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

NOTICE OF PROPRIETARY RIGHTS

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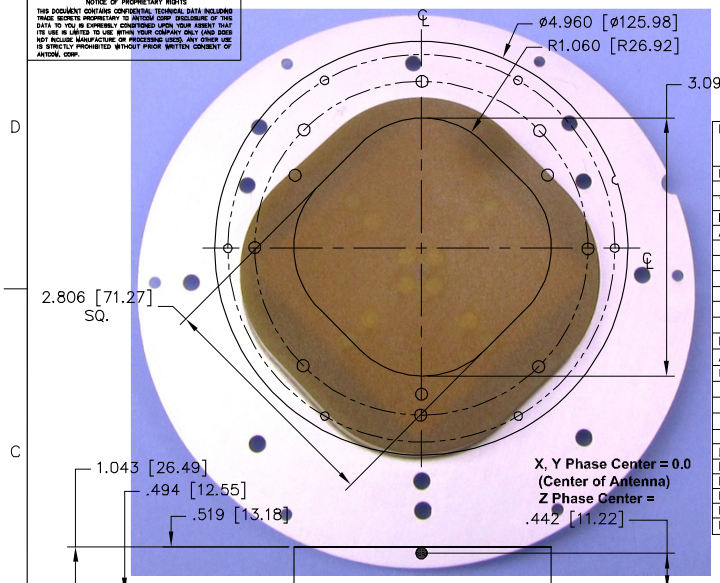
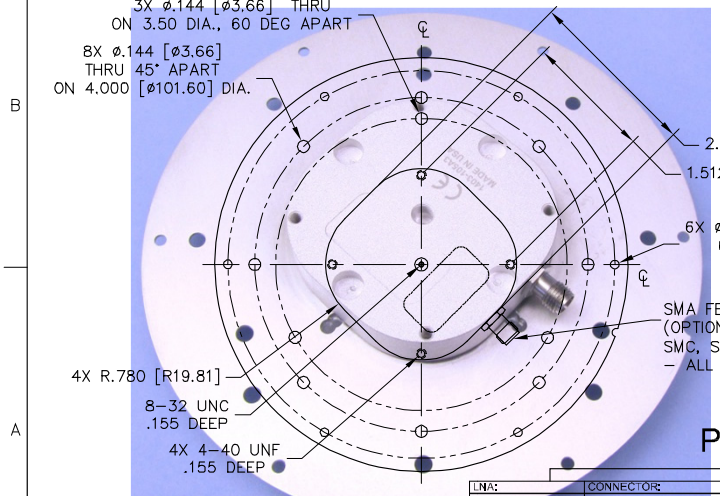




DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
ALL SCREWS ARE SUPPLIED BY ANTCOM CORPORATION
NOTES: UNLESS OTHERWISE SPECIFIED:

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 ± 12 MHz	1227.60 ± 12 MHz 1207.14 ± 10 MHz	1242 - 1252 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 - 1609 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):						
@ 90 ° Above Horizion (Top):	+ 1.9	+ 3.7	+ 4.1	+ 4.4	+ 5.6	+ 6.2
@ 15 ° Above Horizion:	- 4.5	- 3.3	- 3.0	- 4.5	- 3.5	- 3.0
@ 20 ° Above Horizion:	- 3.6	- 2.5	- 2.2	- 3.6	- 2.6	- 2.1
@ 25 ° Above Horizion:	- 2.7	- 1.6	- 1.3	- 2.7	- 1.6	- 1.1
@ 30 ° Above Horizion:	- 2.3	- 1.1	- 0.8	- 1.8	- 0.7	- 0.2
@ 70 ° Above Horizion:	+ 1.2	+ 2.9	+ 3.4	+ 3.6	+ 4.8	+ 5.4
BEAM WIDTH (3dB):	95 Deg.	80 Deg.	80 Deg.	80 Deg.	80 Deg.	80 Deg.
AXIAL RATIO:	1 dB	1 dB	1 dB	1 dB	1 dB	1 dB
MULTIPATH REJECTION (RHCP/LHCP):						
@ 90 ° Above Horizion (Top):	23 dB	23 dB	22 dB	31 dB	32 dB	32 dB
@ 0° Above Horizion:	19 dB	19 dB	16 dB	10 dB	9 dB	8 dB
@ 15° Above Horizion:	19 dB	16 dB	14 dB	14 dB	13 dB	11 dB
@ 25° Above Horizion:	17 dB	16 dB	15 dB	16 dB	16 dB	14 dB
LIGHTNING PROTECTION:	DC GROUNDING					
LNA GAIN:	42 dB	42 dB	42 dB	43 dB	43 dB	43 dB
LNA NOISE FIGURE (With Filter):	2.6 dB	2.6 dB	2.6 dB	2.9 dB	2.9 dB	2.9 dB
LNA P1dB Out:	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm
LNA DC POWER:	(3.3-24)V/<50mA					
POWER HANDLING:	3 Watt CW (With Limiter)					

