



SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±15) MHz			L2: (1227.60 ±15) MHz		
	RADIATION PATTERN:	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):	+ 3.7	+ 4.7	+ 3.1	- 1.7	+ 3.3	+ 4.5
@ 10° Elevation:	- 2.9	- 1.8	- 1.9	- 7.3	- 3.8	- 3.5
@ 20° Elevation:	- 1.3	- 0.3	+ 0.6	- 6.2	- 2.0	- 0.8
@ 30° Elevation:	0.0	+ 1.4	+ 1.7	- 5.2	- 0.5	+ 1.4
@ 60 - 90° Elevation:	> 3.0	> 3.9	> 2.4	> -3.2	> 2.7	> 2.2
BEAM WIDTH (3dB):	108 Deg.	114 Deg.	143 Deg.	100 Deg.	106 Deg.	74 Deg.
AXIAL RATIO:	2 dB			2 dB		
LIGHTNING PROTECTION:	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, (2.5-24V)/<50mA					
REJECTION @ (-50/+50) MHz:	-41 dB / -59 dB			-40 dB / -40 dB		
@ (-100/+100) MHz:	< -65 dB			< -65 dB		
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)					

MECHANICAL:

SIZE: LENGTH: 2.080 in. [52.78 mm], WIDTH: 2.080 in. [52.78 mm]
 HEIGHT: 0.690 in. [17.53 mm], 0.58" [14.73](Optional for Passive)

WEIGHT: 3.0 oz. (85 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5441, With Radome matching color

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,
 SKYDROL RESISTANCE, AND FIRE RETARDANT

CONNECTOR: SMP 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 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

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	1215: L1/L2	A: WITH LNA; A4: WITH 40 DB LNA WITHOUT REJECTION FILTERS
1.9: 1.9" SQ.	15: L1 ONLY	AL: WITH LNA/LIMITER
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		PL: WITHOUT LNA and THINNER (0.58" THICK)
4: MINI ARINC		AZ: WITH 20 DB LNA WITHOUT REJECTION FILTERS

QTY	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REV
1	ADHESIVE GASKET	12345G-3M-1G				1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 ± .005 ± .1°

ORIGINAL DRAWN: S. HUYNH, May-29-01
 ORIGINALLY DESIGNED: S. HUYNH, May-29-01
 UPDATE DRAWN: PHIL TRAN, June-05-12
 APPROVED: S. HUYNH, June-05-12

ANTCOM CORP. TORRANCE, CALIFORNIA
 Center Connector, 2in Square Active L1/L2 GPS ANTENNA
 D3CVE11G1215A-XSMP-X-DS
 SCALE 1/1 SHEET 1 OF 1

- 032 BRUSH FINISH ON SURFACE INDICATED
- APPLY ADHESIVE: ABLEBOND 724-14C OR EQUIVALENT TO FORM HERMATIC SEAL BETWEEN BASEPLATE AND RADOME AND AROUND COAX CONNECTOR; ADHESIVE SHALL BE FLUSH W/ EXTERNAL SURFACES
- ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION
- DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

P/N: 1G1215A-XSMP-3-DS

CABLE'S LENGTH:	CONNECTOR (Female for SMP Only):	COLOR:
X: NO CABLE	SMP: SMP Female; SC: SMA	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N: NO MAG.	MC: MCX; MMC: MMCX; PC: PINS	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	NC: NBC; N: N-Bulkhead; RSC: R-SMA	-3: OLIVE DRAB GREEN #34088 PER FED-STD-595B
R: RIGHT ANGLE CON.	TC: TBC; TNC: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		-5: TAN #F: FS 23446 or 33446, FED-STD-595

NOTES: UNLESS OTHERWISE SPECIFIED:

NMO Connector Option is Now Available for Some Antennas