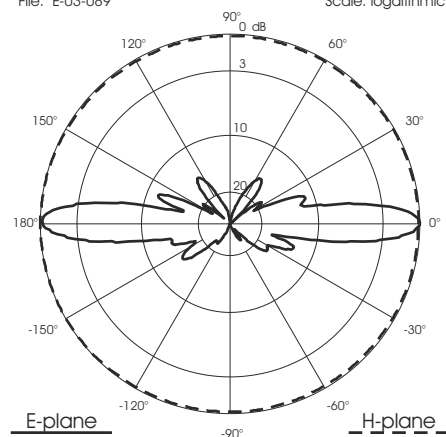


SPO-868-8

TYPICAL RADIATION PATTERN at 868 MHz

File: E-03-089 Scale: logarithmic

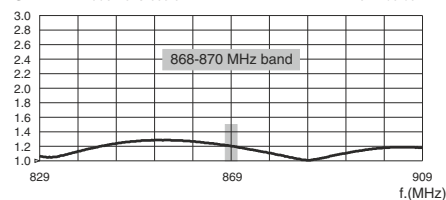


E-plane
HPBW = 13°

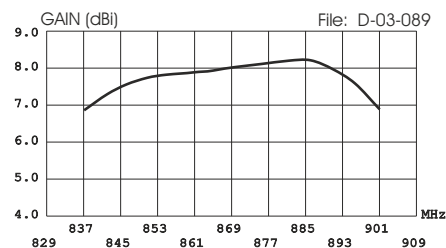
H-plane

TYPICAL S.W.R. RESPONSE

S.W.R. Model: SPO 868-8 File: F-03-089



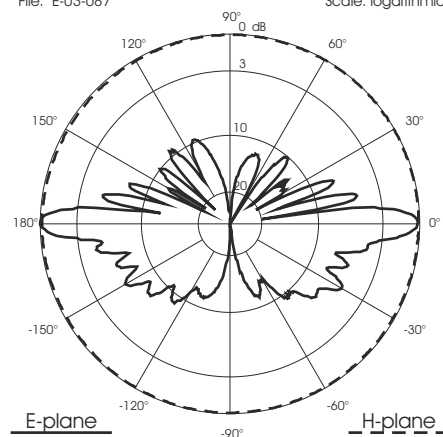
TYPICAL GAIN DIAGRAM vs FREQUENCY



SPO-868-10

TYPICAL RADIATION PATTERN at 868 MHz

File: E-03-087 Scale: logarithmic

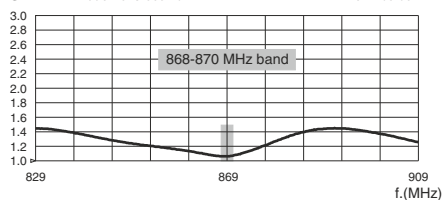


E-plane
HPBW = 8.6°

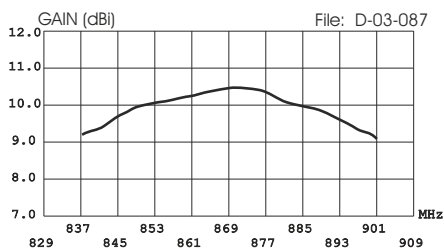
H-plane

TYPICAL S.W.R. RESPONSE

S.W.R. Model: SPO 868-10 File: F-03-087



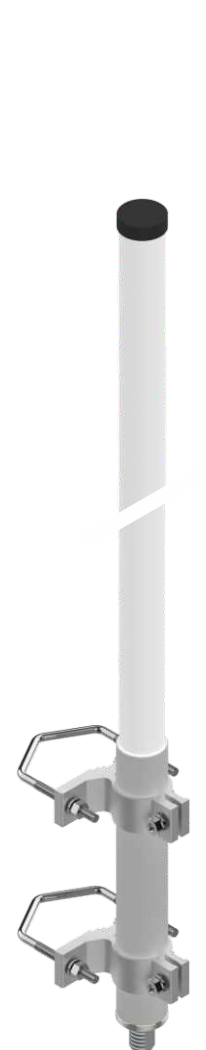
TYPICAL GAIN DIAGRAM vs FREQUENCY



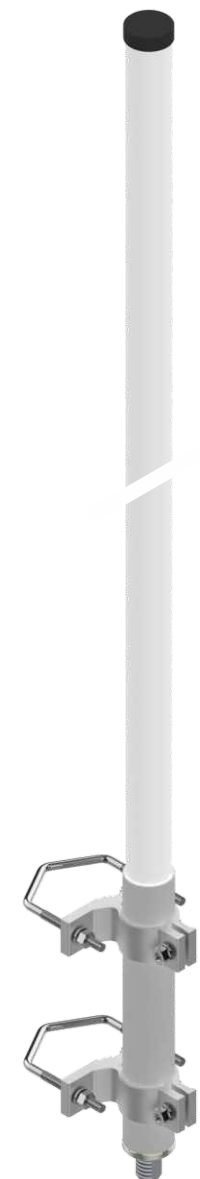
SPO-868-8

SPO-868-10

Base Station Antenna ISM LoRa 868 MHz



SPO-868-8



SPO-868-10



HI-QUALITY ANTENNAS MADE IN ITALY

SPECIFICATIONS

Electrical Data	SPO 868-8	SPO 868-10
Type	6 x 1/2 λ Colinear	10 x 1/2 λ Colinear
Frequency Range @ SWR $\leq$ 1.5	868 - 870 MHz (ISM, LoRa system)	
Impedance	50 Ω	
Radiation (H-plane)	360° omnidirectional	
Radiation (E-plane) Beamwidth @ -3 dB:	13°	8.6°
Radiation angle deg.	0°	
Polarization	Linear Vertical	
Gain	5.9 dBd, 8 dBi	8.4 dBd, 10.5 dBi
Max Power (CW) @ 30° C	20 Watts	
Connector	N-female, gold plated central pin	
Mechanical Data		
Housing & Radome Material	Fiberglass, PCB, Anodized aluminium, Nickel plated brass	
Bracket & Hardware Material	Aluminium, Stainless steel	
Wind Load @ 150 Km/h, 93 mi/h	53 N	93 N
Wind Resistance	180 Km/h, 112 mi/h	140 Km/h, 87 mi/h
Wind Surface	0.046 m ² ; 0.49 ft ²	0.078 m ² ; 0.84 ft ²
Height (approx.)	1600 mm, 5.25 ft	2590 mm, 8.5 ft
Weight (without bracket, approx.)	1020 gr, 2.25 lb	1500 gr, 3.3 lb
Operating Temperature	-40 °C to +80 °C	
Ingress Protection	IP 67	
Installation type	Mast: $\varnothing$ 35-60 mm, $\varnothing$ 1.4-2.4 inch with U-bolt	

**N-female
connector**



MOUNTING INSTRUCTIONS

$\varnothing$ 35-60 mm

1 cm approx

Mast not supplied

"N-male" connector:
suggested tightening torque
1.3-1.7 Nm; 12-15 lb-in

FT-5 fixing bracket:

FT-5 fixing bracket part list	
Q.ty	Description
2	Extruded aluminium bracket
2	M6x206 V-bolt
2	M6x20 Exagonal head screw
6	M6 Spring lock washer
6	M6 Hexagonal nut
Materials:	extruded aluminum
Hardware:	stainless steel
Dimensions:	85x65x25mm; 3.3x2.5x1 in
Weight:	220 g; 0.5 lb
Re-order code: 2519613.00	



SIRIO
antenne

HI-QUALITY ANTENNAS MADE IN ITALY