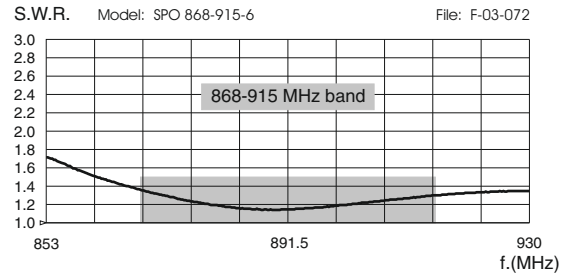


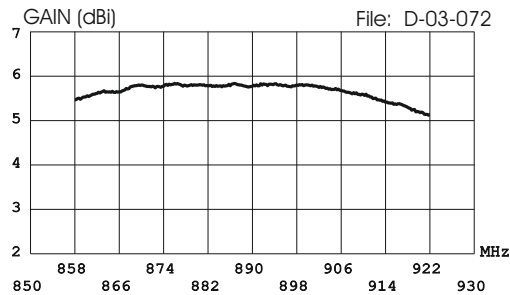
SPO 868-915-6

Base Station Antenna ISM LoRa 868 MHz & 915 MHz bands

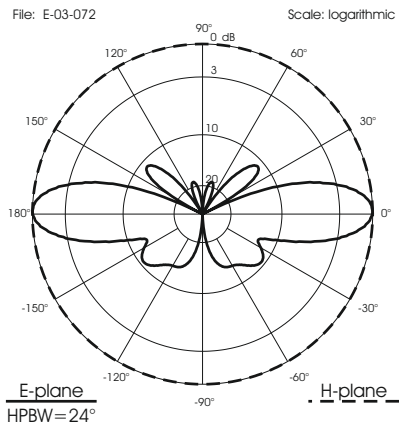
TYPICAL S.W.R. RESPONSE



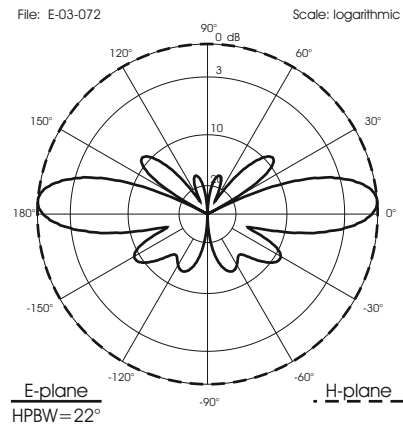
TYPICAL GAIN DIAGRAM vs FREQUENCY



TYPICAL RADIATION PATTERN at 868 MHz



TYPICAL RADIATION PATTERN at 915 MHz



DESCRIPTION

Base station antennas conceived for ISM LoRa systems working on 868 MHz & 915 MHz. The radiant colinear dipoles are made of PCB and protected by a strong fiberglass tube. SPO 868-915-6 are available in 2 versions: N-f connector (fitted at the bottom) or supplied with 5m Low Loss cable directly connected and SMA-male (other type on request).

SPECIFICATIONS

| | SPO 868-915-6 N-f connector | SPO 868-915-6 cable version |
|--|--|------------------------------------|
| Electrical Data | | |
| Type | 3 x 1/2 λ Colinear | |
| Frequency Range @ SWR ≤ 1.5 | 868 - 915 MHz | |
| Impedance | 50 Ω | |
| Antenna detection DC resistance | on request | |
| Radiation (H-plane) | 360° omnidirectional | |
| Radiation (E-plane) Beamwidth @ -3 dB: | 23° | |
| Radiation angle deg. | 0° | |
| Polarization | Linear Vertical | |
| Gain | 3.7 dBd, 5.8 dBi | |
| Max Power (CW) @ 30° C | 20 Watts | |
| Cable Type / Length | / | White Low Loss cable / 5m, 16.4 ft |
| Connector | N-female, gold plated central pin | SMA-male, other type on request |
| Mechanical Data | | |
| Housing & Radome Material | Fiberglass, PCB, Anodized aluminium, Nickel plated brass | |
| Bracket & Hardware Material | Aluminium, Stainless steel, Zinc plated steel | |
| Wind Load @ 150 Km/h, 93 mi/h | 36 N | |
| Wind Resistance | 140 Km/h, 87 mi/h | |
| Wind Surface | 0.028 m ² ; 0.3 ft ² | |
| Height (approx.) | 840 mm, 2.75 ft | |
| Weight (without bracket, approx.) | 460 gr, 1.9 lb | 560 gr, 2.1 lb |
| Operating Temperature | -40 °C to +80 °C | |
| Installation type | Mast: Ø 35-52 mm, Ø 1.4-2.0 inch with U-bolt Wall: mounting screws (not included) | |

