

OPTION

# CloudGate

OUTDOOR LORAWAN  
ANTENNA 8 DBI



## The LoRaWAN Antenna

- Suitable for outdoor deployment and pole mounting
- Antenna gain 8 dBi
- Supports LoRaWAN frequency range from 860 to 930 MHz
- Length 110 cm (43 inches) N-type male connector

# OPTION

## Range

For outdoor LoRaWAN deployments, it is recommended to put LoRaWAN gateways on a high location and use high-gain antennas to extend the range of the gateway. The gain is stretching the antenna profile in the horizontal direction.

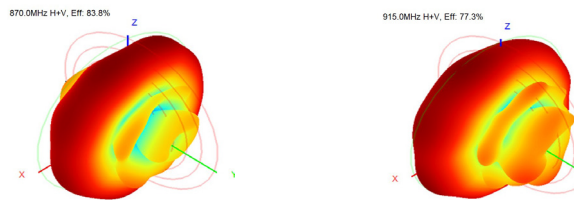
## Frequency

This high-quality outdoor antenna provided by Option is by default tuned to a frequency range that covers the most common LoRaWAN frequencies in the world. On request it is possible to order this antenna as well tuned for 868MHz or 915MHz where a gain up to 9dBi can be achieved.

## High quality outdoor antenna

Due to the significant length it is not recommended to mount the antenna directly on the outdoor box but use the U-shape bracket to mount the antenna on a pole near the box. An optional N-type male to N-type female antenna cable can be used from the connector on the box to the antenna.

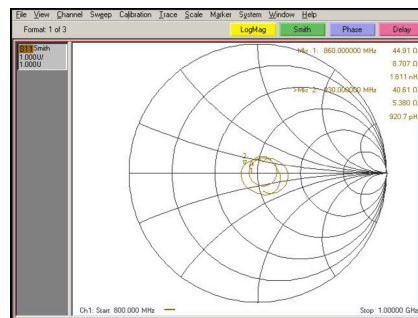
| TECHNICAL SPECIFICATIONS |   |
|--------------------------|---|
| Frequency range          | • 860 - 930 MHz                                 |
| Bandwidth                | • 70 MHz  |
| Input Impedance          | • 50 Ohm  |
| VSWR                     | • $\leq 1.5$                                    |
| Gain                     | • 8+/-0.3 dBi                                   |
| Polarization type        | • Vertical                                      |
| Radiation direction      | • All directions                                |
| Half-power beamwidth     | • Horizontal: 360°, Elevation: +/- 8°           |
| Max input power          | • 100 W   |
| Antenna size             | • $\Phi$ 23 x 1100mm (0.9 inches x 43.3 inches) |
| Antenna weight           | • 520g (18.3 ounces)                            |
| Antenna cover color      | • White   |
| Antenna cover material   | • Glass fibre                                   |
| Antenna connector        | • N male  |
| Operating temp           | • -20° to +85°C                                 |
| Storage temp             | • -40° to +85°C                                 |
| Mounting                 | • Pole ( $\Phi$ 25 to 50mm) with U-bracket      |
| Pole dimension           | • 25 to 50mm (1 to 2 inches)                    |
| Lighting protection      | • DC grounding                                  |
| Wind resistance          | • 60m/s   |



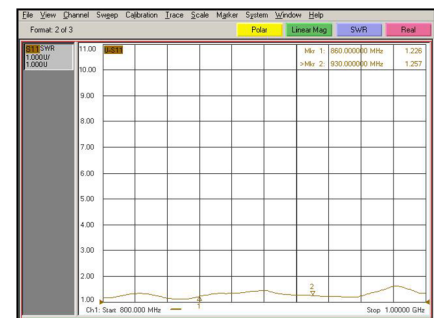
| Product                       | PN      |
|-------------------------------|---------|
| Outdoor LoRaWAN antenna 8 dBi | 1010644 |



Return loss chart



Smith chart



VSWR chart