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/TerraStar Rejection: -27dB@1545MHz

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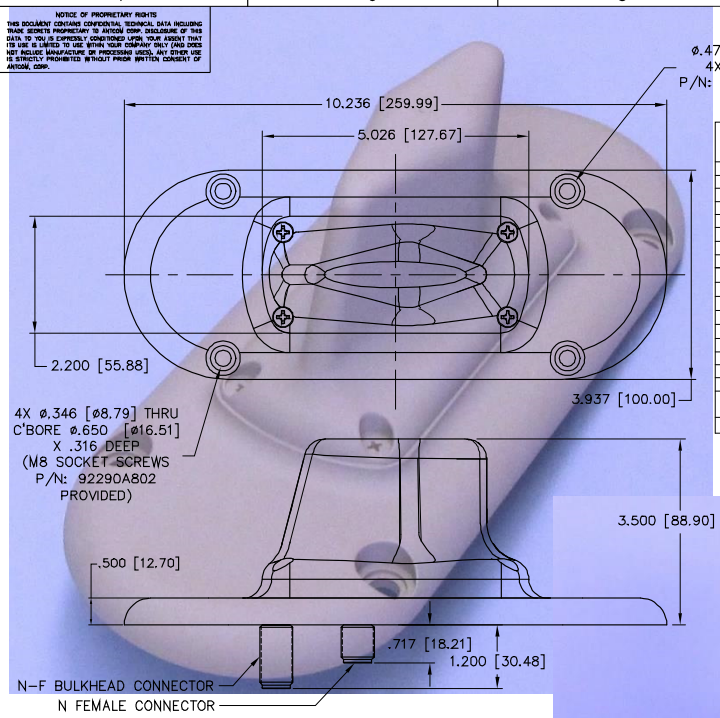

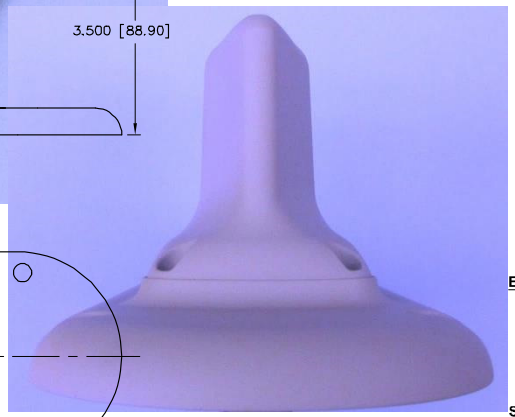

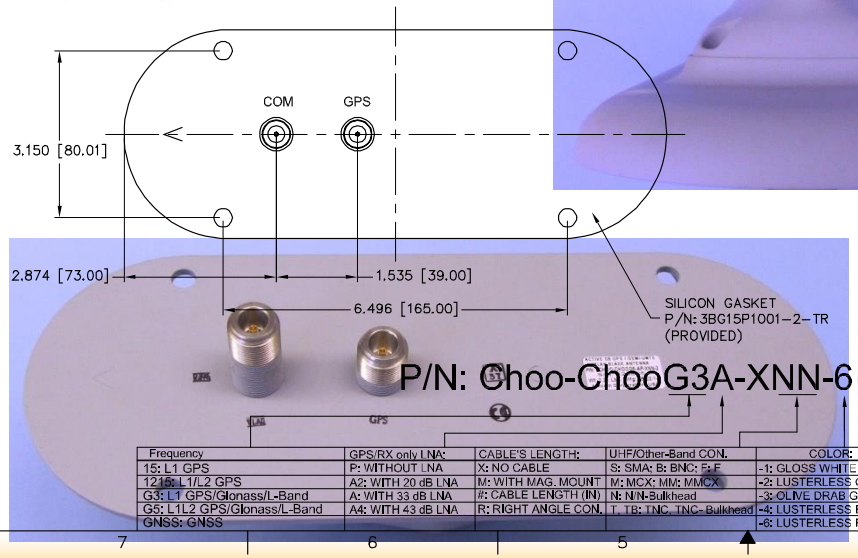

SPECIFICATIONS

ELECTRICAL:

	G5								G3				COM
	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		GSM/UMTS WLAN
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 ± 12.0 MHz		(1598 - 1606) MHz		810 - 960 1600 - 2300 2300 - 2400 2400 - 2700 3400 - 3700 4000 - 5875
RADIATION PATTERN:	HEMISPHERICAL												OMNI
POLARIZATION:	RHCP		RHCP		RHCP		RHCP		RHCP		RHCP		VERTICAL
VSWR:	< 2.0:1		< 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		50 ohms
ANTENNA GAIN (dBic):	Free Space	Sin G.P	Free Space	Sin G.P	Free Space	Sin G.P	Free Space	Sin G.P	Free Space	Sin G.P	Free Space	Sin G.P	
@ 90 ° (ZENITH):	- 4	- 3	+ 2.6	+ 3.2	+ 1.8	+ 1.6	- 1.2	+ 0.8	+ 4.0	+ 3.0	+ 3.7	+ 2.2	(810 - 960 MHz) + 5.3 (1600 - 2300 MHz) + 7.5 (2300 - 2400 MHz) + 7.3 (2400 - 2700 MHz) + 7.8 (3400 - 3700 MHz) + 6.4 (4000 - 5875 MHz) + 4.9
@ 10 ° Elevation:	- 11	- 11	- 3.7	- 3.6	- 4.9	- 5.4	- 6.3	- 5.4	- 3.5	- 3.0	- 4.0	- 4.1	
@ 20 ° Elevation:	- 10	- 10	- 2.8	- 2.2	- 4.1	- 3.7	- 4.6	- 3.8	- 1.9	- 1.9	- 2.5	- 2.6	
@ 30 ° Elevation:	- 9	- 8	- 1.4	- 0.2	- 2.4	- 1.8	- 3.5	- 2.9	- 0.6	- 0.5	- 1.1	- 1.6	
@ 60 - 90 ° Elevation:	> - 6	> - 5	> + 1.4	> + 2.2	> + 0.5	> + 0.6	> - 0.2	> + 0.2	> + 2.6	> + 2.4	> + 2.2	> + 1.5	
BEAM WIDTH (3dB):	95 Deg.	100 Deg.	100 Deg.	107 Deg.	95 Deg.	105 Deg.	90 Deg.	100 Deg.	90 Deg.	105 Deg.	85 Deg.	100 Deg.	
AXIAL RATIO:	3 dB	3 dB	1.5 dB	1.5 dB	1 dB	1 dB	3 dB	1 dB	1 dB	1 dB	5 dB	2.5 dB	
LIGHTNING PROTECTION:	DC GROUNDING												
LNA GAIN:	35 dB		35 dB		35 dB		33 dB		33 dB		33 dB		N/A
LNA NOISE FIGURE:	2.7 dB		2.7 dB		2.7 dB		2.7 dB		2.7 dB		2.7 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												
FILTERS & OUT OF BAND REJECTION	For L1 or L1/L2: 36dB@1618MHz (Iridium); 44dB@1625MHz, 55dB@1640MHz, 67db@1660MHz (Inmarsat/Thuraya) For G3 , G5 or GNSS: 8dB@1616MHz (Iridium); 38dB@1625MHz, 45dB@1640MHz, 73db@1660MHz (Inmarsat/Thuraya)												
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)												100 Watt

MECHANICAL:

SIZE:	WIDTH 10.24 in. [260 mm], LENGTH 3.94 in. [100 mm], HEIGHT 3.50 In. [88.9 mm]
WEIGHT:	25.0 oz. (709g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541F
COLOR:	LUSTERLESS RED #31136 PER FED-STD-595B
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDAN
CONNECTOR:	N FEMALE, N FEMALE BULKHEAD (OPTION: SMA, N, TNC)

ENVIRONMENTAL:

TEMPERATURE:	-76°F TO +185°F [-60°C TO +85°C]
ALTITUDE:	70,000 ft.
VIBRATION:	30 G's
LEAKAGE:	HERMETICALLY SEALED
INGRESS:	IP 68

SPECIFICATIONS:

EN 50155, EN 50121-3-2, DO-160D, D0-228, MIL-C-5541, MIL-STD-461E/F, SAE J1455
MIL-E-5400, MIL-I-45208A, MIL-STD-810, MIL-S-901D, MIL-STD-167-1A

ITEM NO	PART NO	DESCRIPTION	QUANTITY REQ
4	P/N: 509-10, Item 509-M10	OPTIONAL M10 56x115mm MOUNTING ADAPTER	1
3	P/N: 3BG15P1001-2-TR, Item 546-TR	SILICON GASKET	1
2	P/N: AS568A-011, Item 553-011	TOP O-RING (FOR SCREW)	4
1	P/N: 92290A802, Item 590M8-1	SCREW, SOCKET, M8 X 1.25, 16.4MM L	4

PARTS LIST

Frequency	GPS/RX only LNA:	CABLE'S LENGTH:	UHF/Other-Band CON.	COLOR:
15: L1 GPS	P: WITHOUT LNA	X: NO CABLE	S: SMA; B: BNC; F: F	-1: GLOSS WHITE #17925 PER FED-STD-595B
1215: L1/L2 GPS	A2: WITH 20 dB LNA	M: WITH MAG. MOUNT	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
G3: L1 GPS/Glonass/L-Band	A: WITH 33 dB LNA	#: CABLE LENGTH (IN)	N: N/N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
G5: L1L2 GPS/Glonass/L-Band	A4: WITH 43 dB LNA	R: RIGHT ANGLE CON.	T, TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
GNSS: GNSS				-6: LUSTERLESS RED #31136 PER FED-STD-595B

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS ± 1/64 DECIMALS .XX± .015 .XXX± .005 ANGLES ± 1°
REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 MACHINED SURFACES 125

ORIGINALLY DRAWN	S. HUYNH	Sep-23-11
ORIGINALLY DESIGNED	S. HUYNH	Sep-23-11
UPDATED	S. HUYNH	April-09-14
UPDATE DRAWN	P. TRAN	April-09-14
APPROVED	S. HUYNH	April-09-14

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA

GPS / WIFI
BLADE ANTENNA

SIZE D | CAGE NO 3CVE1 | DRAWING NO Choo-ChooG3A-XNN-6 | REV
SCALE 1/1 | SHEET 1 OF 1

P/N: Choo-ChooG3A-XNN-6

http://www.antcom.com/documents/catalogs/page/Choo-ChooG3A-XNNN-2_InstallationManual.pdf