Version with
N-female
connector

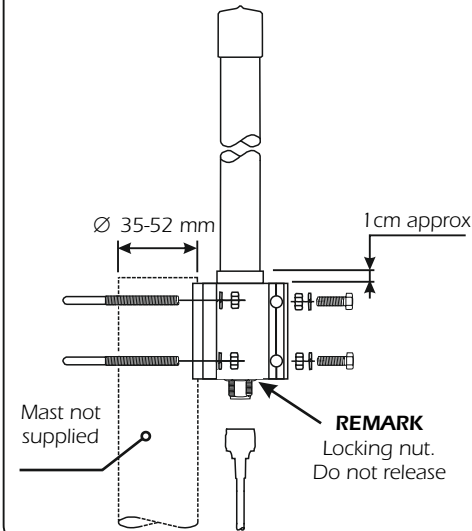


Version with
Low Loss
cable

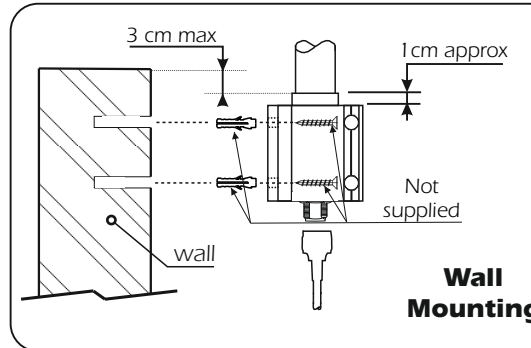
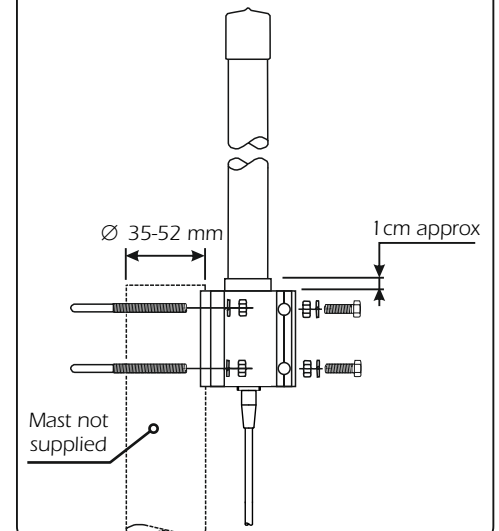


MOUNTING INSTRUCTIONS

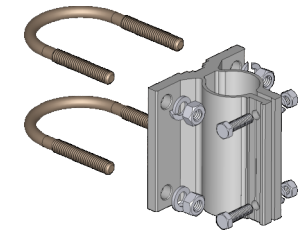
SPO 868-915-6



SPO 868-915-6 w/cable



Standard Mounting Bracket



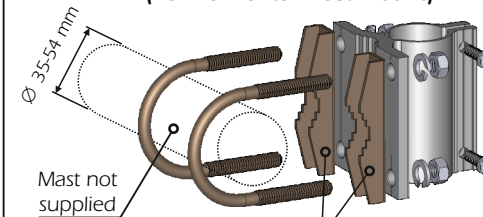
Spare parts: P/N SA285

Materials: extruded aluminium
Hardware: stainless & zinc plated steel
Dimensions : 80 x 76 x 65 mm
Weight: 363 gr

Part list

| Q.ty | Description |
|------|----------------------------|
| 1 | Extruded aluminium bracket |
| 2 | M8x200 U-bolt |
| 4 | M8 Grower washer |
| 4 | M8 Hexagonal nut |
| 2 | M6x20 Hexagonal head screw |
| 2 | M6 Grower washer |
| 2 | M6 Hexagonal nut |

Optional Brackets (For horizontal mast mount)



P/N SA286

Material: zinc plated steel
Dimensions : 2 pcs - 80 x 18 x 16 mm
Weight: 88 gr