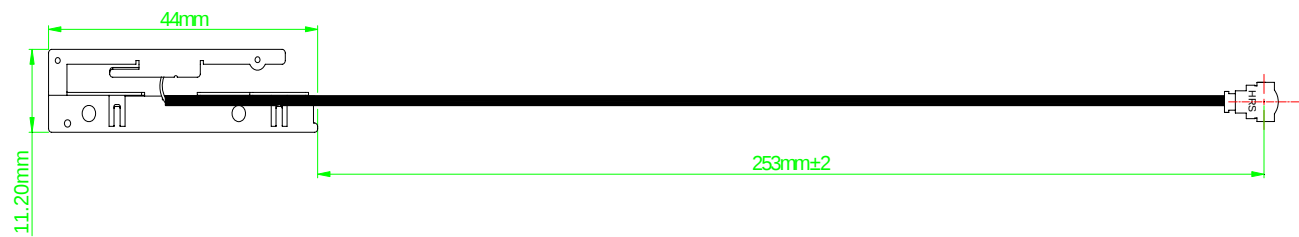
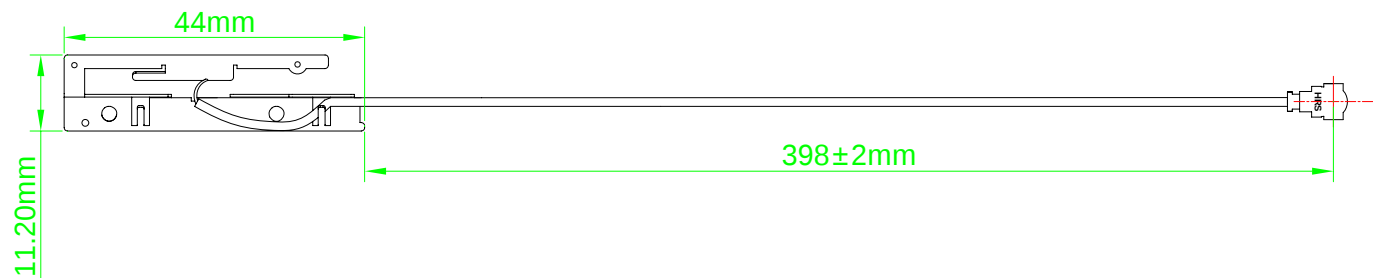


WLAN Antenna:

Main Antenna Drawing:



Aux Antenna Drawing:

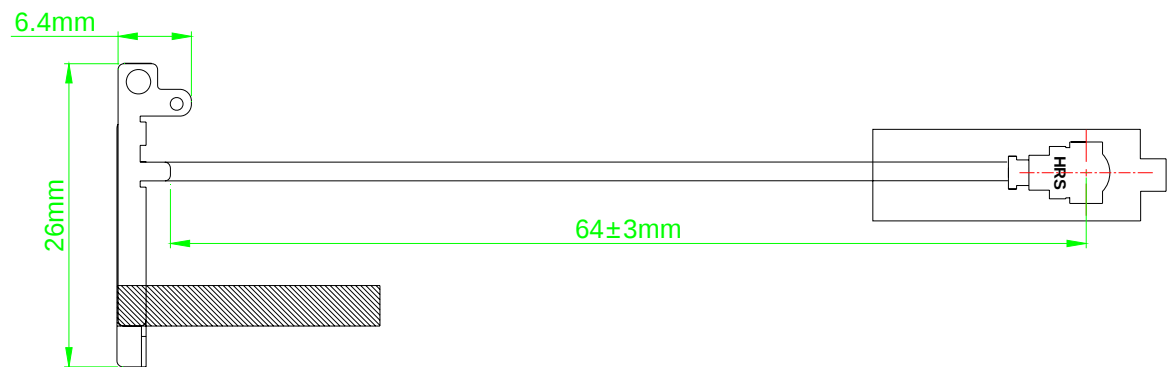


Antenna Gain

Antenna Part Number	Antenna Type	Peak Gain W/ Cable loss (dBi)	Peak Gain w/o Cable Loss (dBi)	VSWR	Cable Loss (dBi)
Main antenna	PIFA	2400-2500MHz 2.59 dBi (peak)	2400-2500MHz 3.44 dBi (peak)	2400-2500MHz 2.0 max	2400-2500MHz 0.85 dBi (peak)
Aux antenna	PIFA	2400-2500MHz 2.78 dBi (peak)	2400-2500MHz 4.06 dBi (peak)	2400-2500MHz 2.0 max	2400-2500MHz 1.28 dBi (peak)

Bluetooth Antenna

Dimensioned Drawing:



Antenna Peak Gain & Average Gain

X-Y

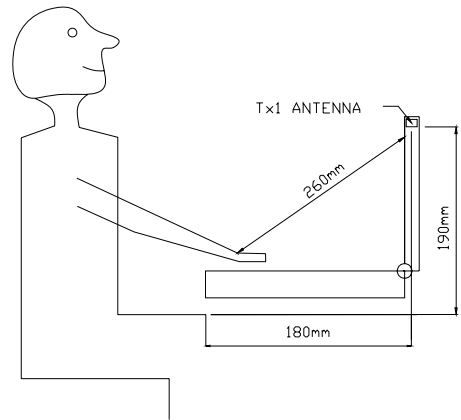
Antenna	Peak Gain (dBi)			Average Gain (dBi)		
Frequency (GHz)	2.4	2.45	2.5	2.4	2.45	2.5
Bluetooth Antenna	-2.55	-2.77	-3.86	-6.30	-6.44	-6.83

Y-Z

Antenna	Peak Gain (dBi)			Average Gain (dBi)		
Frequency (GHz)	2.4	2.45	2.5	2.4	2.45	2.5
Bluetooth Antenna	-1.04	-1.30	-1.74	-4.12	-4.16	-4.48

X-Z

Antenna	Peak Gain (dBi)			Average Gain (dBi)		
Frequency (GHz)	2.4	2.45	2.5	2.4	2.45	2.5
Bluetooth Antenna	-3.80	-3.83	-3.62	-5.52	-5.33	-5.34



Co-Location Antenna Separation

