



FAA Approved Facility

Active L1 Glonass + L1 GPS Antenna, P/N: 2.8G16AF-XTC-1 (RoHS)
with High OmniStar/TerraStar/Iridium/Inmarsat/Thuraya-Rejection Front End Filters:

-27dB@1545MHz, -22dB@1616MHz, -34dB@1625MHz, -34dB@1640MHz, -35dB@1660MHz

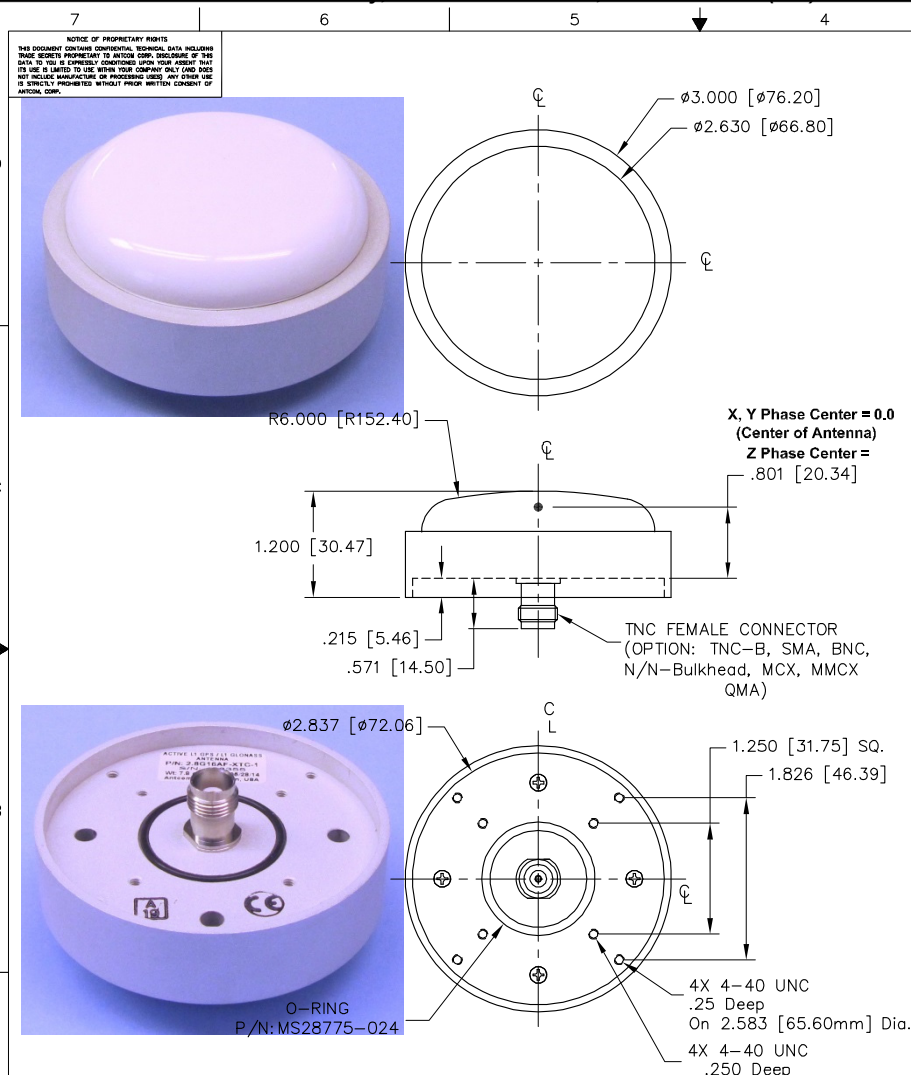
with High Power Front End Limiter Suitable for High Interference Environment with Lightning Protection Per EN61000-4-5 Level 4

Available in Other G5 Versions of Any Foot Prints with or without OmniStar/TerraStar



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@1625MHz, -34dB@1640MHz, -35dB@1660MHz
“HFO” for Additional OmniStar/TerraStar Rejection: -27dB@1545MHz



