



FAA Approved Facility

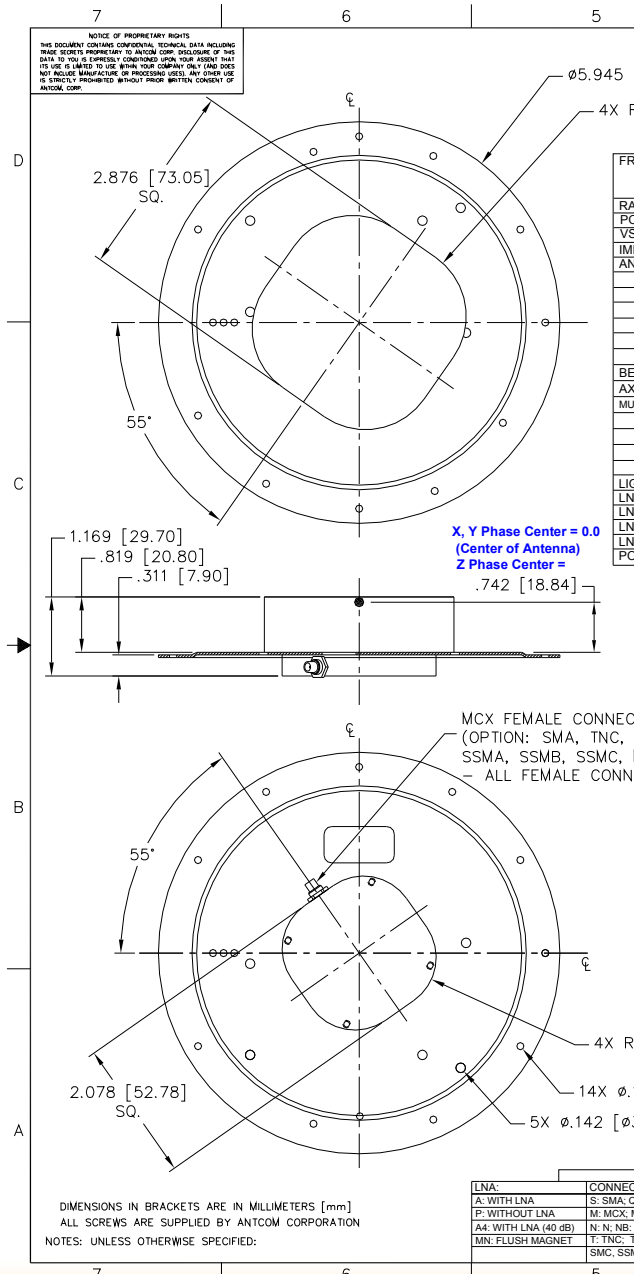
The OEM I New High Performance OEM on 6 in Ground Plane GNSS +S-Band Antenna P/N: G8SAnt-6A4MX Rev A (5.94" Dia. X 0.87" Thick)

Antenna Mounts/Adapters: <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@1625-1660MHz
“-HFO” for Additional Omnistar Rejection: -27dB@1545MHz



NOTICE OF PROPRIETARY RIGHTS
THE FOLLOWING CONTAINS CONFIDENTIAL, TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU IS EXPRESSLY CONDITIONED UPON YOUR AGREEMENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY AND DOES NOT INCLUDE MANUFACTURE OR REPRODUCTION. ANY OTHER USE IS EXPRESSLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM CORP.

