Quadrifilar Helix Antenna

For L1/L5 B1/B2a E1/E5

MAN1216Q18

50 x Φ18.5 mm

MAN1216Q18

Quadrifilar Helix Antenna For GNSS

FEATURES

1, High gain and low Noise Figure.
2, Light weight less then 20g.
3, Convenient connect both DC bias and RF Signal through SMA.
4, IP67 compliance.

DESCRIPTION

The MAN1216Q18 is a Quadrifilar Helix antenna in structure, which has better gain and wide-angle circular polarization characteristics compared to traditional antennas. It can receive more low elevation satellite signals. Especially suitable for devices such as UAV, handheld devices, wearable devices, etc. It convenient connected both DC bias and RF Signal through one SMA. All Antennas are 100% RF tested.

MAXIMUM RATINGS

Characteristic	Ratings	Units
Weight	12	g
Operating Temperature Range	-40~+85	℃
Storage Temperature Range	-40~+85	℃
Moisture Sensitivity Levels	3	MSL
Classification of Waterproof	IP67	

ANTENNA CHARACTERISTICS

Item	Frequency Range	Min.	Typ.	Max.
Gain(dBi)	GPS L1		1	
	GPS L5		0	
	BDS B1		1	
	BDS B2a		0	
	GALILEO E1		1	
	GALILEO E5a		0	
Characteristics Impedance (Ω)		50 (Nominal)		
Polarization		RHCP		
Covering Range (°)		360		
Out Put VSWR (:1)				2
Axial Ratio (dB)				3

- Ta: +25±5°C

MAN1216Q18

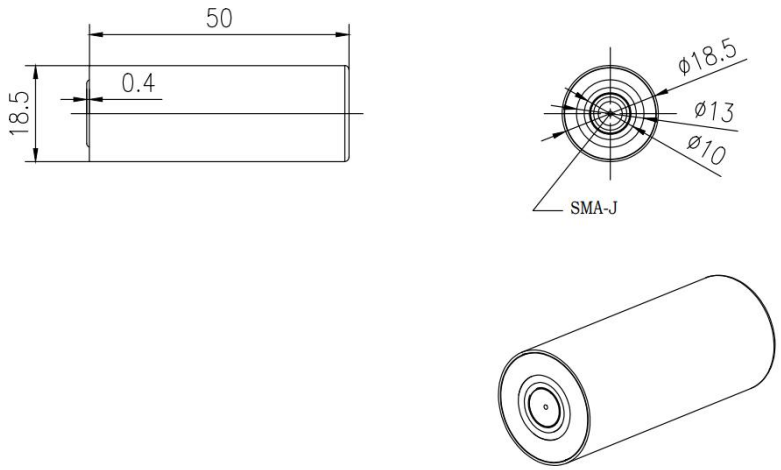
Quadrifilar Helix Antenna For GNSS

AMPLIFIER CHARACTERISTICS

Item	Frequency Range (MHz)	Min.	Typ.	Max.
Gain (dB)		-	28	
Noise Figure (dB)				1.5
Output VSWR (:1)				2
Voltage (V)		3.3		5
Current (mA)			9	

- Ta: +25±5°C

SHAPES AND DIMENSIONS



Revision	Description	Date
Rev0	Preliminary	2025/5/7