



FAA Approved Facility

7in Dia. Choke Ring GNSS Antenna for Global Navigation Satellite Systems (GNSS) Applications

P/N: 72GNSSA-XX-X (Survey Mount)

Antenna Mounts: <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**@(1625-1660)MHz
 "-HFO" for Additional Omnistar Rejection: **-27dB**@1545MHz

P/N: 72GNSSA-XT-1

SIZE:	LNA:	CABLE'S LENGTH:	CONNECTOR:	COLOR:
1: 2" SQ.	A: WITH 33 dB LNA	X: NO CABLE	S: SMA; SMB; SMBC; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.8: 1.8" SQ.	A4: WITH 40 dB LNA		M: MCX; MM; MMCX; MMR; MMCX-R	-2: LUSTERLESS GRAY #38320 PER FED-STD-595B
2: 2.6" DIA.	P: WITHOUT LNA		N: N; NB; N-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
3: 3.5" DIA.			T: TNC; TS; TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC	X: Bare on 5/16" Dia. Ground Plane		S/MC, SSMC, SSMB, SSMA	

SPECIFICATIONS

ZONE	REV	DESCRIPTION	REVISIONS	
			DATE	APPROVED
-	-	-	-	-

ELECTRICAL:

FREQUENCY:	L5 GPS E5, E5a, E5b, Galileo L5 IRNSS	L2 GPS B2 Compass	L2 GLONASS E6 Galileo B3 Compass	Omnistar / L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 GLONASS
	1176.45 ± 12.0 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15.0 MHz	1227.60 ± 12.0 MHz 1207.14 ± 10.0 MHz	1252.50 ± 7.5 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10.0 MHz	1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10.0 MHz	1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz	1609.0 ± 7.0 MHz

RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP
VSWR:	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1
IMPEDANCE:	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
ANTENNA GAIN (dBi):	Free Space 4 ft G.P.	Free Space 4 ft G.P.	Free Space 4 ft G.P.	Free Space 4 ft G.P.	Free Space 4 ft G.P.	Free Space 4 ft G.P.
@ 90° Elevation:	-1.3 +2.4 +5.5 +3.6 +5.0 +2.3 +3.1 -2.5 +4.4 +3.5 +1.5 -2.1					
@ 10° Elevation:	-12.1 -4.5 -4.5 -3.6 -5.0 -6.4 -8.1 -7.1 -6.8 -1.2 -9.9 -7.7					
@ 20° Elevation:	-10.9 -1.6 -3.1 -0.4 -3.8 -1.9 -6.0 -4.0 -4.6 +1.6 -7.7 -4.9					
@ 30° Elevation:	-9.1 +0.1 -1.4 +1.5 -2.0 -0.1 -3.9 -2.7 +2.1 -5.8 -4.5					
@ 80-90° Elevation:	> -3.3 > -0.7 > +3.6 > 0.6 > +3.1 > 0.1 > +1.1 > -0.0 > +2.5 > -1.5 > -0.5 > -8.6					
BEAM WIDTH (3dB):	80 Deg. 128 Deg.	84 Deg. 130 Deg.	82 Deg. 120 Deg.	78 Deg. 125 Deg.	80 Deg. 135 Deg.	130 Deg.
AXIAL RATIO:	0.5 dB	0.5 dB	1.5 dB	1.0 dB	5.0 dB	5.0 dB
LIGHTNING PROTECTION:			DC GROUNDING			
LNA GAIN:	35 dB	35 dB	35 dB	33 dB	33 dB	33 dB
LNA NOISE FIGURE:	3.0 dB	3.0 dB	3.0 dB	3.0 dB	3.0 dB	3.0 dB
LNA P1dB Out:	+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.3-2.4)V/50mA					
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)					

MECHANICAL:

SIZE: DIAMETER: 7.01 in. [178 mm]
 HEIGHT: 3.93 in. [99.82 mm]
 1.87 lbs. (848 g)

WEIGHT:
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

CONNECTOR: TNC FEMALE CONNECTOR
 (OPTION: SMA, BNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX)

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, D0-228, MIL-C-5541,
 MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	REV
1	1"-14 Mount (Optional)	MTR-3B2		3
1	5/8"-11 Mount	MTR-3B		2
1	INTERNAL ANTENNA	72GNSSX-XX-X		1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TO DECIMALS ANGLES ± 1/64 .002 .005 ± .1

TOLERANCE SURF PER ANSI Y14.5 UNLESS ALL DIMENSIONS BREAK EXTERNAL DIMENSIONS TO .015 SURF FINISHES PER MIL-C-8879 DIMS ON A COMMON & 27.000 MACHINED SURFACES .125

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

OUTLINE DRAWING
ACTIVE OR PASSIVE GNSS
CHOKER RING ANTENNA

DATE: 05/29/14
SCALE: 1/1
SHEET 1 OF 1

CC: 3CVE1, NAICS: 334511, S.H, 6/10/2014

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

4 of 30