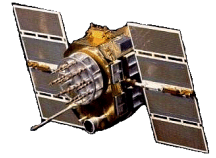




Active L1/L2 GPS & GSM Antenna

P/N: 42GG1215A-5SSF-1

Arinc 743, Front Mount Configuration



ISO 9001:2008/FAA Approved Facility

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

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>

SPECIFICATIONS

ELECTRICAL:

	L1: (1575.42±12) MHz	L2: (1227.60±12) MHz	GSM (902 - 928) MHz
FREQUENCY:			
RADIATION PATTERN:	HEMISPHERICAL		
POLARIZATION:	RHCP	RHCP	VERTICAL
VSWR:	< 1.5:1	< 1.5:1	< 2.0:1
IMPEDANCE:	50 ohms	50 ohms	50 ohms
ANTENNA GAIN (dBic):	Free Space	4 ft G.P.	Free Space
@ 90° (ZENITH):	+5.0	+3.1	+0.7
@ 10° Elevation:	-2.1	-1.9	-5.8
@ 20° Elevation:	-0.6	+0.6	-4.3
@ 30° Elevation:	+0.9	+1.7	-3.4
@ 60 - 90° Elevation:	> 4.0	> 2.4	> -0.9
@ 60 - 90° Elevation:	> 4.0	> 2.4	> 2.2
BEAM WIDTH (3dB):	103 Deg.	143 Deg.	94 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, (2.5-24)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: WIDTH: 3.00 in. [76.20 mm], LENGTH 4.700 in. [119.38 mm], HEIGHT: 0.788 in. [20 mm]

WEIGHT: 8.00 oz. (226g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDIUM TEPER MIL-C-5441

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

CONNECTOR: 2x 5in SMA FEMALE CABLES (OPTION: TNC, SMA, 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, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE

ATP-GPS-L1L2-100

QTY	DESCRIPTION	PART NO	TEST NO
4	MOUNTING SCREW: (10-32, 1")	MS24693C276	5
A/R			3
1	O-Ring, or GASKET	2-036/N756-75	1
-2	DESCRIPTION	PART NO	TEST NO

SIZE	FREQ. BAND	LNA
1: 2" SQ.	G1215: GSM/L1/L2	A: WITH LNA: A4 WITH 40 DB LNA WITHOUT REJECTION FILTERS
1.5: 1.9" SQ.	G15: GSM/L1	AL: WITH LNA/LIMITER
2: 2.6" DIA.	L1215: L1/L2	P: WITHOUT LNA
3: 3.5" DIA.	15: L1	PL: WITHOUT LNA and THINNER (HEIGHT = 0.58")
42: ARINC 743		A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE IN INCHES

FRACTIONS	DECIMALS	ANGLES
± 1/64	± .001	± 1°

REMOVE ALL FILERS
BREAK EXTERNAL EDGES .005 TO .015
FILERS IF .005 TO .015
SCREW THREADS PER MIL-C-8879
DAYS ON A CONFORM 2, 27, 200
MACHINED SURFACES 125

DO NOT SCALE DRAWING

3. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION

2. MOUNTING HEX NUT AND LOCK WASHER ARE SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

P/N: 42GG1215A-5SSF-1

CABLE LENGTH	GPS/GSM CONNECTOR	COLOR
X: NO CABLE	S: SMA; RS: R-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: N/A; 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

DATE	QTY	REV	DESCRIPTION	DATE	APPROVED

ANTCOM CORP. TORRANCE, CALIFORNIA

ARINC 743 Active L1/L2 GPS & GSM Antenna

D 3CVE142GG1215A-5SSF-1

SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas