Part No. 9003206

LoRa and GNSS Antenna

863-870MHz; 902-928MHz; 1559MHz-1610MHz

Supports: LoRa and GNSS

LoRa antenna
EU Band
US Band

GNSS antenna
L1/E1/G1

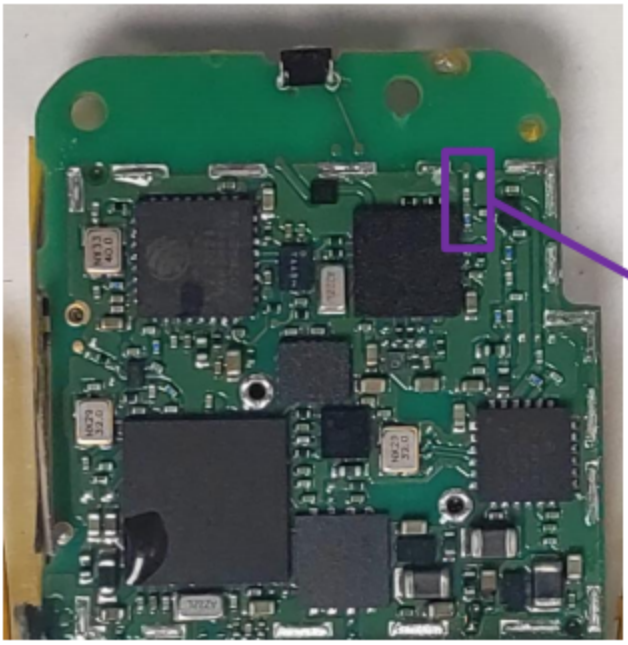
Electrical Specifications

Frequency (MHz)	863 - 870	902 - 928	1559 - 1610
Peak Gain (dBi)	-10	-9.5	NA
Average Efficiency (%)	5.8	5	45
Return Loss (dB)	< -6	< -5.5	< -10
Feed Point Impedance	50 ohms unbalanced		
Polarization	Linear		
Power Handling	2.0 Watt CW		

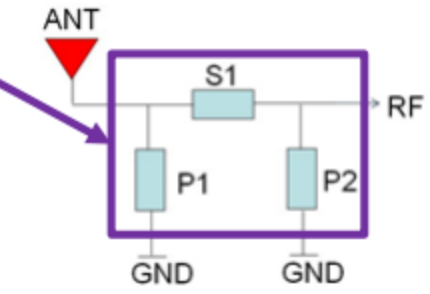
Mechanical Specifications & Ordering Part Number

Ordering Part #	9003206
Dimensions (mm)	34 x 20 x 0.3
Mounting	Using 3M 9448A Adhesive

Antenna Matching Structure



Customer's PCB Front View



LoRa Antenna Matching

Matching	Value	PN
P1	27nH	LQW15AN27NG00D
S1	7pF	04025J7RBBS
P2	NA	-

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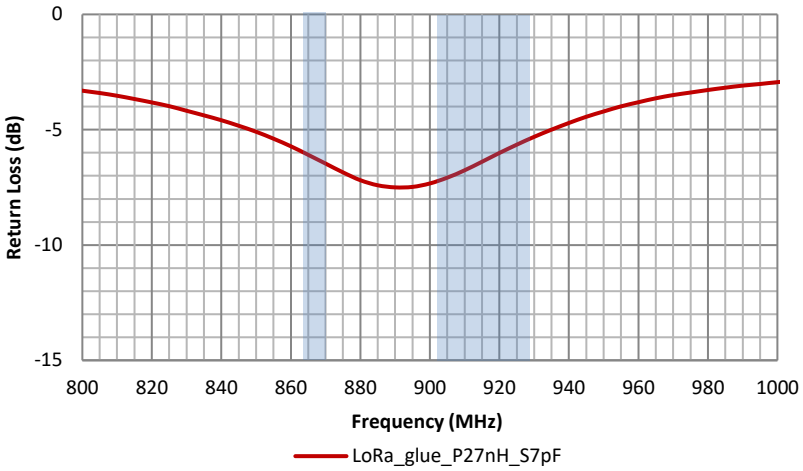
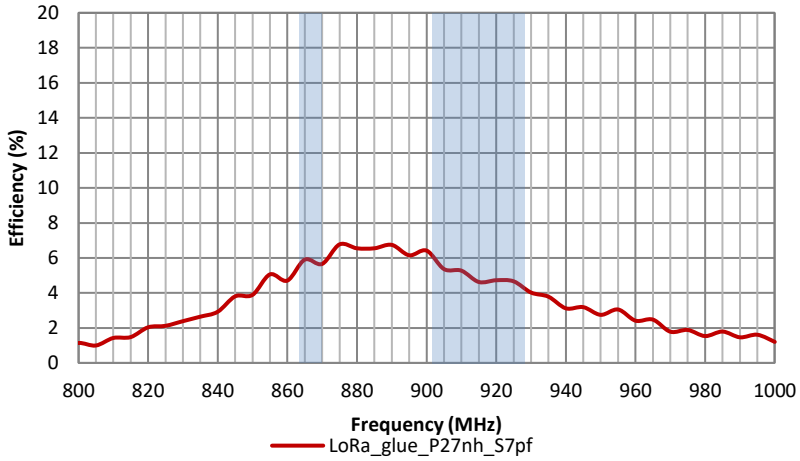
Return Loss, Efficiency and Peak Gain Plots

