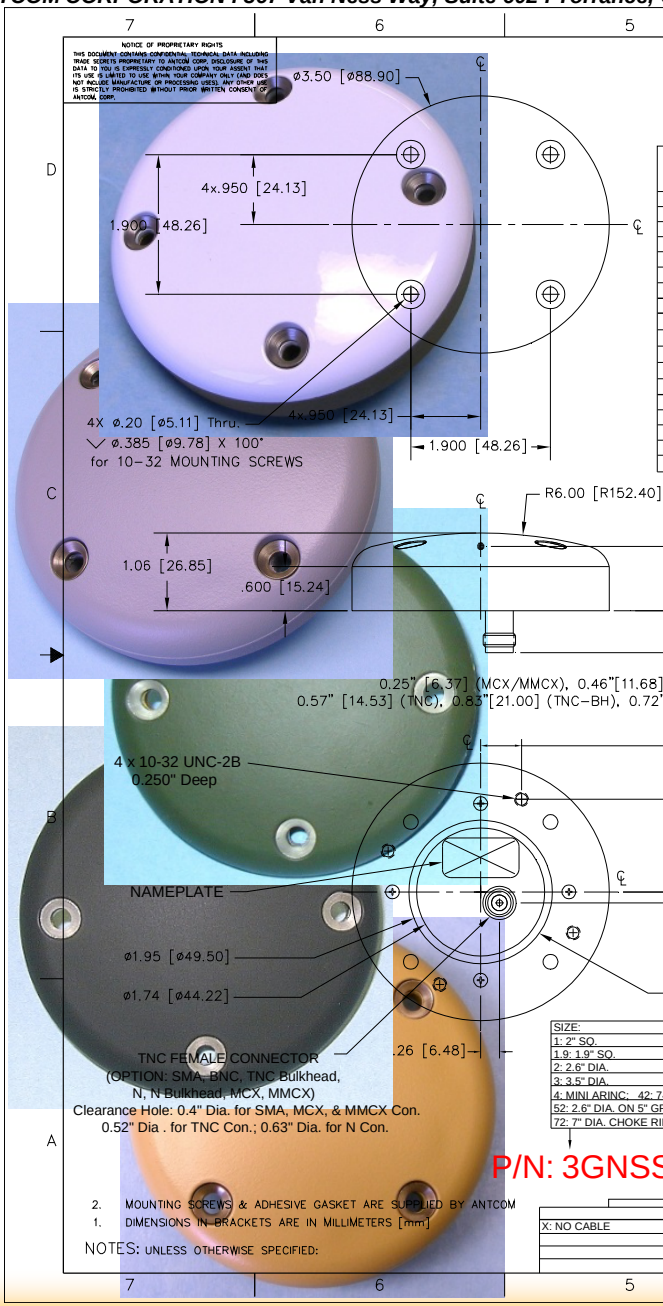
ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . http://www.antcom.com

"-HF" for High Iridium/Inmarsat/Thuraya-Rejection Front End Filter Option: -22dB@1616MHz, -34dB@(1625-1660)MHz
"-HFO" for Additional Omnistar Rejection: -27dB@1545MHz

NMO Connector Option is Now Available for Some Antennas



SPECIFICATIONS

ELECTRICAL:

	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	
FREQUENCY:	1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15 MHz		1227.60 ± 12 MHz 1207.14 ± 10 MHz		1252.50 ± 7.5 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10 MHz		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 MHz		1609 ± 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 (dBic):	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 ° (ZENITH):	+ 1.6	+ 2.4	+ 2.6	+ 3.6	+ 1.4	+ 2.3	- 1.0	- 2.5	+ 4.3	+ 3.5	- 1.5	- 2.1
@ 10 ° Elevation:	- 4.5	- 4.5	- 3.7	- 3.6	- 5.1	- 5.4	- 8.1	- 7.1	- 2.5	- 1.2	- 8.5	- 7.7
@ 20 ° Elevation:	- 3.5	- 1.6	- 2.3	- 0.4	- 3.6	- 1.9	- 6.6	- 4.0	- 1.3	+ 1.6	- 7.2	- 4.9
@ 30 ° Elevation:	- 2.0	+ 0.1	- 0.7	+ 1.5	- 2.1	- 0.1	- 5.6	- 2.8	+ 0.1	+ 2.1	- 6.0	- 4.5
@ 60 - 90 ° Elevation:	> 0.5	> - 0.7	> 1.5	> 0.6	> 0.1	> 0.1	> -2.0	> -5.0	> 3.2	> -1.5	> -2.6	> -8.6
BEAM WIDTH (3dB):	112 Deg.	128 Deg.	115 Deg.	130 Deg.	105 Deg.	120 Deg.	105 Deg.	125 Deg.	104 Deg.	135 Deg.	102 Deg.	130 Deg.
AXIAL RATIO:	1 dB		1.5 dB		4 dB		1.5 dB		5 dB		5.5 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, (2.5-24)V/<50mA											
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)											

MECHANICAL:

SIZE:	DIAMETER: 3.50 in. [88.90 mm] HEIGHT: 1.06 in. [26.85 mm]
WEIGHT:	12 oz. (340 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
COLOR:	GLOSS WHITE #17925 PER FED-STD-595B
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	TNC - TYPE FEMALE (OPTION: SMA, BNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C] (Operational) -85 °F TO +302 °F [-65 °C TO +150 °C] (Storage)
ALTITUDE:	70,000 ft.
VIBRATION:	> 30 G's
LEAKAGE:	HERMETICALLY SEAL
HAILSTONES:	< 0.5" Dia.

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

SIZE:	LNA:
1: 2" SQ.	A: WITH LNA
1.9: 1.9" SQ.	P: WITHOUT LNA
2: 2.6" DIA.	
3: 3.5" DIA.	
4: MINI ARINC, 42: 743 ARINC,	
52: 2.6" DIA. ON 5" GROUND PLANE	
72: 7" DIA. CHOKE RING	

	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
	N: N, NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
	T: TNC, TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

ITEM NO	QUANTITY REQD	DESCRIPTION	PART NO
4	4	Mounting Screws: 10-32, 1.25"	J507C1032R20 (93085A835)
3	4	Washer, Custom C'Sink	3G15P1001-70
1	1	O-Ring or Gasket	2-031/N756-75 or 3G15P1001-3G

PARTS LIST

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	ECO# 0007, RELEASE	11-11-08	S. HUYNH

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS ± 1/64, DECIMALS .XX ± .015, .XXX ± .005, ANGLES ± 1°. TOLERANCE SYM PER ANSI Y14.5. REMOVE ALL BURRS. BREAK EXTERNAL EDGES .005 TO .015. FILLETS R .005 TO R .030. SCREW THREADS PER MIL-S-8879. DIA'S ON A COMMON ℄ OF .005. MACHINED SURFACES 125. DO NOT SCALE DRAWING.

DRAWN | CHECKED | ENGINEER | APPROVED S. HUYNH 11-11-08 | CAD FILE NO

ANTCOM CORP. TORRANCE CALIFORNIA

OUTLINE DRAWING
ACTIVE OR PASSIVE
3.5in Dia. GNSS ANTENNA

SIZE D | CAGE NO 3CVE1 | DRAWING NO 3GNSSX-XX-X | REV A

SCALE 1/1 | SHEET 1 OF 1