

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

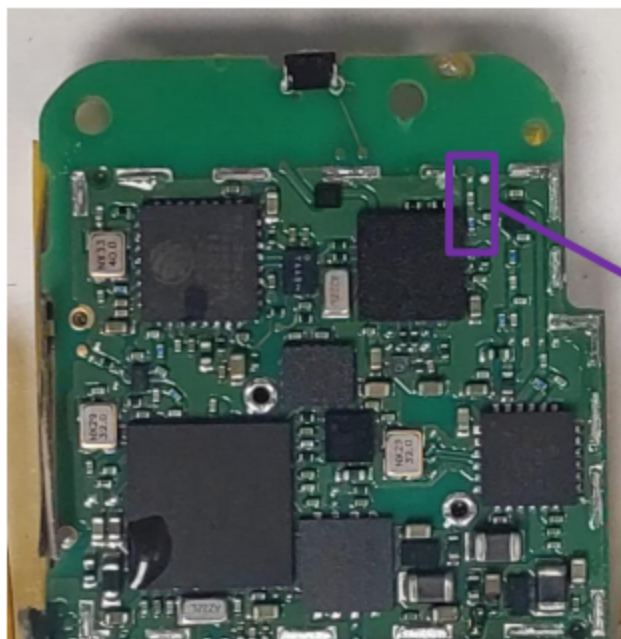
Electrical Specifications

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		

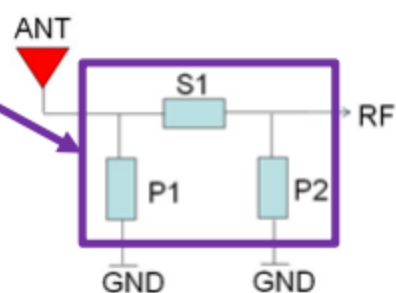
Mechanical Specifications & Ordering Part Number

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

Antenna Matching Structure



Customer's PCB Front View

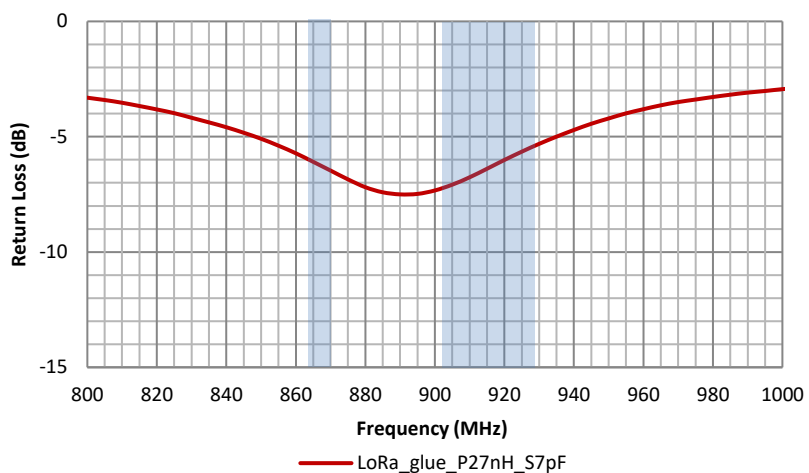


LoRa Antenna Matching

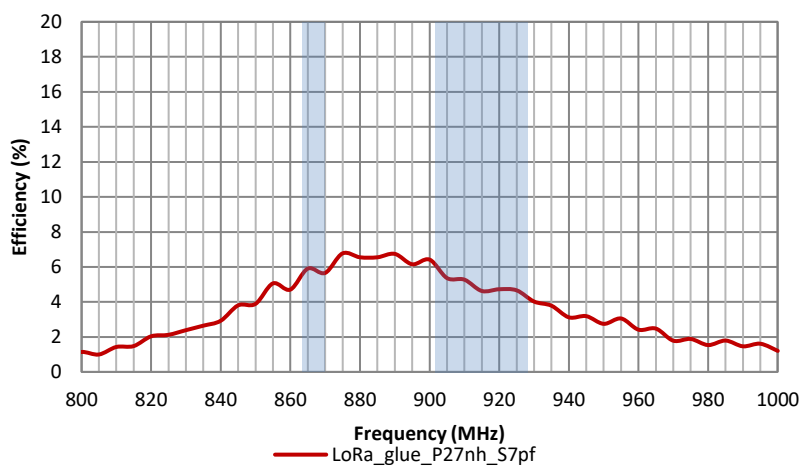
Matching	Value	PN
P1	27nH	LQW15AN27NG00D
S1	7pF	04025J7RBBS
P2	NA	-