P/N: 2.8G16AF-XTC-1

| SIZE: | LNA: | CABLE'S LENGTH: | CONNECTOR: | COLOR: |
|----------------|----------------|-----------------|--------------------------|--|
| 1: 2" SQ. | A: WITH LNA | X: NO CABLE | S: SMA; B: BNC | -1: GLOSS WHITE #17925 PER FED-STD-595B |
| 1.9: 1.9" SQ. | P: WITHOUT LNA | | M: MCX; MM: MMCX | -2: LUSTERLESS GRAY #36320 PER FED-STD-595B |
| 2: 2.6" DIA. | | | N: N; NB: N-Bulkhead | -3: OLIVE DRAB GREEN #34094 PER FED-STD-595B |
| 2.1: 2.8" DIA. | | | T: TNC; TB: TNC-Bulkhead | -4: LUSTERLESS BLACK #37038 PER FED-STD-595B |
| 3: 3.5" DIA. | | | Q: QMA | -5: TAN #; FS 33446 or 33446, FED-STD-595 |
| 4: MINI A/B/C | | | | |

SPECIFICATIONS

| ZONE | REVISIONS | | |
|------|-----------|-------------|------|
| | REV | DESCRIPTION | DATE |
| | | | |

| ELECTRICAL: | L1 GPS E1, E2 Galileo L1 IRNSS | | L1 GLONASS | |
|------------------------|--|--|-------------------|----------|
| | FREQUENCY: | 1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz | (1598 - 1606) MHz | |
| RADIATION PATTERN: | HEMISPHERICAL | | | |
| POLARIZATION: | RHCP | | RHCP | |
| VSWR: | < 2.0:1 | | < 2.0:1 | |
| IMPEDANCE: | 50 ohms | | | |
| ANTENNA GAIN (dBic): | Free Space | 5in G.P | Free Space | 5in G.P |
| @ 90 ° (ZENITH): | + 4.1 | + 3.2 | + 2.0 | + 2.6 |
| @ 10 ° Elevation: | - 2.8 | - 3.2 | - 5.1 | - 4.2 |
| @ 20 ° Elevation: | - 1.9 | - 1.6 | - 4.1 | - 2.6 |
| @ 30 ° Elevation: | - 0.4 | - 0.6 | - 2.6 | - 1.4 |
| @ 60 - 90 ° Elevation: | > 2.9 | > + 2.5 | > + 0.8 | > + 1.8 |
| BEAM WIDTH (3dB): | 95 Deg. | 100 Deg. | 95 Deg. | 100 Deg. |
| AXIAL RATIO: | 1 dB | | 2 dB | 2 dB |
| LIGHTNING PROTECTION: | INPUT: DC GROUNDING; OUTPUT: EN61000-4-5 Level 4 | | | |
| LNA GAIN: | 34 dB | | 34 dB | |
| LNA NOISE FIGURE: | 3.2 dB | | 4 dB | |
| LNA P1dB Out: | +13 dBm | | +13 dBm | |
| LNA DC POWER: | 2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA | | | |
| POWER HANDLING: | 3 Watt CW, +50dBm Microsec Pulse Input | | | |

MECHANICAL:

SIZE: DIAMETER: 3.0 in. [76.2 mm]
 HEIGHT: 1.20 in. [30.5 mm]
 WEIGHT: 7.8 oz. (221 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: TNC FEMALE CONNECTOR
 (OPTION: SMA, BNC, N, N Bulkhead, MCX, 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, D0-228, MIL-C-5541,
 MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE:

ATP-GPS-L1L2-100

| QUANTITY REQD | DESCRIPTION | PARTS LIST | FINISH | REV |
|---------------|------------------------------|-------------|--------|-----|
| 1 | | | | 3 |
| 1 | | | | 2 |
| 1 | O-RING, (94115K024) Item 553 | MS28775-024 | | 1 |

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: ANGLES ± 1/84 DECIMALS ± 1°

ORIGINAL DRAWN: S. HUYNH Mar-19-09
 ORIGINAL DESIGNED: S. HUYNH Mar-19-09
 UPDATED: S. HUYNH Dec-06-13
 UPDATE DRAWN: P. TRAN Dec-06-13
 APPROVED: S. HUYNH Dec-06-13

ANTCOM CORP. TORRANCE CALIFORNIA

2.83in Dia.
 L1 Glonass + L1 GPS
 Antenna

D 3CVE1 2.8G16AF-XTC-1 A

SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas