



FAA Approved Facility

(2.1-2.3)GHz Telemetry Antenna
 P/N: 3CG22RR-P-XS-4-1.989 (RHCP), P/N: 3CG22LL-P-XS-4-1.989 (LHCP)
 3.5", Xin Radius Conformal Configurations



Antenna Mounts/Adapters: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

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

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 PROHIBITED UNLESS YOUR AGENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY (AND DOES NOT INCLUDE MANUFACTURE OR REPRODUCTION). ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM CORP.

ANTENNA'S NORTH (FORWARD) DIRECTION INDICATION

P/N: 3CG22RR-P-XS-4-1.989

SIZE:	FREQ. BAND:	Polarization:	LNA:
1: 2" SQ.	1215: L1/L2	RR: RHCP	A: WITH LNA
1.9: 1.9" SQ.	15: L1 ONLY	LL: LHCP	AL: WITH LNA/LIMITER/FILTER (INPUT: +50dBm, OUPUT:+30 dBm)
2: 2.6" DIA.	22: 2.2-2.3 GHz		P: WITHOUT LNA
3: 3.5" DIA.	21: 2.1-2.2 GHz		PL: PASSIVE WITH LIMITER/FILTER (INPUT: +50dBm, OUPUT:+30 dBm)
4: MINI ARINC	09: GSM		

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG, N: NO MAG.	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	N: NB; N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TB; TNC; TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

NOTES: UNLESS OTHERWISE SPECIFIED:
 3. PER LOCKHEED MARTIN IGES FILE
 2. MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION
 1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

SPECIFICATIONS

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	
A		Release	08/26/09 S.H

ELECTRICAL:

FREQUENCY:	(2-1 to 2.3) GHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
GAIN (dBic):	Free Space 4 ft G.P.
@ 90° (Zenith):	+2.5 +4.6
@ 10° Elevation:	- 4.3 -1.1
@ 20° Elevation:	- 3.0 +2.2
@ 30° Elevation:	- 1.5 +2.2
@ 60° to 90°Elevation:	> 1.7 >+3.4
BEAM WIDTH (3dB):	104° 129°
AXIAL RATIO @ Zenith:	2 dB
POWER HANDLING:	100 W
LIGHTNING PROTECTION:	DC GROUNDING

MECHANICAL:

SIZE: 3.50 in.[88.90 mm] SQ.
 HEIGHT = 0.655 in. [16.64 mm]
 WEIGHT: <5.5 oz. (160 g)
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5441
 COLOR: FIELD GREEN, FED-STD-595, COLOR #3409 5
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,
 SKYDROL RESISTANCE, AND FIRE RETARDANT
 CONNECTOR: SMA FEMALE
 (OPTION: TNC, TNC Bulkhead, 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 SEALED

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

QUANTITY REQD.	DESCRIPTION	PART NO	FINISH	THM NO
4				5
1				1
-2				

CONFORMAL RADIUS OPTION:	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TOLERANCES (MPC ANGLES DECIMALS)
3: 3.000" RADIUS S	± 1/64 .0012 .005
3.5N: 3.500" RADIUS (NETFIRE, GMLRS, NLOS)	
4P: 4.000" RADIUS (PAWERSHAW)	
5M: 5.000" RADIUS (NAVSPENCO)	
7.5EM: 7.500" RADIUS (EGSU, MALD)	
14A: 14.00" RADIUS (JACM)	
X: X" RADIUS (D. File: No Radius)	

TOLERANCE 5% PER ANSI Y14.5
 BREAK ALL DIMENSIONS .005 TO .015
 FILED & LOCK TO BE DRAWN
 SUREN THREADS PER MIL-S-8879
 DIA'S ON A COMBINE Q 27.035
 MACHINED SURFACES ✓

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA
PASSIVE RHCP S-BAND ANTENNA

DESIGN: S. HUYNH
 ENGINEER: S. HUYNH
 APPROVED: S. HUYNH
 CAD FILE NO: Aug-10-09

DATE: 08/26/09
 DRAWN BY: DJ3CVE1
 PARTS LIST: 3CG22RR-P-XS-4-1.989
 SCALE: 1/1
 SHEET: 1 OF 1

NMO Connector Option is Now Available for Some Antennas