Return Loss, Efficiency and Peak Gain Plots

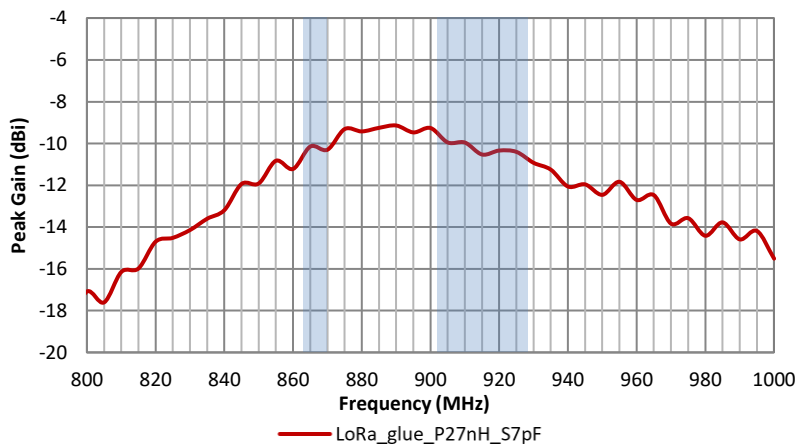
LoRa Return Loss



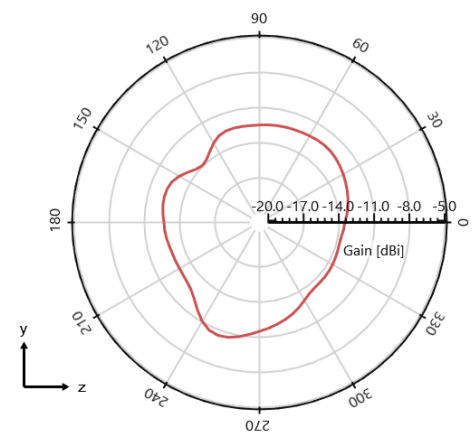
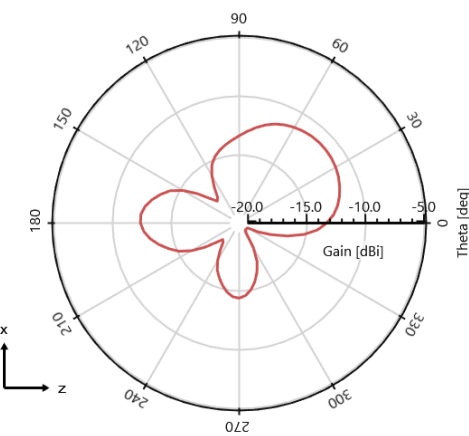
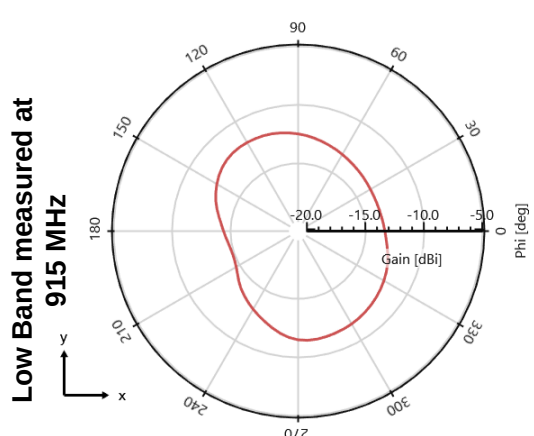
