

Datasheet: Outdoor LongFi Node and Antenna Assembly

LongFi Node

Industrial Die-Cast Aluminum Design

Designed to withstand the toughest of environments, this enclosure is made of Industrial Die-Cast Aluminum. It is rated IP67/NEMA-6, making it completely protected from dust ingress and submersible up to 1m in water.

Thermal Characteristics

- Enclosure seal operating temperature range: -60°C to 230°C
- Heat Trap: $+6.5^{\circ}\text{C}$ under full sun exposure ($\sim 100,000$ Lux)
- Temperature raise using a 5-10W heat source: $+5.5^{\circ}\text{C}$

Ports

- 5x N-Type Antenna connectors
- 1x Ethernet cable gland
- 1x Reserved port

Packaging

- Dimensions: 18in. x 12in. x 6in.
- Weight: 7.5lbs

Operating Frequency

- US915 (902MHz – 928MHz)

Transmitter Peak Gain

- 27 dBm

Power Requirements

- 5 Watts
- Power over Ethernet (PoE) capable

Wireless Protocols Supported (Local Device Management)

- 2.4 GHz and 5.0 GHz IEEE 802.11b/g/n/ac wireless LAN, Bluetooth 5.0, BLE



LongFi Antenna

Antenna Gain	2.8dBi	5.8dBi	8.0dBi
Frequency Range	902– 928MHz	902– 928MHz	902– 928MHz
Type	Omni	Omni	Omni
VSWR	≤1.5	2.0	≤1.5
Impedance	50 Ohms	50 Ohms	50 Ohms
Polarization	Vertical	Vertical	Vertical
Radome Body	Plastic	Fiberglass	Fiberglass
Connector	RP-SMA Female	N-Type Male	N-Type Male
Operating Temperature	-35~+75 °C	-40°C~ +60°C	-30°C~65°C
Length	8 inches	32 inches	36 inches

