ADC input/Open collector output Ignition pin for graceful shutdown				
Power Consumption	2W typical				
Supported bands	LTE CATM1: B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B25, B26, B28				

ORDERING INFORMATION

Product number	Description	Installation
E02631	Ambra Solutions Light Modem	See Fellow page for general installation guideline

sales@ambra.co   1-877-374-3997   www.ambra.co

AMBRA SOLUTIONS LIGHT MODEM

INSTALLATION GUIDELINES

- The Light Modem has all the antennas integrated. For best results, it must be mounted on an external location that has clear view to the sky (satellites and mobile network antennas) without any object interfering this line of sight.
- It should be mounted horizontally or vertically with the harness going out at the bottom.
- The housing holes have been designed to allow usage of a u-bolt mounting bracket (69.85mm) with 10.5mm holes.
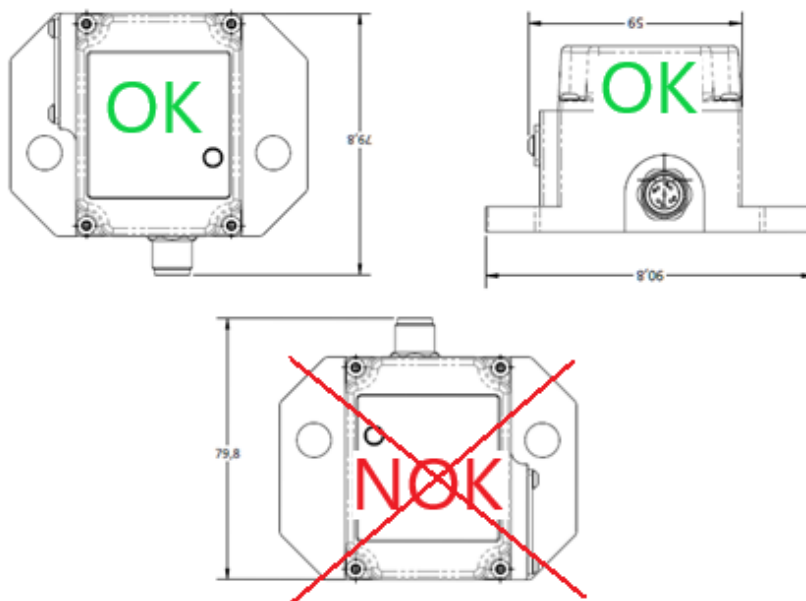
PINOUT

Pin	Harness	Description
1	Brown	Ignition
2	White	VCC
3	Blue	CANLO
4	Black	GND
5-Center	Gray	CANHI
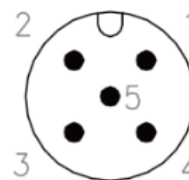
LED CODES

Legend	Description
Green flash	Module is starting
Steady green	Module is operational
Red/Blue flash	Module unable to connect to LTE
Red/Purple flash	Internal error
Green/Red flash	Upgrade in progress

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