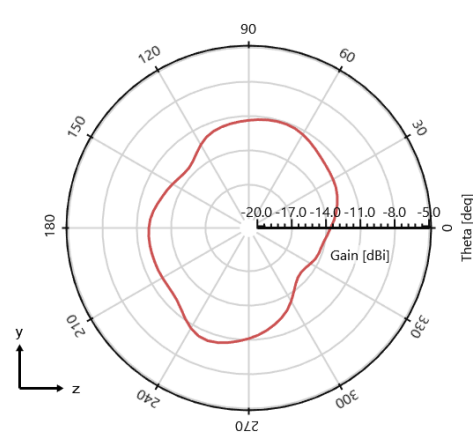
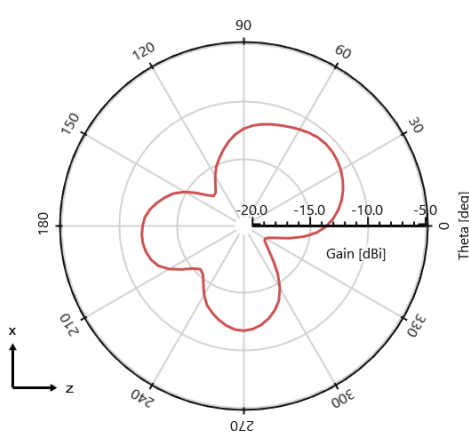
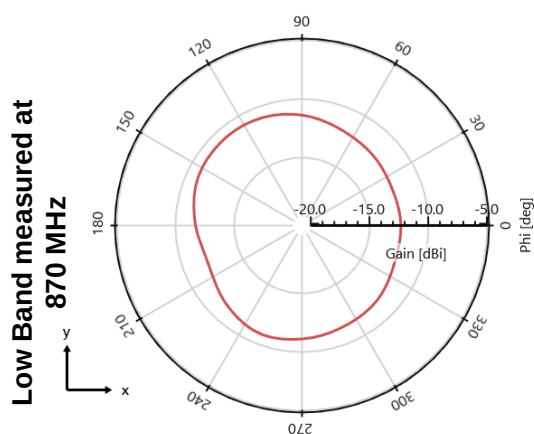
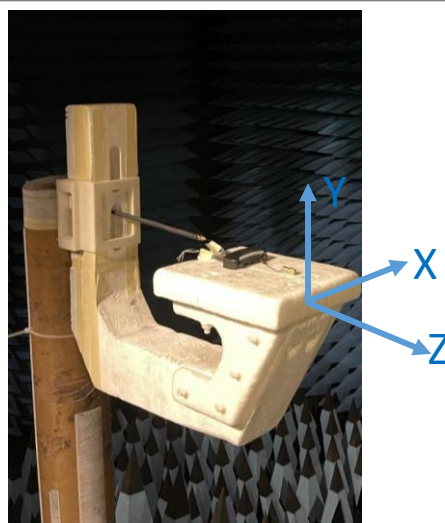
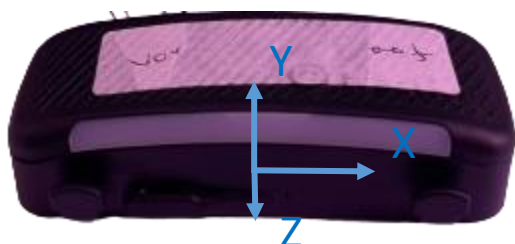
LoRa Efficiency



