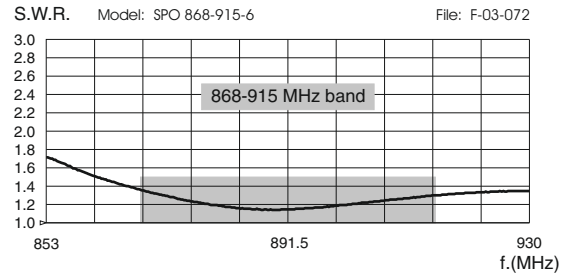


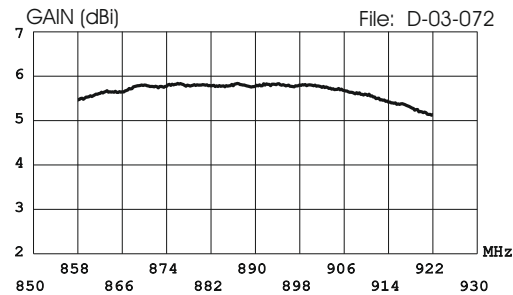
# SPO 868-915-6

Base Station Antenna ISM LoRa 868 MHz & 915 MHz bands

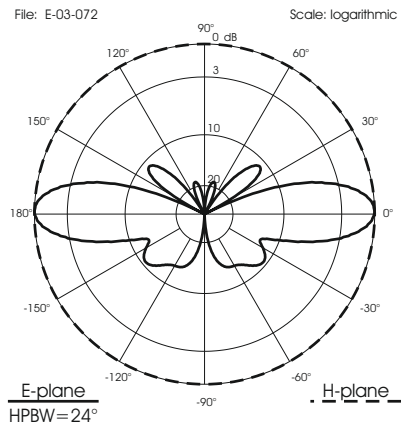
### TYPICAL S.W.R. RESPONSE



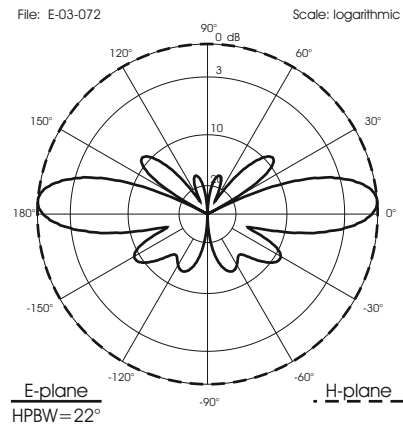
### TYPICAL GAIN DIAGRAM vs FREQUENCY



### 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
<b>Electrical Data</b>		
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
<b>Mechanical Data</b>		
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 <sup>2</sup> ; 0.3 ft <sup>2</sup>	
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

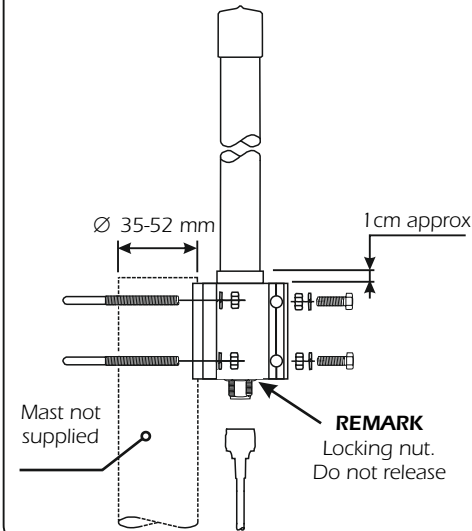


Version with  
Low Loss  
cable

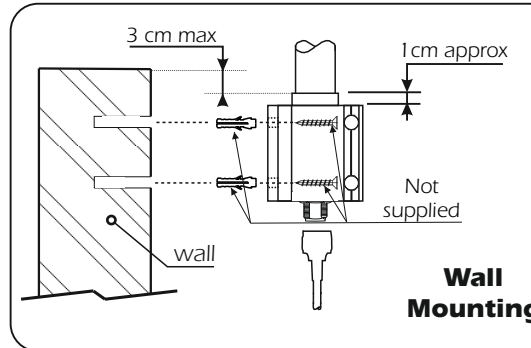
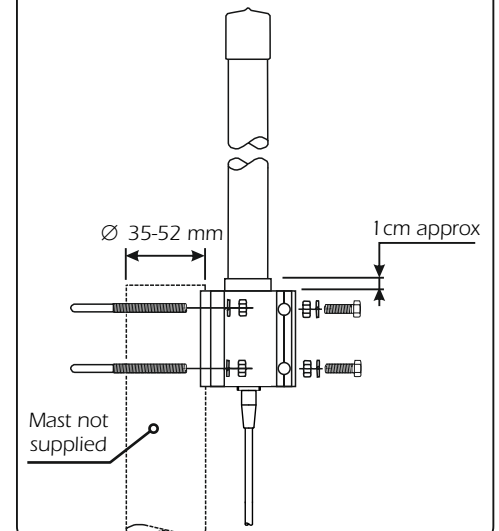


## MOUNTING INSTRUCTIONS

### SPO 868-915-6

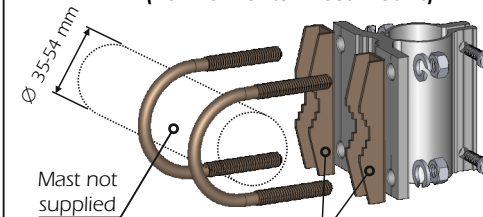


### SPO 868-915-6 w/cable



Wall  
Mounting

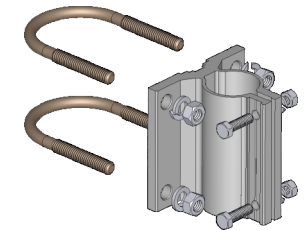
### Optional Brackets (For horizontal mast mount)



#### P/N SA286

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

### 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