



FAA Approved Facility

Antcom's Active G3 L1 Glonass + L1 GPS + OmniStar/TerraStar Antenna

P/N: G3Ant-3.5A2-XSMB-X-OEM

OEM Version on 3.5in. Dia. Ground Plane for Automotive Applications

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



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MECHANICAL:
 SIZE: 3.50 in [88.90 mm] DIAMETER
 HEIGHT: 0.512 in [13.00 mm]
 WEIGHT: < 3.2 oz. (90 g)
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5541F CLASS 1A
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
 CONNECTOR: CABLE/SMB-M FAKRA H CONNECTOR
 (OPTION: SMA, SMB, QMA, SSMC, SSMB, MMCX)

ENVIRONMENTAL:
 TEMPERATURE: -67 °F TO +221 °F [-55 °C TO +105 °C]
 70,000 ft.
 VIBRATION: > 30 G's
 HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:
 SAE J1455 (AUTOMOTIVE), DO-160D (ENV/EMI), DO-228 (ENV/EMI), MIL-C-5541F, MIL-PRF-39012 (CONN), MIL-STD-810G (ENV/EMI), MIL-HDBK-5400 (ELEC), MIL-STD-464C (ELEC MAG), MIL-STD-130N-1 (ID), MIL-STD-889B (METAL), RCC-319-14 (TERMINATION) , RCC-324-01(SAFETY), FAA TSO-C144, MIL-STD-1472 (DOD), MIL-I-45208A, AND NAS411-1 (HAZ)

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

SPECIFICATIONS		REVISIONS		
ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

	OmnISTAR / L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 GLONASS
FREQUENCY:	1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10 MHz	1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz	(1598 - 1606) MHz
RADIATION PATTERN:			
POLARIZATION:	RHCP	RHCP	RHCP
VSWR:	< 2.0:1	< 2.0:1	< 2.0:1
IMPEDANCE:	50 ohms	50 ohms	50 ohms
ANTENNA GAIN (dBi):			
@ 90 ° (ZENITH):	+ 1.2	+ 4.1	+ 3.0
@ 10 ° Elevation:	- 7.4	- 4.5	- 5.8
@ 20 ° Elevation:	- 5.8	- 2.9	- 4.1
@ 30 ° Elevation:	- 4.1	- 1.2	- 2.4
@ 60 - 90 ° Elevation:	> - 0.3	> + 2.6	> + 1.6
BEAM WIDTH (3dB):	75 Deg.	80 Deg.	80 Deg.
AXIAL RATIO:	1 dB		1 dB
LIGHTNING PROTECTION:		DC GROUNDING	
LNA GAIN:	27 dB		27 dB
LNA NOISE FIGURE:	2.8 dB		2.8 dB
LNA P1dB Out:	+13 dBm	+13 dBm	+13 dBm
LNA DC POWER:		(2.5 - 24)V @ <=12mA	
POWER HANDLING:	1 Watt CW, Optional; 10 Watts 1 Microsec Pulse (-AL-)		

SIZE:
 1: 2" SQ, 42: ARINC 743
 1.8: 1.9" SQ, 52: 2.6" DIA, ON 5" GROUND PLANE
 2: 2.0" DIA, 72: 7" DIA, CHOKE RING
 3: 3.5" DIA, 8: Bare on 3in [126mm] Dia, Ground Plane
 4: MINI ARINC X,X: Bare on X,in Dia, Ground Plane

LNA:
 A2: WITH 27dB LNA
 A3: WITH 33 dB LNA
 A4: WITH 43 dB LNA
 P: WITHOUT LNA

CABLE'S LENGTH:
 X: NO CABLE

CONNECTOR:
 UR: J,FL
 SM: SMA/M, SMB: B, BNC
 M: MMCX, MM: MMCX/M, MMCX/R
 SMC, SSMC, SSMB, SSMA
 QMA: QMA

COLOR:
 -1: GLOSS WHITE #17925 PER FED-STD-595B
 -2: LUSTERLESS GRAY #36320 PER FED-STD-595B
 -3: OLIVE DRAB #34031 PER FED-STD-595B
 -4: LUSTERLESS BLACK #37038 PER FED-STD-595B
 -5: TAN #33446 PER FED-STD-595B

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	HTG
-	-	-	-	2
-	-	-	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		ANTCOM CORP. TORRANCE, CALIFORNIA	
FRACTIONS TO DECIMALS	ANGLES	ORIGINALLY DRAWN	S. HUYNH Mar-16-15
± 1/64	± 1°	ORIGINALLY DESIGNED	S. HUYNH Mar-16-15
TOLERANCE SHALL PER ANSI Y14.5		UPDATED	S. HUYNH Mar-23-16
RELIEVE ALL BURRS		DATE	P. TRAN Mar-23-16
BREAK EXTERNAL EDGES TO .010		UPDATE DRAWN	S. HUYNH Mar-23-16
SOLES TO .005 DIA		APPROVED	S. HUYNH Mar-23-16
90° ON A CORNER ± .005			
MACHINED SURFACES			
DO NOT SCALE DRAWING			

ANTCOM CORP.
 OEM Version on 3.5in DIA. Ground Plane
 L1Glonass/L1GPS/OmniStar
 G3 ANTENNA (ROHS)

REV: D 3C1E1 G3Ant-3.5A2-XSMB-X-OEM
 SCALE 1/1 SHEET 1 OF 1