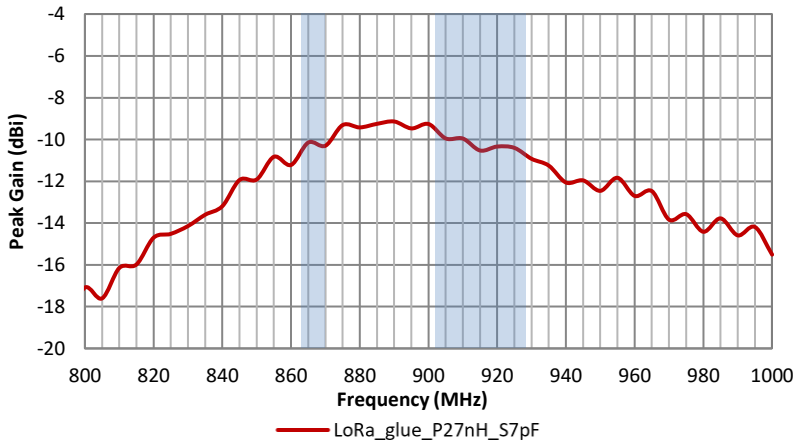
LoRa Return Loss



LoRa Efficiency



LoRa Peak Gain



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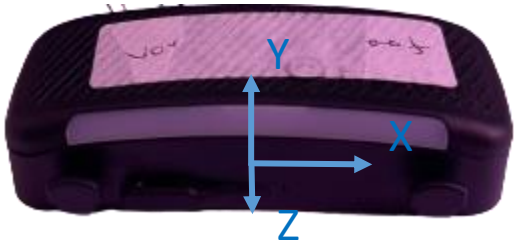
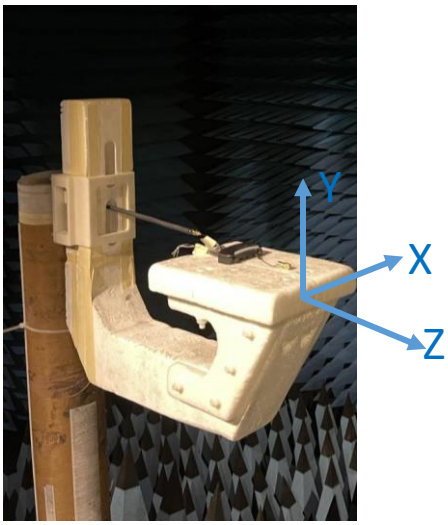
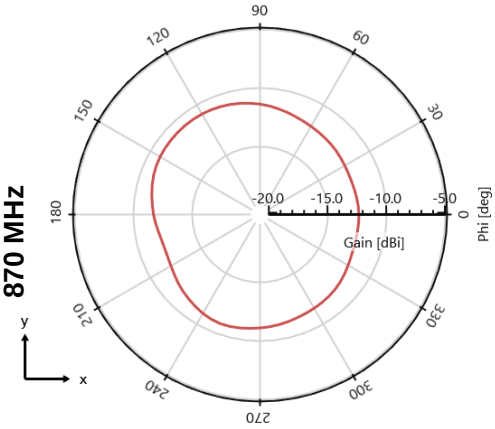
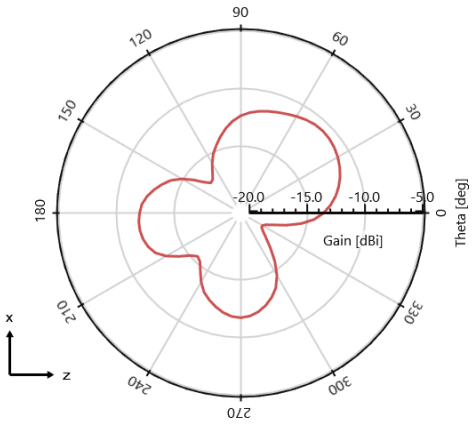
Antenna Radiation Patterns – LoRa