SPECIFICATIONS

| ELECTRICAL: | REVISIONS | | | | | | |
|---|---|--|--|---|--|-------------------------------|-------------------------|
| | ZONE | REV | DESCRIPTION | DATE | APPROVED | | |
| FREQUENCY: | L5 GPS E5, E5a, E5b Galileo L5 IRNSS 1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 12 MHz | L2 GPS B2 Compass 1227.60 ± 12 MHz 1207.14 ± 10 MHz | L2 GLONASS E6 Galileo B3 Compass 1242 - 1252 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10 MHz | Omnistar / L-Band L6 Galileo B1 Compass 1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10 MHz | L1 GPS E1, E2 Galileo L1 IRNSS 1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz | L1 GLONASS 1598 - 1609 MHz | S-Band 2493 ± 12 MHz |
| RADIATION PATTERN: | HEMISPHERICAL | | | | | | |
| POLARIZATION: | RHCP | 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 | < 2.0:1 |
| IMPEDANCE: | 50 ohms | 50 ohms | 50 ohms | 50 ohms | 50 ohms | 50 ohms | 50 ohms |
| ANTENNA GAIN (dBi): | | | | | | | |
| @ 90° Above Horizon (Top): | + 1.9 | + 3.7 | + 4.1 | + 4.4 | + 5.6 | + 6.2 | + 4.1 |
| @ 15° Above Horizon: | - 4.5 | - 3.3 | - 3.0 | - 4.5 | - 3.5 | - 3.0 | - 3.0 |
| @ 20° Above Horizon: | - 3.6 | - 2.5 | - 2.2 | - 3.6 | - 2.6 | - 2.1 | - 2.1 |
| @ 25° Above Horizon: | - 2.7 | - 1.6 | - 1.3 | - 2.7 | - 1.6 | - 1.1 | - 1.4 |
| @ 30° Above Horizon: | - 2.3 | - 1.1 | - 0.8 | - 1.8 | - 0.7 | - 0.2 | - 0.7 |
| @ 70° Above Horizon: | + 1.2 | + 2.9 | + 3.4 | + 3.6 | + 4.8 | + 5.4 | + 3.5 |
| BEAM WIDTH (3dB): | 95 Deg. | 80 Deg. | 80 Deg. | 80 Deg. | 80 Deg. | 80 Deg. | 90 Deg. |
| AXIAL RATIO: | 1 dB | 1 dB | 1 dB | 1 dB | 1 dB | 1 dB | 1 dB |
| MULTIPATH REJECTION (RHCP/LHCP): | | | | | | | |
| @ 90° Above Horizon (Top): | 23 dB | 23 dB | 22 dB | 31 dB | 32 dB | 32 dB | |
| @ 0° Above Horizon: | 19 dB | 19 dB | 16 dB | 10 dB | 9 dB | 8 dB | |
| @ 15° Above Horizon: | 19 dB | 16 dB | 14 dB | 14 dB | 13 dB | 11 dB | |
| @ 25° Above Horizon: | 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 | 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 | 2.9 dB |
| LNA P1dB Out: | +10 dBm | +10 dBm | +10 dBm | +10 dBm | +10 dBm | +10 dBm | +10 dBm |
| LNA DC POWER: | (3.3-24V)/<50mA | | | | | | |
| POWER HANDLING: | 3 Watt CW (With Limiter) | | | | | | |

MECHANICAL:

SIZE: 5.9 in. SQ. [151.0 mm]
HEIGHT: 1.17 in [29.7mm]

WEIGHT: 9.32oz. (264.2 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: MCX FEMALE
(OPTION: SMA, TNC, QMA, SMB, SMC, SSMA, SSMB, SSMC, MMCX)

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

ACCEPTANCE TEST PROCEDURE:

ATP-GPS-L1L2-100

| LNA: | CONNECTOR: | COLOR: |
|----------------------|----------------------------------|--|
| A: WITH LNA | S: SMA; Q/QMA: SMB; SM/R: B; BNC | -1: GLOSS WHITE #17925 PER FED-STD-595B |
| F: WITHOUT LNA | M: MMCX; MM: MMCX; MM/R: MMCX-R | -2: LUSTERLESS GRAY #36320 PER FED-STD-595B |
| D4: WITH LNA (40 dB) | N: N; NB: N-Bulkhead; MR: MMCX-R | -3: OLIVE DRAB GREEN #34094 PER FED-STD-595B |
| MM: FLUSH MAGNET | T: TNC; TB: TNC-Bulkhead | -4: LUSTERLESS BLACK #37038 PER FED-STD-595B |
| | SMC, SSMC, SSMB, SSMA | -5: DESERT TAN #34446 PER FED-STD-595B |

| QUANTITY REQD | DESCRIPTION | PARTS LIST | PART NO | FINISH | NUM NO. |
|---------------|-------------|------------|---------|--------|---------|
| | | | | | |

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES UNLESS OTHERWISE SPECIFIED ARE:
± 1/64 DECIMAL ANGLES ± 1°
TOLERANCE SHIP PER AMS 1145
REMOVE ALL BURRS
BREAK EXTERNAL EDGES 000 10 .015
FILE TO .005 TO .010
SOB W/ THREADS PER MIL-S-8879
DAYS ON A CONFORMING TO ORDER
MACHINED SURFACES
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE CALIFORNIA
2.8in. OEM VERSION
ON 6in. GROUND PLANE
GNSS + S-BAND ANTENNA

DATE: 3/20/12
DRAWN BY: S. HUYNH
CHECKED BY: S. HUYNH
APPROVED BY: S. HUYNH

SCALE 1/1 SHEET 1 OF 1