

PW2020-110

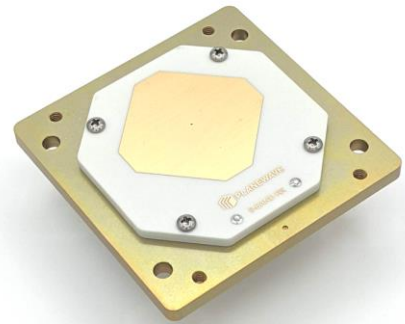
S-Band Dual-CP RX Omni Antenna

Features

- ✓ Size < 1U
- ✓ Dual circular polarization: RHCP, LHCP or both
- ✓ Omni-directional pattern
- ✓ Wide operating temperature range
- ✓ Designed to NASA GEVS (GSFC-STD-7000)
- ✓ TRL 9

Benefits

- ✓ Commercial off-the-shelf (COTS)
- ✓ Acceptance Tests available
- ✓ Compatible Test Hat available
- ✓ Qualified for space applications
- ✓ True circular polarization with extremely low Axial Ratio over the entire frequency band
- ✓ Consultation services available (link budget, architecture and system design)



Product Overview

PW2020-110 is a high-performance uplink antenna designed for TT&C applications in harsh space environments. It features excellent axial ratio over the entire frequency band, making it ideal for demanding and reliable space communication links.

This antenna is a perfect choice for a variety of space applications, including LEO, MEO and GEO. The S-Band TT&C Antenna is lightweight and easy to integrate. It is also available with Test Hats to facilitate testing and integration.

Related Products

Part Number	Description
PW2020-310	S-Band Dual-CP RX Omni Test Hat
PW2020-000	Active S-Band RHCP RX Omni Antenna
PW2020-100	S-Band RHCP RX Omni Antenna
PW2020-200	S-Band LNA
PW2222-110	S-Band Dual-CP TX Omni Antenna
PW1515-001	Active GPS L1 Antenna

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Electrical Specifications

Parameter / Condition	Min	Typ	Max	Unit
Operating Frequency	2025		2110	MHz
Polarization		RHCP/LHCP		
Axial Ratio		2	3	dB
VSWR			2:1	
Gain	4	4.5	5	dBic
Pattern Coverage		Omni		