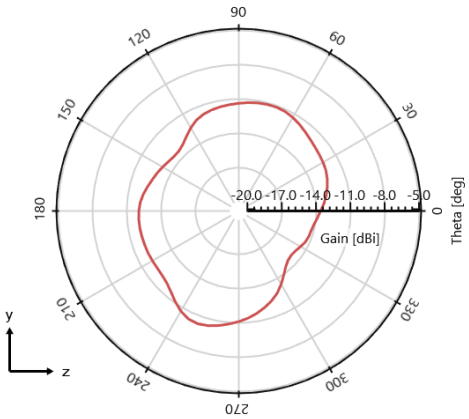




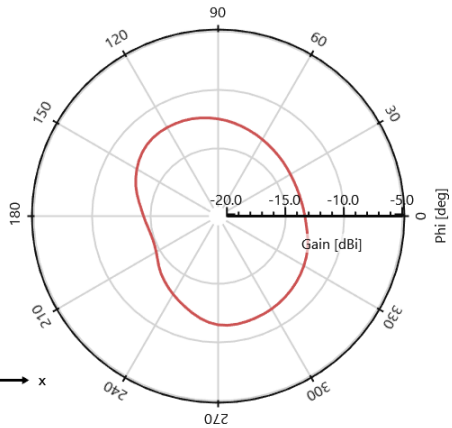
Low Band measured at 870 MHz

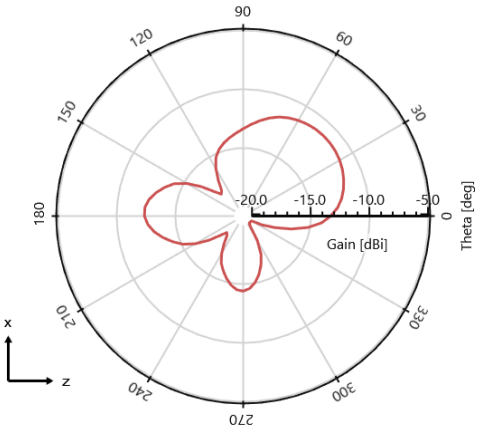


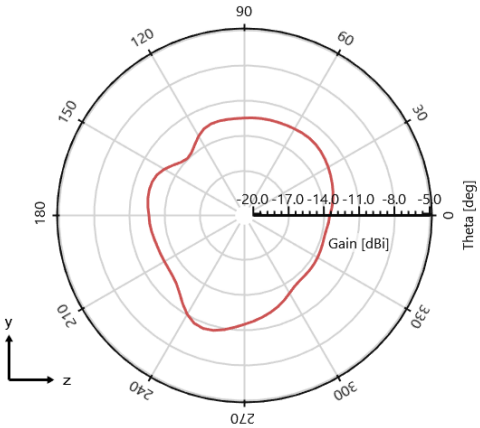




Low Band measured at 915 MHz







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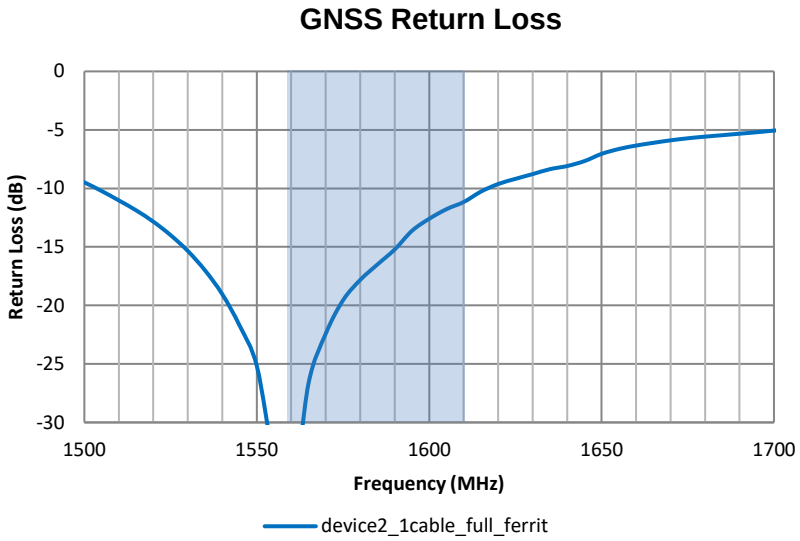
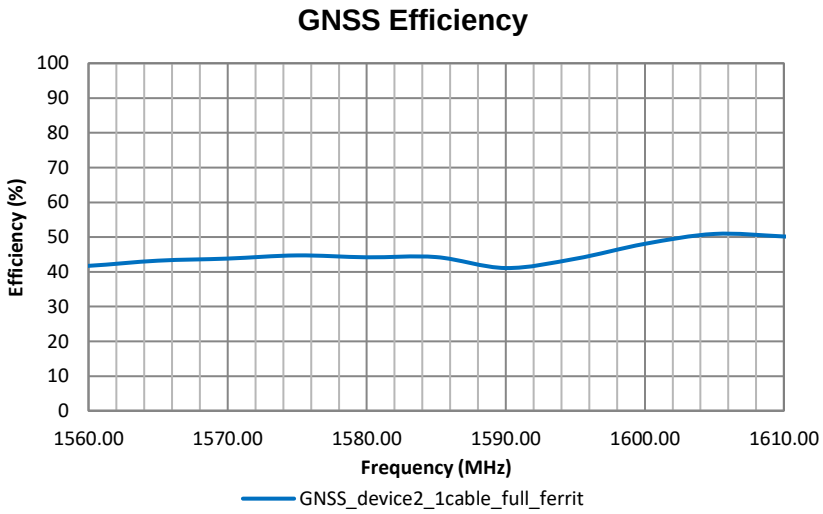
Return Loss and Efficiency





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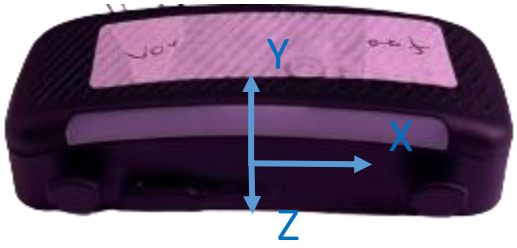
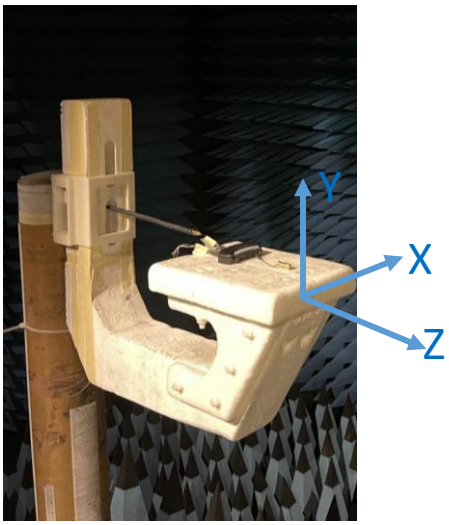
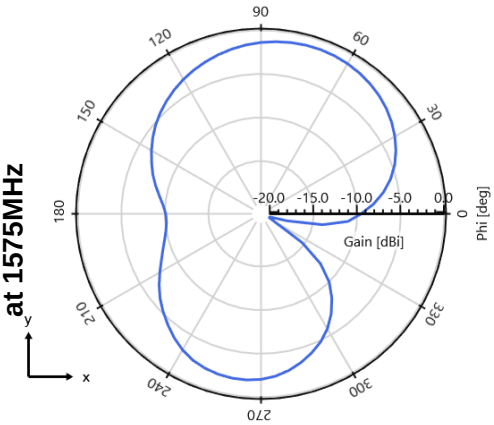
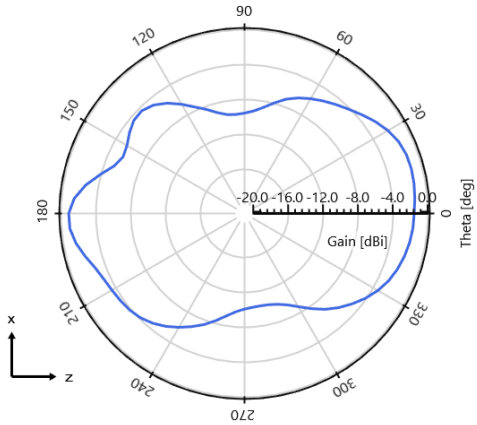
Antenna Radiation Patterns – GNSS

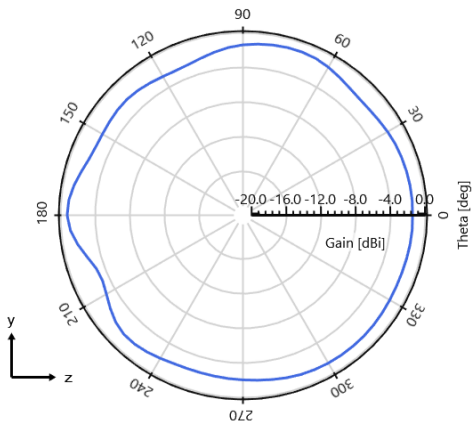




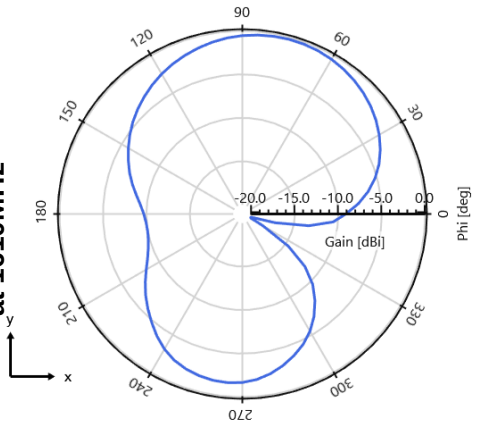
GNSS Band measured at 1575MHz

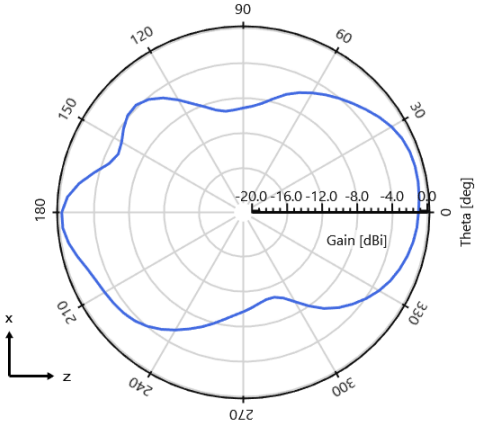


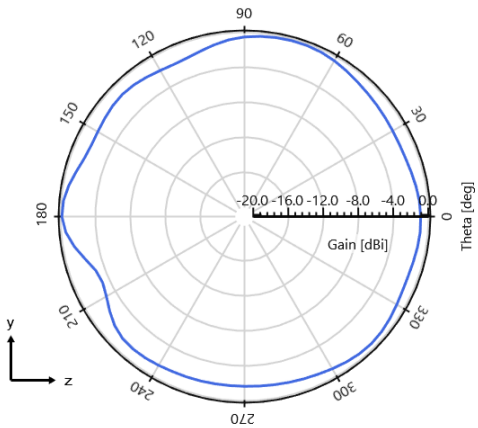




GNSS Band measured at 1610MHz







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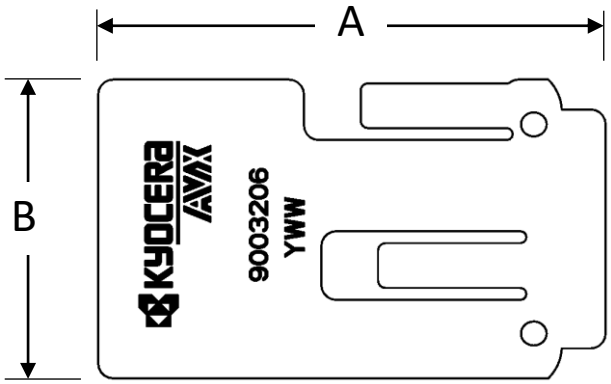
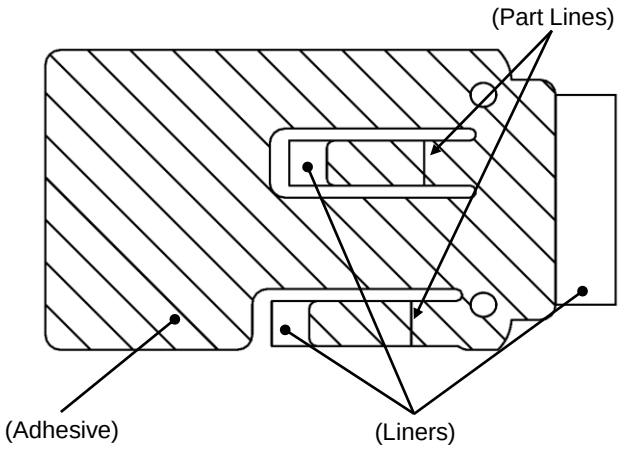
Mechanical Dimensions

Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	Thickness (mm)
9003206	34.0 ± 0.3	20.0 ± 0.3	0.3 ±10%



Top View



Bottom View

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