

## Main product features

- IoT cellular outdoor modem, supporting NB-IoT and LTE-M
- Magnetic fixture points
- Preconfigured for automated VPN connectivity, automatic GPS synch with LSA, and multiple recovery modes during power or network outages
- Ideal for retrofit solutions, piloting purposes, or other scenarios where deep integration with the existing turbine communication network is not viable
- The modem may be preconfigured for direct support of Jomitek cloud services. Once installed, customers can access lightning data via centralized database connectivity and/or via relevant dashboards. Additional services on request.
- Requires only an external power supply
- Very robust and durable design fit for off-shore use

## Illustration



## General description

The Lightning Sensor & Analyzer is mounted outdoors and requires an Ethernet connection for data and power supply (PoE).

The cellular modem offers an Ethernet cable connection via an appropriately sealed interface at the bottom, which can be directly interfaced with the LSA.

A 2 wire DC carrying power supply cable is required for powering the modem. The modem shares the power supply with the LSA via the Ethernet connection.

The need for a simple power cable, with no prefitted terminating connector, may greatly ease options for an entryway into the turbine, if no power supply is conveniently available on the outside of the turbine.

Note that the solution requires NB-IoT or LTE-M coverage at the point of installation, and a power supply featuring UPS functionality with a minimum duration of 2 minutes after a lightning strike.

Additional details and installation considerations are listed in the LSA user manual, as part of the installation instructions using a cellular modem.

Note that the modem is ideally placed above the LSA, and may not be placed within 1m on the sides of the LSA, as it may otherwise interfere with the magnetic field measurements of the lightning sensor.

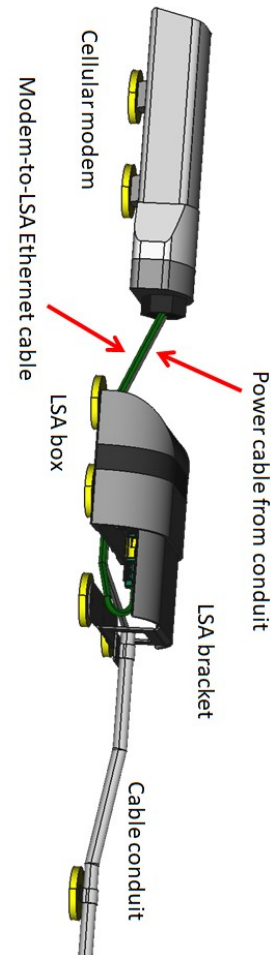
## Technical specifications

Dimensions, HxWxD	26x9x7cm
Magnet pad diameter	43mm
Magnet number	2
Power supply, DC cable	24-57VDC
-or-	
Power supply, PoE	PoE, class 3 (13W)
Integration with LSA	Preconfigured
GNSS / GPS	Integrated
IP class	66
WiFi	Yes, local configuration

### Installation:

(For detailed instructions, see the LSA users manual)

1. Attach sensor to tower surface, using the prefitted magnets.
2. Route cables to/from the modem - relevant cable assemblies are prefitted, when ordered at the same time, i.e. no need to open the modem bottom cable clamp.
3. A typical physical configuration is depicted on the right, where earthing of the entire assembly (if required) is efficiently obtained via the cable conduit.
4. Add the sealant (Sikaflex 291i is suggested), with appropriate environmental conditions, around the magnets so the assembly remains fixed in position.
5. Once the modem is powered up, it may be relevant to specify the cellular APN manually, if using your own SIM card. This can be done by connecting to the WiFi of the modem. Credential details for the WiFi can be found on the modem. Reach out to Jomitek for credentials to change the APN once logged on to the WiFi.



### Ordering information:

Either use own OEM part number or use:

Cellular modem *J910 00058 101*

Optional items, including relevant cable assemblies which must be ordered at the same time, for pre-assembly purposes. Replace xxx's with required cable length in decimeters:

Sikaflex 70ml: *J900 00067 070 (a single unit is sufficient for the entire installation)*  
 Cable with M12/RJ45IP20 connector: *J700 00060 xxx (for LSA with M12 mating connector)*  
 Cable with RJ45IP67/RJ45IP20 connector: *J700 00048 xxx (for LSA with RJ45IP67 mating connector)*  
 2 wire DC connector: *J750 00063 xxx (for LSA with RJ45IP67 mating connector)*

Note that for installation of the modem above the LSA, a cable length for the connection to the LSA of 0.5m is typically a good choice, i.e. *J700 00060 005* for the M12 variant.