



#### THDRLR89

#### **Thunder Series**

Integrated Directional 868 + 915 MHz Antenna for your LoRa device.

- Integrated 868 and 915 MHz antenna
- Cavity to install LoRa device
- Robust, IP67 Rated Enclosure

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Taiwan ISO 9001:2015 Certified







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# Thunder Series THDRLR89 Integrated Directional Antenna for your LoRa Device

#### INTERGRATED DIRECTIONAL 868 + 915 MHZ ANTENNA + PLACE TO INSTALL LoRa DEVICE (ALL-IN-ONE)

The **THDRL89** operates at 868MHz (EU868, IN865, RU864) and 915MHz (US915, AU915, AS923, KR920) with 12.5dBi gain. Experience unparalleled reach with this high-gain directional antenna. Its advanced design enables your LoRa devices to communicate effectively over long distances, even in challenging outdoor environments. Comparing to omnidirectional antenna, sector antenna transmits signal to a farther distance because of the antenna's directional gain.

The design allows for the installation of LoRaWAN/IoT gateways like SenseCAP M1 inside the antenna housing. Advanced mounting system gives significant advantage that it can be adjusted in the range of +/-35 degrees in two planes, also in case of wall mounting.

Unlock the full potential of your LoRa-based IoT applications with our directional, outdoor LoRa antenna. Experience extended range, reduced interference, and enhanced connectivity for your LoRa networks. Trust in its durability, precision, and ease of installation to elevate the performance of your IoT solutions.



















## **ANTENNA SPECIFICATION**

FREQUENCY	840 - 940 MHz [EU868, IN865, RU864, US915, AU915, AS923, KR920]
GAIN	12.5 dBi
VSWR	<1.80, MAX <2.00
BEAMWIDTH	$90^{\circ}/30^{\circ}\pm30^{\circ}$
POLARIZATION	Vertical
IMPEDANCE	50Ω
FRONT TO BACK	>17 dB

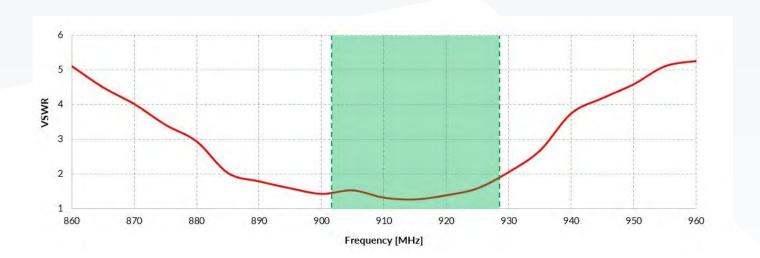
#### **MECHANICAL SPECIFICATION**

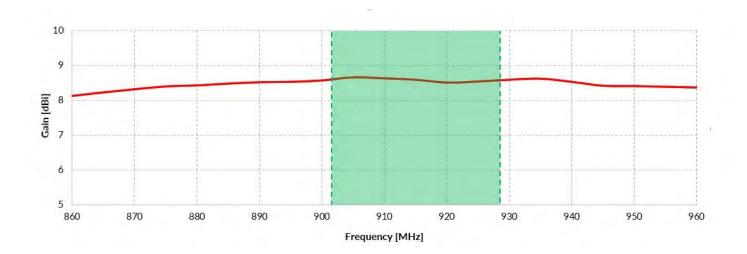
MATERIAL	ABS, aluminum, PTFE, Fiberglass
CONNECTOR TYPE	RPSMA
INGRESS PROTECTION	IP67
DIMENSIONS	292 x 486 x 110 mm 11.5 x 19.13 x 4.33 inch
WEIGHT	1.5 kg 3.31 lbs
OPERATING TEMPERATURE	From -40°C to 75°C From -40°F to 167°F
OPERATING TEMPERATURE	25 - 66 mm 0.98 - 2.60 inch



## **PLOTS**

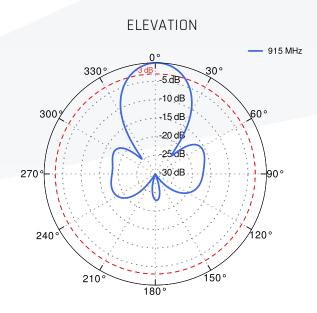
VSWR —

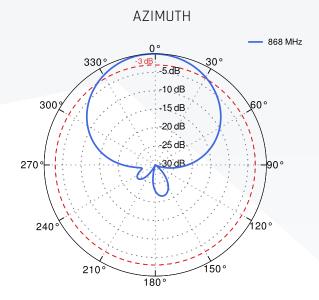




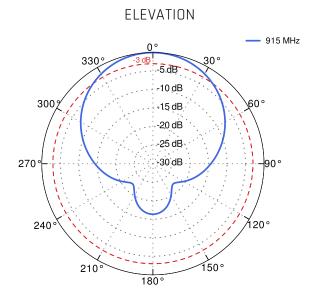


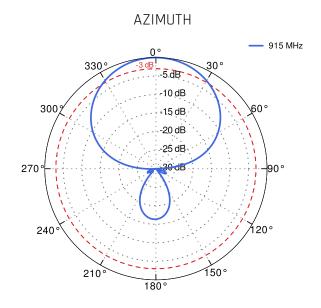






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# **DIMENSIONS**



DIMENSIONS

292 x 486 x 110 mm 11.5 x 19.13 x 4.33 inch