MECHANICAL:

SIZE: 4.96 in. SQ. [126 mm]
HEIGHT: 0.519 in [13.2 mm]

WEIGHT: 6.6 oz. (188 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5541F CLASS 1A

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,
SKYDROL RESISTANCE, AND FIRE RETARDANT

CONNECTOR: SMA FEMALE
(OPTION: MCX, TNC, QMA, SMB, SMC, SSMA, SSMB, SSMC,

ENVIRONMENTAL:

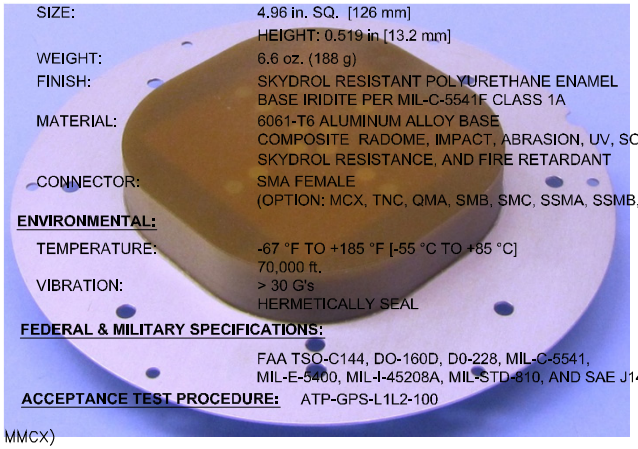
TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
70,000 ft.

VIBRATION: > 30 G's
HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

FAA TSO-C144, DO-160D, D0-228, MIL-C-5541,
MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100



P/N: G8Ant-5A4SX

LNA:	CONNECTOR:	COLOR:
A: WITH LNA	S: SMA; Q: QMA; SMB; SMBR; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
P: WITHOUT LNA	M: MCX; MM: MMCX; MMR: MMCX-R	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
A4: WITH LNA (40 dB)	N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
MN: FLUSH MAGNET	T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	SMC, SSMC, SSMB, SSMA	-5: DESERT TAN #33446 PER FED-STD-595B

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

PARTS LIST

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	ITEM NO

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 ℄ ø.005
MACHINED SURFACES 125
DO NOT SCALE DRAWING

ORIGINALLY DRAWN	S. HUYNH	Mar-24-09
ORIGINALLY DESIGNED	S. HUYNH	Mar-24-09
UPDATED	S. HUYNH	Sept-20-12
UPDATE DRAWN	P. TRAN	Sept-20-12
APPROVED	S. HUYNH	Sept-20-12

ANTCOM CORP. TORRANCE CALIFORNIA

2.8in. OEM VERSION
ON 5in. GROUND PLANE
GNSS ANTENNA

SIZE	CAGE NO	DRAWING NO	REV
D	3CVE1	G8Ant-5A4SX	A

SCALE 1/1 SHEET 1 OF 1