

Active or Passive L1/L2 GPS Antennas, P/N: 2G1215X-XX-X: 2.6" Diameter, Bulkhead/Back Mount Configurations



ANTCOM CORPORATION . 367 Van Ness Way, #602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . http://www.antcom.com



P/N: 2G1215X-XX-1 (White)



P/N: 2G1215X-XX-1 (Gray)



P/N: 2G1215X-XX-3 (Green)



P/N: 2G1215X-XX-4 (Black)

Hermetically Sealed, Designed for Hash Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)



P/N: 2G1215X-XS-X (SMA)



P/N: 2G1215X-XT-X (TNC)



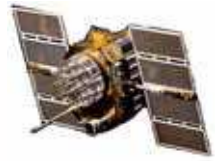
P/N: 2G1215X-XTB-X (TNC-B)



P/N: 2G1215X-XN-X (N)



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NOTICE OF PROPRIETARY RIGHTS
THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU IS EXPRESSLY CONDITIONED UPON YOUR AGREEMENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY AND DOES NOT INCLUDE MANUFACTURE OR REPRODUCTION THEREOF, AND OTHER USE IS EXPRESSLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM CORP.

MECHANICAL:
SIZE: DIAMETER: 2.60 in. [66.04 mm]
 HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73] (Optional for Passive, -PL-)
WEIGHT: 4.00 oz. (113 g)
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5441
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,
 SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR: TNC BULKHEAD
 (OPTION: TNC, SMA, N, N Bulkhead, MCX, MMCX, or Cable)

ENVIRONMENTAL:
TEMPERATURE: -67 F TO +185 F [-55 C TO +85 C]
ALTITUDE: 70,000 ft.
VIBRATION: > 30 G's
LEAKAGE: HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:
DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541,
 MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455
ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
	1			

ELECTRICAL:

	L1: (1575.42 ±12) MHz			L2: (1227.60 ±12) MHz		
FREQUENCY:						
RADIATION PATTERN:	HEMISPHERICAL			HEMISPHERICAL		
POLARIZATION:	RHCP			RHCP		
VSWR:	< 1.5:1			< 1.5:1		
IMPEDANCE:	50 ohms			50 ohms		
ANTENNA GAIN (dBic):	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
@ 90 °(ZENITH):	+ 5.0	+ 4.7	+ 3.1	+ 0.7	+ 3.3	+ 4.5
@ 10 °Elevation:	- 2.1	- 1.8	- 1.9	- 5.8	- 3.8	- 3.5
@ 20 °Elevation:	- 0.6	- 0.3	+ 0.6	- 4.3	- 2.0	- 0.8
@ 30 °Elevation:	+ 0.9	+ 1.4	+ 1.7	- 3.4	- 0.5	+ 1.4
@ 60 - 90 °Elevation:	> 4.0	> 3.9	> 2.4	> - 0.9	> 2.7	> 2.2
BEAM WIDTH (3dB):	103 Deg.	114 Deg.	143 Deg.	94 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING			DC GROUNDING		
LNA GAIN:	33 dB			35 dB		
LNA NOISE FIGURE:	3.0 dB			3.0 dB		
LNA P1dB Out:	+13 dBm			+13 dBm		
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA					
REJECTION @ (-50/+50) MHz	-41 dB / -59 dB			-40 dB / -40 dB		
REJECTION @ (-100/+100) MHz	< -65 dB			< -65 dB		
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)					

MECHANICAL:
SIZE: DIAMETER: 2.60 in. [66.04 mm]
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MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,
 SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR: TNC BULKHEAD
 (OPTION: TNC, SMA, N, N Bulkhead, MCX, MMCX, or Cable)

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FREQUENCY:						
RADIATION PATTERN:	HEMISPHERICAL			HEMISPHERICAL		
POLARIZATION:	RHCP			RHCP		
VSWR:	< 1.5:1			< 1.5:1		
IMPEDANCE:	50 ohms			50 ohms		
ANTENNA GAIN (dBic):	Free Space	3 in G.P.	4 ft G.P.	Free Space	3 in G.P.	4 ft G.P.
@ 90 °(ZENITH):	+ 5.0	+ 4.7	+ 3.1	+ 0.7	+ 3.3	+ 4.5
@ 10 °Elevation:	- 2.1	- 1.8	- 1.9	- 5.8	- 3.8	- 3.5
@ 20 °Elevation:	- 0.6	- 0.3	+ 0.6	- 4.3	- 2.0	- 0.8
@ 30 °Elevation:	+ 0.9	+ 1.4	+ 1.7	- 3.4	- 0.5	+ 1.4
@ 60 - 90 °Elevation:	> 4.0	> 3.9	> 2.4	> - 0.9	> 2.7	> 2.2
BEAM WIDTH (3dB):	103 Deg.	114 Deg.	143 Deg.	94 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	DC GROUNDING			DC GROUNDING		
LNA GAIN:	33 dB			35 dB		
LNA NOISE FIGURE:	3.0 dB			3.0 dB		
LNA P1dB Out:	+13 dBm			+13 dBm		
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA					
REJECTION @ (-50/+50) MHz	-41 dB / -59 dB			-40 dB / -40 dB		
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POLARIZATION:	RHCP			RHCP		
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LNA P1dB Out:	+13 dBm			+13 dBm		
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