LoRa Peak Gain

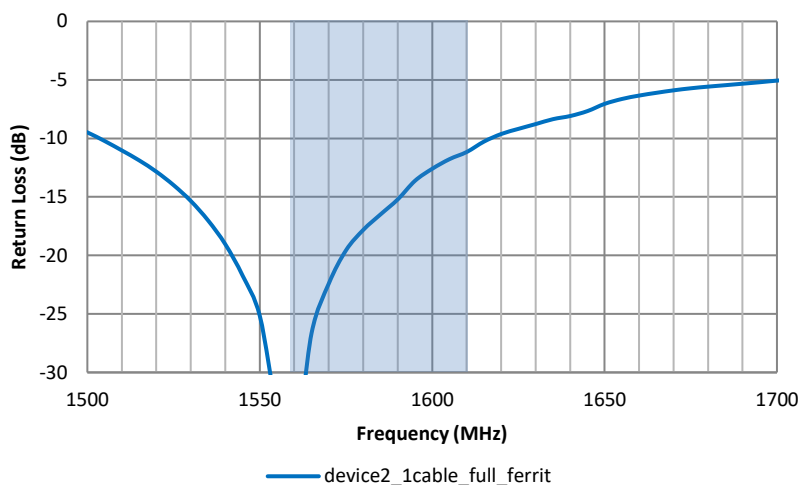


Antenna Radiation Patterns – LoRa

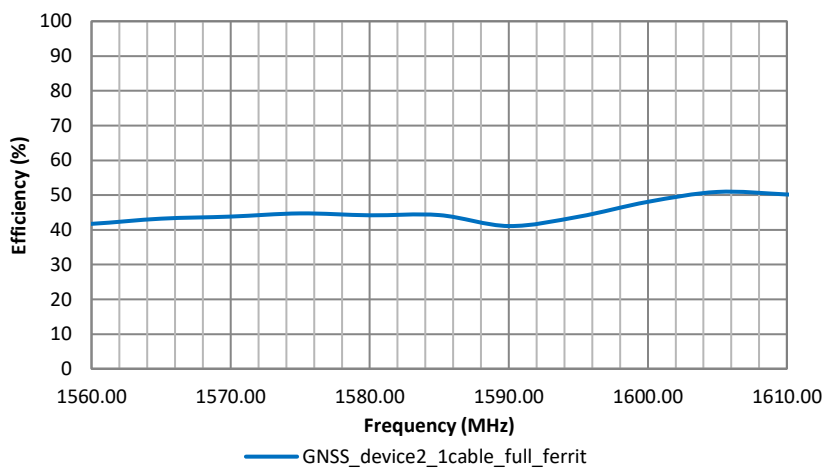


Return Loss and Efficiency

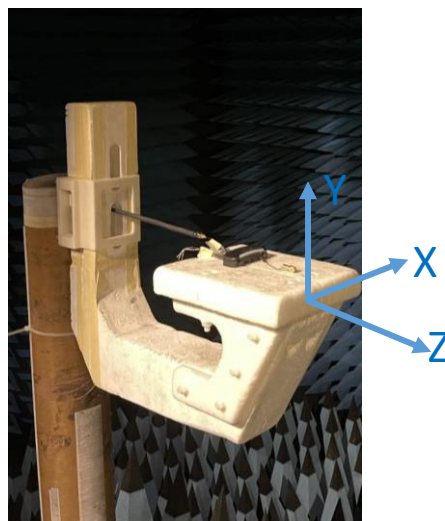
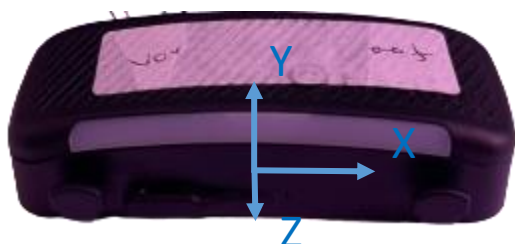
GNSS Return Loss



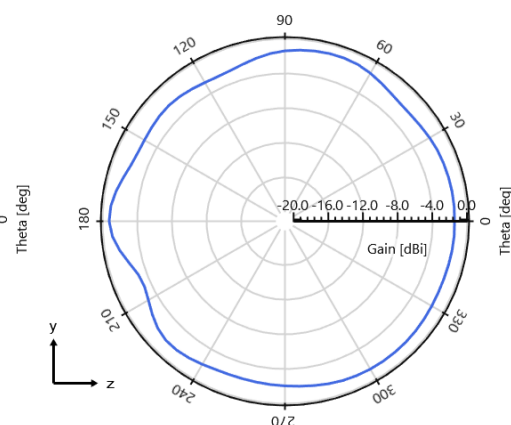
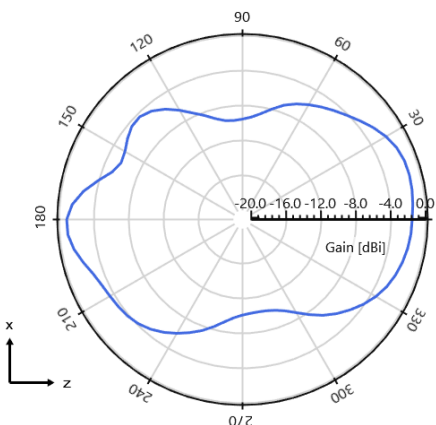
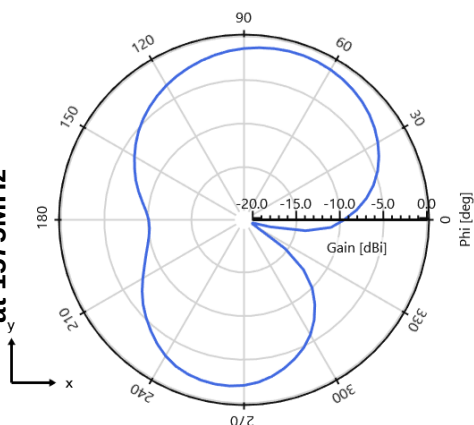
GNSS Efficiency



