

WHIN-WAN-GW Antenna Datasheet

FCC ID: 2A9LS-WX-WW-R1

Description

The antenna used in the WHIN-WAN Gateway is a custom monopole antenna designed and built internally by WHIN. The antenna is a simple $\frac{1}{4}$ wave monopole antenna designed for 915 MHz with a velocity factor of 0.95. The ground plane is provided by a square PCB.

Wire (20 AWG) length: 3.07"

Simulated Antenna Gain: 7.47 dBi (Measured by Intertek-Lexington)

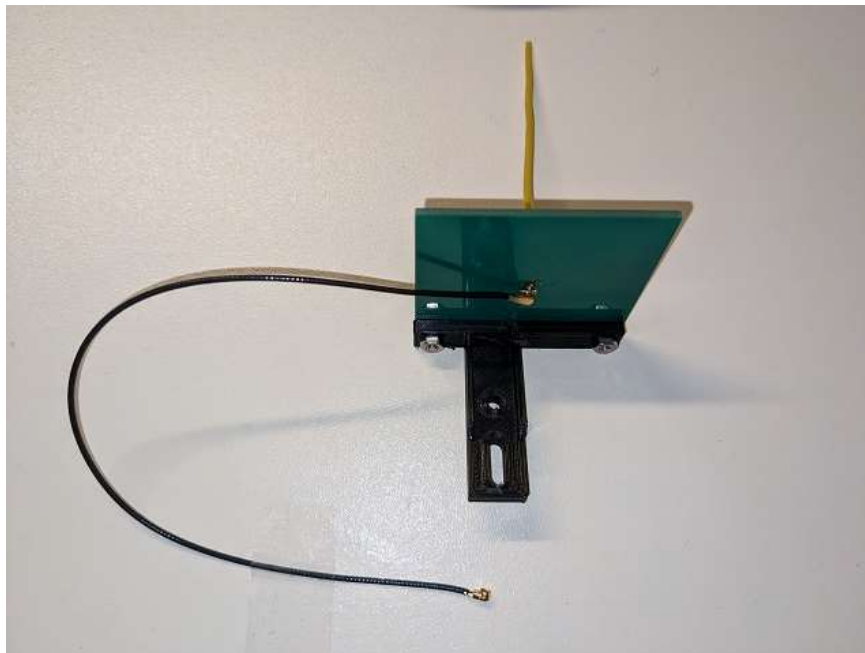
Ground plane dimensions: 2.0" X 2.0"

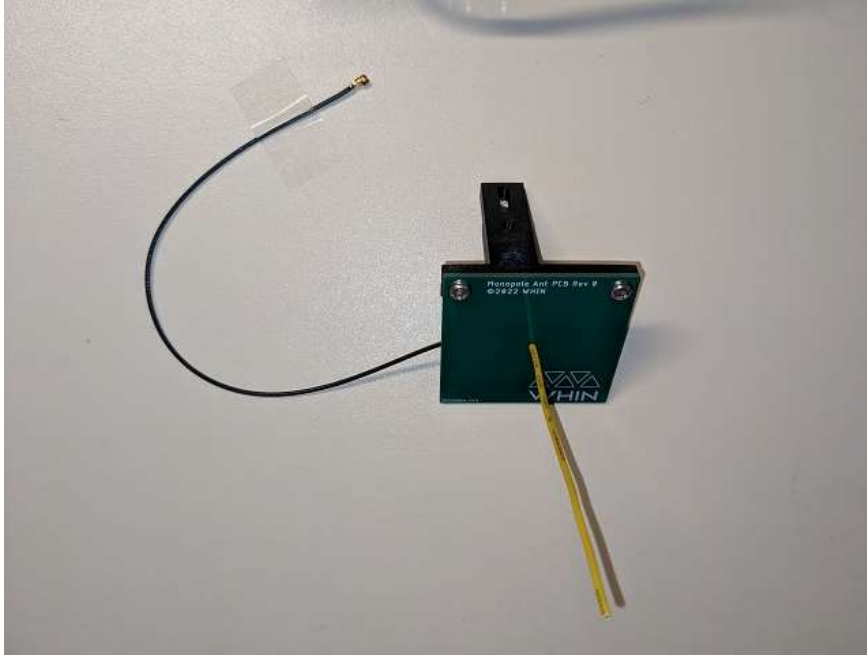
The antenna assembly includes a u.FL to u.FL cable to connect to LoRaWAN transceiver. There is also a mounting bracket included in the assembly.

Assembly Parts List

Item #	Qty	Description	Manufacturer	Manufacturer Part Number
1	1	Monopole Ant PCB Rev 0	WHIN	Monopole Ant PCB
2	1	Conn U.FL RCPT 50 ohm smd	Hirose Electric Co LTD	U.FL-R-SMT-1(10)
3	1	CBL ASSY UMCC PLUG-PLUG 9"	Molex Connector Corp	0731160046
4	3.25" (cut to 3.07")	20AWG solid conductor, yellow PVC jacket wire	Alpha Wire	422001 YL001
5	2	4-40 pan head screw, 9/32"	Shop stock	
6	2	4-40 nut	Shop stock	
7	1	3D printed mounting bracket	WHIN	Ant Bracket

Assembly Images





PCB Schematic

