



L1/L2 GPS / L-Band Antenna, P/N: 3GO1215A4-XXR-1: 3.5" Dia. Front/Back/Pipe Mount Configuration

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P/N: 3GO1215A4-XXR-1
(White)



P/N: 3GO1215A4-XXR-2
(Gray)



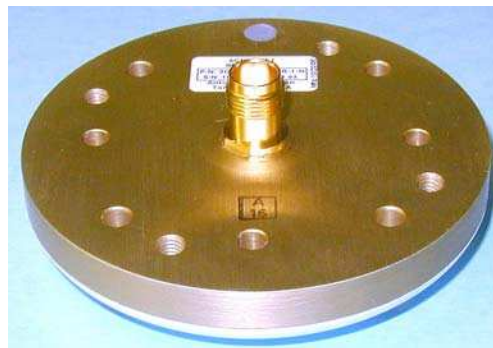
P/N: 3GO1215A4-XXR-3
(Green)



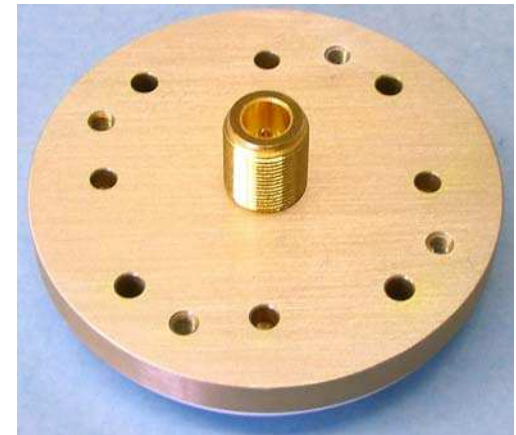
P/N: 3GO1215A4-XXR-4
(Black)



P/N: 3GO1215A4-XSR-X
(SMA)



P/N: 3GO1215A4-XTR-X
(TNC)



P/N: 3GO1215A4-XNR-X
(N)

Hermetically Sealed, Designed for Harsh Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)



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4X ϕ .20 [ϕ 5.11] Thru.
 \checkmark ϕ .385 [ϕ 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]

0.25" [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)

NAMEPLATE APPROXIMATE LOCATION

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

SMA 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.

P/N: 3GO1215A4-XTR-1

SIZE	FREQ. BAND	LNA	CABLE LENGTH	CONNECTOR	COLOR
1: 2" SQ.	42: ARINC 743	GO1216: L1/L2 GPS/GNSS/L-Band	X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ.	5: 5" CIRCULAR	A2: WITH 20 dB LNA	M: MAG; N: NO MAG	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #35320 PER FED-STD-595B
2: 2.6" DIA.	GO1215: L1/L2 GPS/L-Band	A4: WITH 40 dB LNA	F: CABLE LENGTH (IN)	N: NB; N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
3: 3.5" DIA.	G1215: L1/L2	P: WITHOUT LNA	R: RIGHT ANGLE CON.	T: TR; TNC; TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC	GO1116: L1/L2/L3/L5/L6	GPS/GNSS/Galileo			

SPECIFICATIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

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	4 ft G.P.	Free Space	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
BEAMWIDTH (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: 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 IRIDIUM 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 2-031/N756-75, or 123450-3M-30

QUANTITY REQD	DESCRIPTION	PART NO	REF ID
4	MOUNTING SCREWS: 10-32, 3/4"	J507C1032R12	5
A/R	WASHER, CUSTOM C'SINK	3G15P1001-70	3
1	GASKET	3G15P1001-3G	1
-2	-1		

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMAL ANGLES \pm 1/64 \pm .015 \pm 1'

REWORK ALL SURFACES BREAK EXTERNAL EDGES .005 TO .015 FILED R .005 TO R .015 SCREW THREADS PER MIL-C-8879 DIMS ON A COMMON & 20% AREA MACHINED SURFACES 12/

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA
Active L1/L2 GPS/L-Band ANTENNA

FILE NO: D13CVE1
SCALE: 1/1
SHEET: 1 OF 1