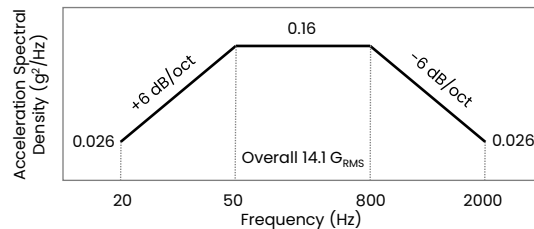
Mechanical Specifications

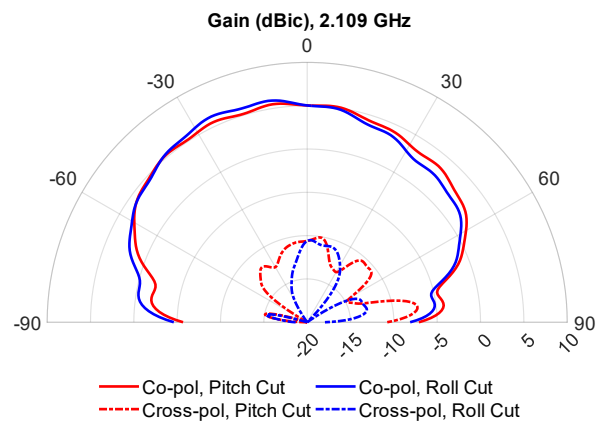
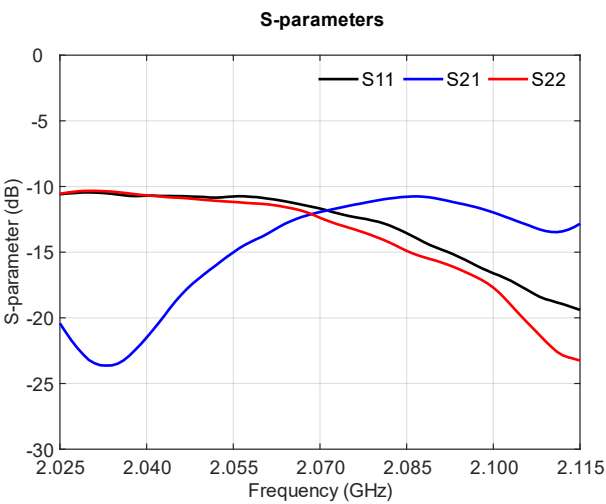
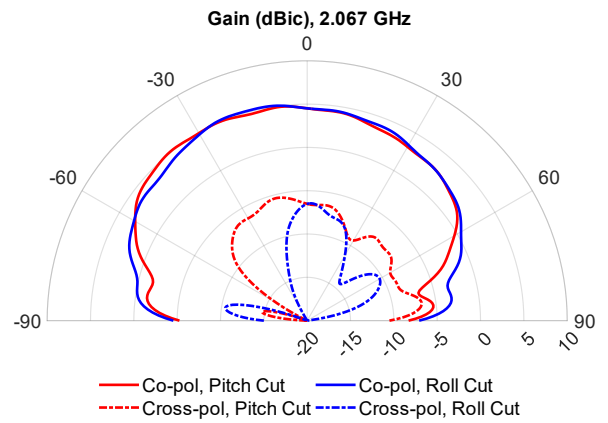
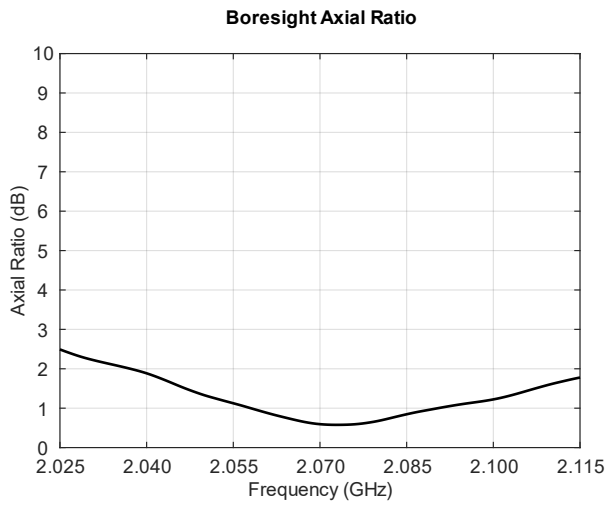
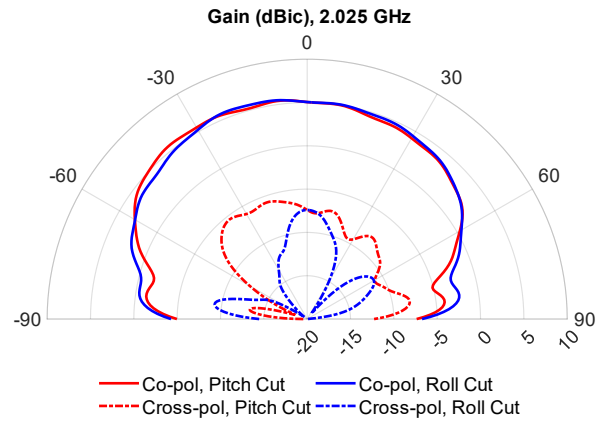
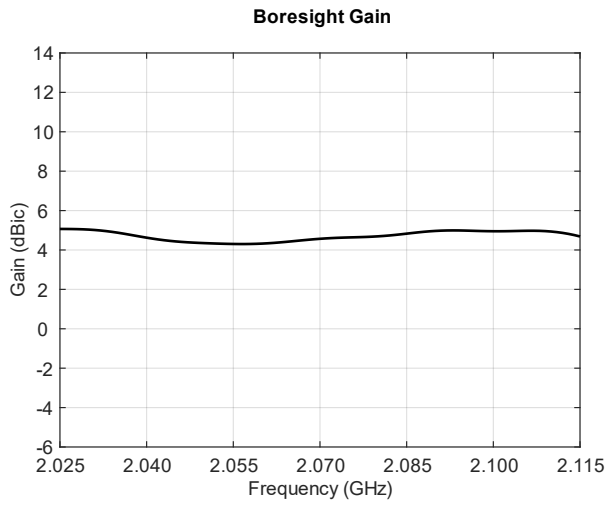
Parameter / Condition	Value	Unit	Limits
Connector	SMA Female		
Mass	100	g	Max
Compatible Test Hat	PW2020-310		

Environmental Specifications

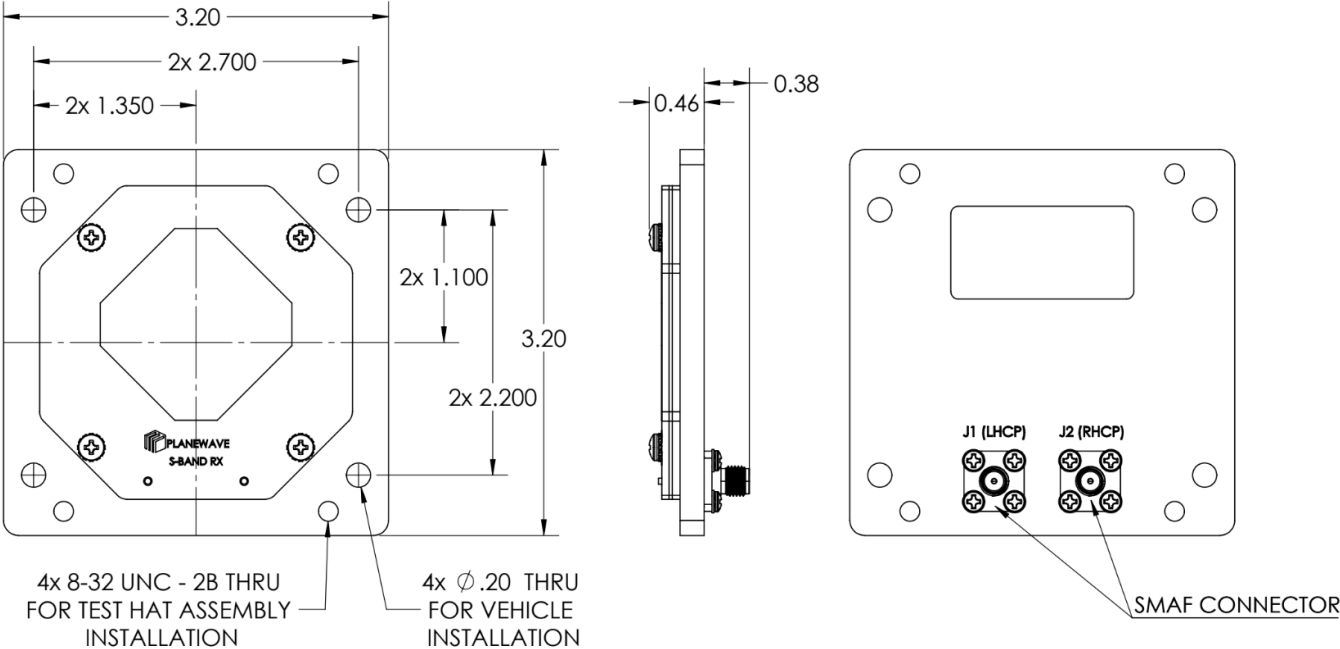
Parameter / Condition	Min	Typ	Max	Unit
Operating Temperature	-70		100	°C
Storage Temperature	-70		100	°C
Vibration	14.1			G _{RMS}

Random Vibration Test Levels
(GSFC-STD-7000)





Mechanical Outline



Dimensions shown in inches.

Tolerances - Two Place Decimal: ± 0.010 , Three Place Decimal: ± 0.005

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