

Noise Figure is Now Improved to 1.9 dB for L1 GPS/OmniStar/Glonass and 2.3 dB for L1/L2 GPS/OmniStar/Glonass as of June-01-14  
 Antenna Mounts/Adapters: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

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"-HF" for High Iridium/Inmarsat/Thuraya-Rejection Front End Filter Option: -22dB@1616MHz, -34dB@1660MHz

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4X  $\phi$ .20 [ $\phi$ 5.11] Thru.  
 $\phi$ .385 [ $\phi$ 9.78] X 100"  
 for 10-32 MOUNTING SCREWS

SPHERICAL R6.000 [R152.40]

X, Y Phase Center = 0.0  
 Z Phase Center = .632 [16.05]

0-Ring (P/N: 2-031/N756-75)

TNC CONNECTOR  
 (OPTION: R-SMA, SMA, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, or Cable)  
 Clearance Hole: 0.4" Dia. for SMA, MCX, & MMCX Con.  
 0.52" Dia. for TNC Con.  
 0.63" Dia. for N Con.

NAMEPLATE APPROXIMATE LOCATION

4x 0.190-32 UNC-2B  
 0.250" Deep, Equally Spaced on 1.375" Rad. for Optional Mounting

### SPECIFICATIONS

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	
		Initial Release	May-29-01 S.H
A		Minor Change	Nov-01-13 S.H

**ELECTRICAL:**

FREQUENCY:	L1: (1575.42 $\pm$ 13) MHz	O: (1542.5 $\pm$ 17.5) MHz	L2: (1227.60 $\pm$ 13) MHz
RADIATION PATTERN:	HEMISPHERICAL		
POLARIZATION:	RHCP		
VSWR:	< 1.5:1		
IMPEDANCE:	50 ohms		
ANTENNA GAIN (dBic):	Free Space	4 ft G.P.	Free Space
@ 90° (ZENITH):	+4.1	+2.5	+5.7
@ 10° Elevation:	-3.5	-3.0	-1.8
@ 20° Elevation:	-2.1	-0.2	-0.4
@ 30° Elevation:	-0.8	+0.8	+0.9
@ 60-90° Elevation:	> 2.5	> 1.8	> 4.1
BEAM WIDTH (3dB):	87 Deg.	139 Deg.	89 Deg.
AXIAL RATIO:	2 dB	2 dB	2 dB
LIGHTNING PROTECTION:	DC GROUNDING		
LNA GAIN:	20 dB (...A2-...), 40 dB (...A4-...)		
LNA NOISE FIGURE:	1.9 dB		
LNA P1dB Out:	+13 dBm		
LNA DC POWER:	(2.5-24) V / < 35 mA		
POWER HANDLING:	1 Watt CW		

**MECHANICAL:**

SIZE: DIAMETER: 3.50 in. [ 88.90 mm]  
 HEIGHT: 0.812 in. [20.62 mm]

WEIGHT: 8.8 oz. (249 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
 BASE IRIDITE PER MIL-C-5441

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 SEAL

**FEDERAL & MILITARY SPECIFICATIONS :**

**DESIGN TO:** FAA TSO-C144, DO-160D, DO-228, MIL-C-5541, MIL-E-5400, MIL-145208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE :** ATP-GPS-L1L2-100 2-031/N756-75, or 123456-3M-3G

QUANTITY REQD	DESCRIPTION	PARTS LIST	TRF. NO.
4	MOUNTING SCREWS: 10-32, 3/4"	J507C1032R12	5
A/R	WASHER, CUSTOM C'SINK	3G15P1001-70	3
1	GASKET	3G15P1001-3G	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 .005 .015 ± 1° DRAWN

TOLENANCE SHI PER ANSI Y14.5 CHECKED M. BOAS 01-05-29  
 REMOVE ALL BURRS  
 BREAK EXTERNAL EDGES .005 TO .015  
 FILED R .005 TO R .015  
 USE SCREW THREADS PER MIL-C-8879  
 DIMS ON A COLUMN 5, 2P .005  
 MACHINED SURFACES .125

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE CALIFORNIA  
 3.5" Dia.  
 Active  
 L1/L2 GPS/L Band Antenna  
 D 3CVE1 3GOXX16A4-XTR-1-7  
 SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas