

L1/L2 GPS / L-Band Antenna

P/N: 1.9GO1215X-XX-X

1.9" Square x 0.5" Thick, Back Mount Configuration

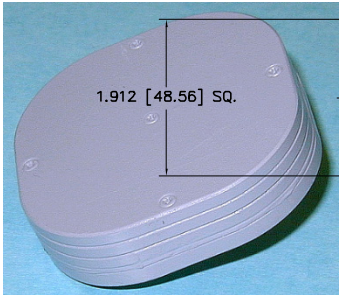
Noise Figure is Now Improved to 1.9 dB for L1 GPS/OmniStar/Glonass and 2.3 dB for L1/L2 GPS/OmniStar/Glonass as of June-01-14

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

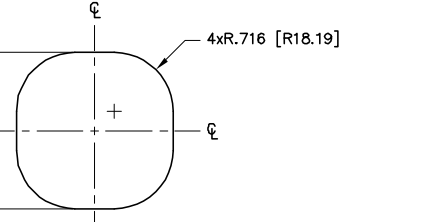
ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

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

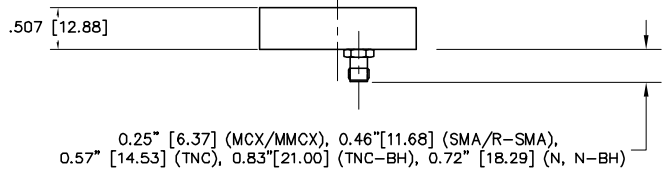
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1.912 [48.56] SQ.



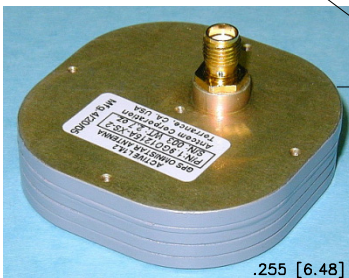
4xR.716 [R18.19]



.507 [12.88]

0.25" [6.37] (MCX/MMCX), 0.46" [11.68] (SMA/R-SMA), 0.57" [14.53] (TNC), 0.83" [21.00] (TNC-BH), 0.72" [18.29] (N, N-BH)

MOUNTING:
ADHESIVE CASEKET



.255 [6.48]

.149 [3.78]

SMA FEMALE CONNECTOR
(OPTION: TNC, 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.

SPECIFICATIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±13) MHz	O: (1542.5±17.5)MHz	L2: (1227.60 ±13) MHz			
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP					
VSWR:	< 1.5:1					
IMPEDANCE:	50 ohms					
ANTENNA GAIN (dBic):	3.5" Dia. G.P	4 ft G.P.	3.5" Dia. G.P	4 ft G.P.	3.5" Dia. G.P	4 ft G.P.
@ 90° (ZENITH):	+ 4.1	+ 2.5	+ 5.7	+ 2.5	+ 3.9	+ 4.9
@ 10° Elevation:	- 3.5	- 3.0	- 1.8	- 3.0	- 3.8	- 3.6
@ 20° Elevation:	- 2.1	- 0.2	- 0.4	- 0.2	- 2.3	- 0.1
@ 30° Elevation:	- 0.8	+ 0.8	+ 0.9	+ 0.8	- 0.7	- 1.8
@ 60 - 90° Elevation:	> 2.5	> 1.8	> 4.1	> 1.8	> 3.0	> 3.0
BEAM WIDTH (3dB):	87 Deg.	139 Deg.	89 Deg.	139 Deg.	97 Deg.	75 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: 1.912 in.[48.56 mm] SQ.
HEIGHT: 0.507 in. [12.88 mm]

WEIGHT: 2.88 oz. (82 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-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

QUANTITY REQD	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	REV
1	ADHESIVE GASKET	123456-3M-1G	-	-	-	3
1						2
1						1
-2	-1					

PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ± 1/64 DECIMAL ANGLES ± 1°

TOLERANCE SIZE PER ANSI Y14.5

REMOVE ALL BURRS

BRAC CIRCULAR EDGES 90° TO JIS

FASTER TO JIS TO JIS

DRIVE TORQUE PER JIS B0709

DRIVE ON A COAXIAL & 270°

MACHINED SURFACES

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

1.9" SQ. Active L1/L2 GPS/OmniStar ANTENNA

D3CVE11.9GO1215X-XX-X

SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas

CC: 3CVE1, NAICS: 334511, S.Huynh, 23-Nov-13

<http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf> (Amplifiers, Power Divider/Combiner, Filters, Diplexer)

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