



FAA Approved Facility

RHCP/LHCP L1/L2 GPS Antenna, P/N: 1.9G1215P2-XSSMCRS-3: Low Profile 1.9" Square, Flat/Back Mount Configuration,

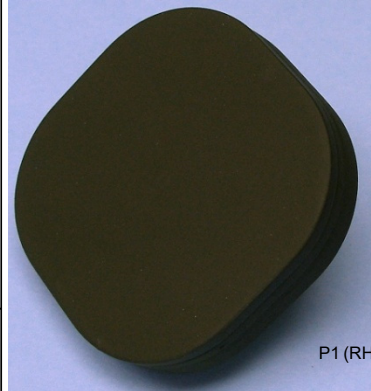
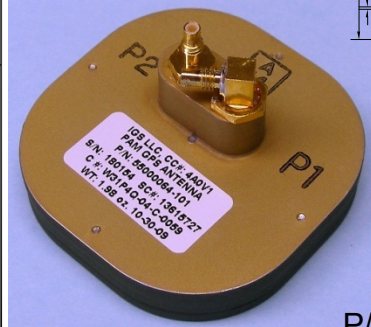
"-PL-" or "-AL-" for Limiter Options for High Power Pulse Protection



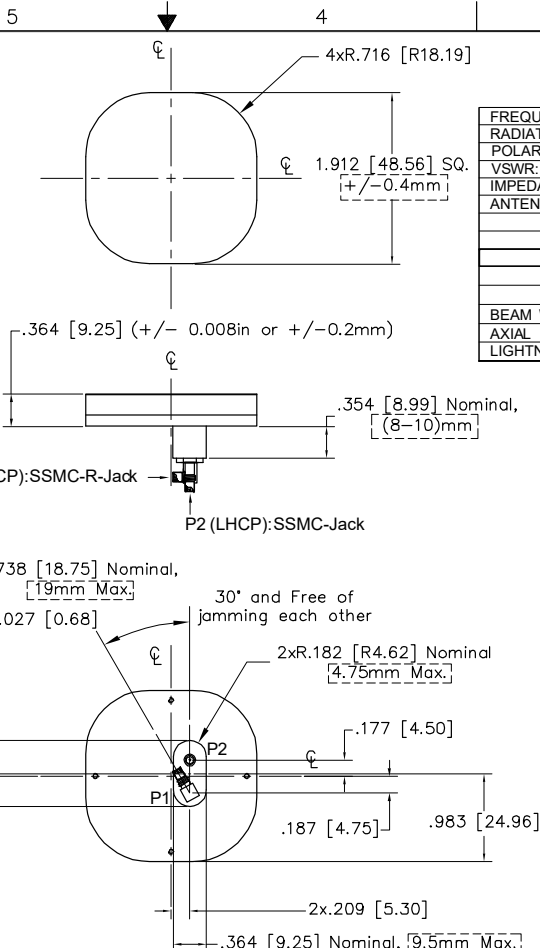
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1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]



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SPECIFICATIONS

ZONE	REV	DESCRIPTION	REVISIONS				
			DATE	APPROVED			
ELECTRICAL:							
FREQUENCY:		L1: (1575.42±12) MHz		L2: (1227.60±12) MHz			
RADIATION PATTERN:		HEMISPHERICAL					
POLARIZATION:		RHCP/LHCP					
VSWR:		< 2.0:1		< 2.0:1			
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):		+2.7	+4.7	+3.1	+1.5	+3.3	+4.5
@ 10 ° Elevation:		-4.4	-1.8	-1.9	-6.7	-3.8	-3.5
@ 20 ° Elevation:		-2.3	-0.3	+0.6	-5.6	-2.0	-0.8
@ 30 ° Elevation:		-0.8	+1.4	+1.7	-4.5	-0.5	+1.4
@ 60 - 90 ° Elevation:		>2.0	>3.9	>2.4	> 0.0	>2.7	> 2.2
BEAM WIDTH (3dB):		113 Deg.	114 Deg.	143 Deg.	85 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:		2 dB		2 dB			
LIGHTNING PROTECTION:		DC GROUNDING					
LNA OPTION:							
LNA GAIN:		(21.0+/-2.0) dB					
LNA NOISE FIGURE:		1.8 dB					
LNA P 1dB Out:		+16 dBm					
VOLTAGE/CURRENT:		(+2.8 TO +28) Volts DC / (15 TO 25) mA					
MECHANICAL:							
SIZE:		1.912in.[48.56mm]SQ.					
HEIGHT:		0.36 in. [9.25 mm]					
WEIGHT:		2.4 oz. (69 g)					
FINISH:		SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541F TypeI Class3					
MATERIAL:		6061-T6 ALUMINUM ALLOY BASE THERMOSET PLASTIC RADOME, UV, ABRASION AND SKYDROL RESISTANCE					
CONNECTOR:		P1 (RHCP): SSMC-R-Jack, P2 (LHCP): SSMC-Jack (OPTION:SMC, SMB,SSMB, SMA, PIN, TNC, TNC-Bulkhead, N, N-Bulkhead, MCX, MMCX, or Cable)					
ENVIRONMENTAL:							
TEMPERATURE:		-67 °F TO +185 °F [-55 °C TO +85 °C]					
ALTITUDE:		70,000ft.					
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, AND MIL-STD-8'D					

SIZE	FREQ. BAND	POLARIZATION/LNA OPTIONS
1: 2" SQ	1215: L1/L2	A2: WITH 20 dB LNA
1.9: 1.9" SQ	15: L1 ONLY	A4: WITH 40 dB LNA
2: 2.3" SQ		P: WITHOUT LNA
2: 2.6" DIA.		P2: WITHOUT LNA, WITH RHCP/LHCP POLARIZATION
3: 3.5" DIA.		P2L: WITHOUT LNA, WITH DUAL LINEAR POLARIZATION

1	ADHESIVE GASKET	12345G-3M-1G	-	-	-	1
QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO

ANTCOM CORP. TORRANCE CALIFORNIA

1.9" SQUARE, L1/L2 PASSIVE
RHCP/LHCP GPS ANTENNA

SCALE 1/1 SHEET 1 OF 1

6 5 4 3 2 1

CABLE'S LENGTH: CONNECTOR: COLOR:

X: NO CABLE	S: SMA; P: P2 PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. V: NO MAG.	M: MCK; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
F: CABLE LENGTH (IN)	N: NB; RS: R5MA	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TB; TNC; TNC-Bulkhead d	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ARE DECIMALS ANGLES ± 1/64 .XX4 .020 ± 2' .XXX4 .008

TOLERANCE SYM PER ANS1 Y14.5

REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 FILET R .030 TO R .030 SCREW THREADS PER MIL-S-8879 DIA'S ON A COMMON @ 24.005

MACHINED SURFACES 125

DO NOT SCALE DRAWING

APPROVED: S. HUYNH OCT-12-09

CAD FILE NO: D:\3CVE1

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SCALE 1/1 SHEET 1 OF 1

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