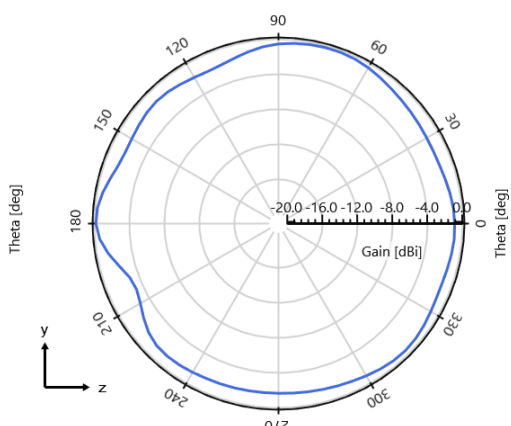
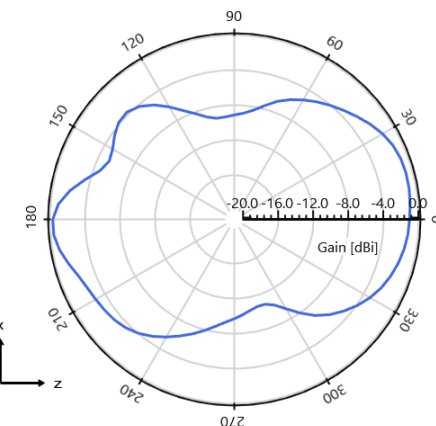
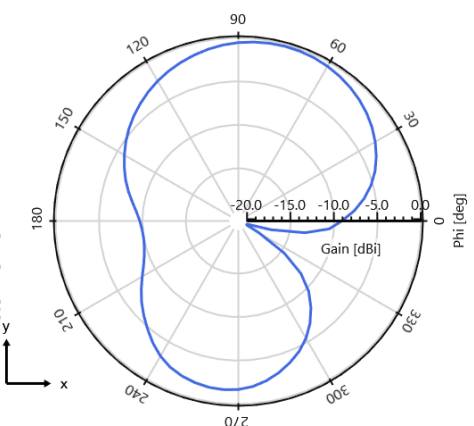
Antenna Radiation Patterns – GNSS



GNSS Band measured
at 1575MHz



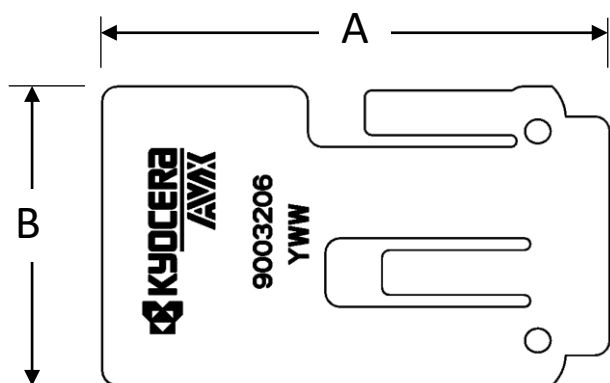
GNSS Band measured
at 1610MHz



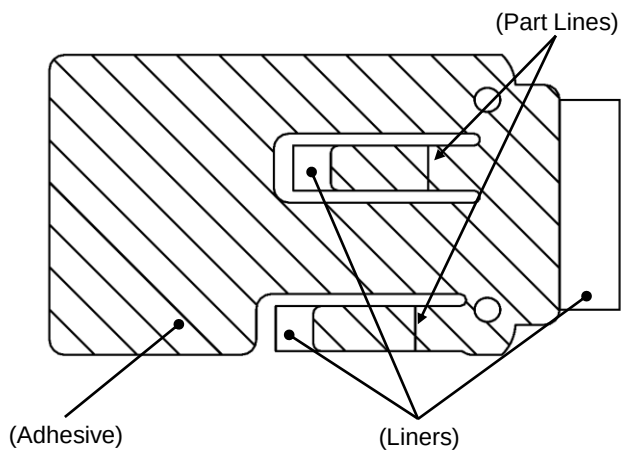
Mechanical Dimensions

Typical antenna dimensions (mm)

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



Top View



Bottom View