



FAA Approved Facility

15-Element RHCP L1/L2 GPS Antenna Array

P/N: 15NF-10.5CG1215P-R-XS-X-1.2

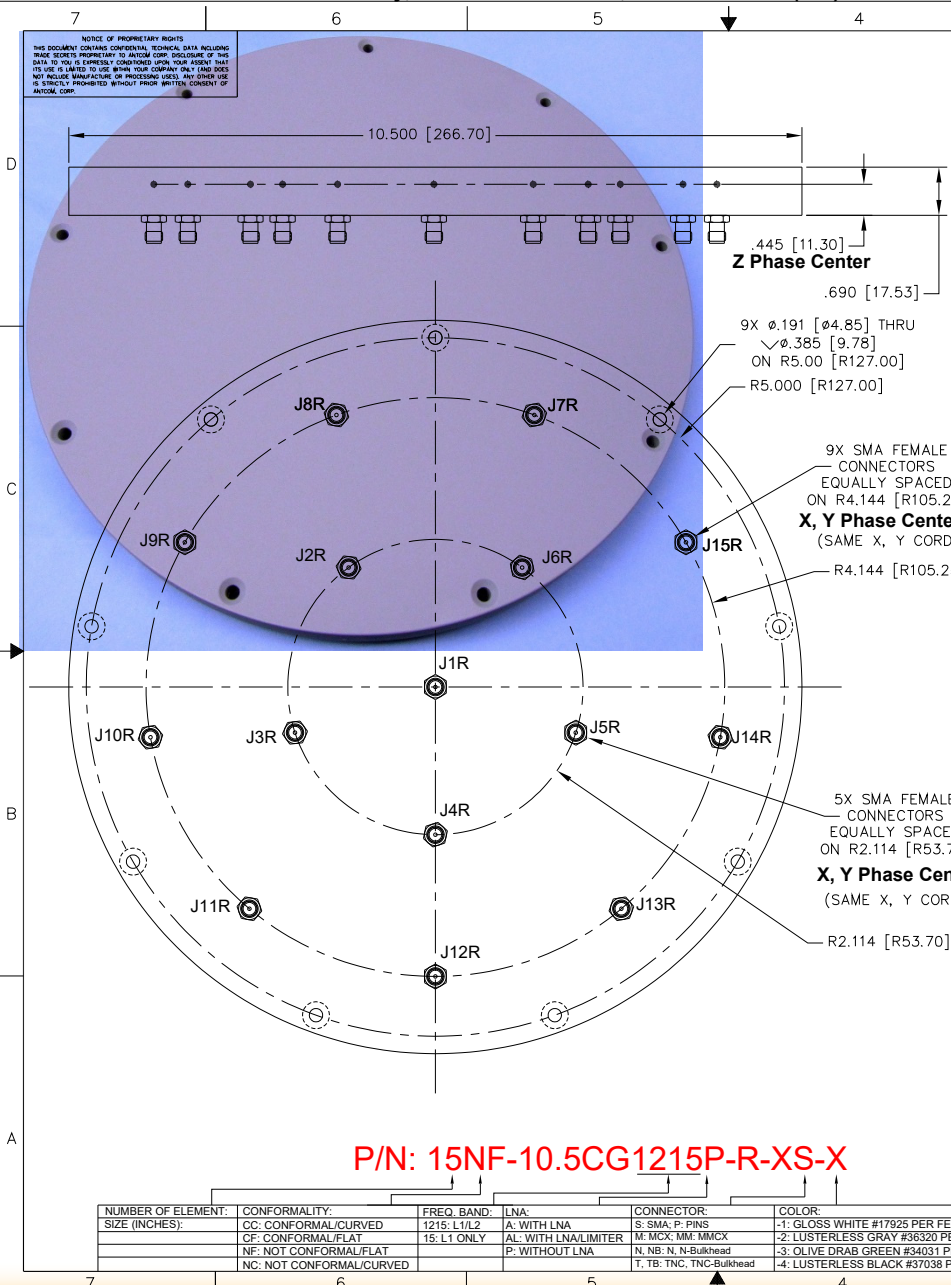
(10.5" Dia. x 0.7" Thick)

"-PL-" or "-AL-" for Limiter Options for High Power Pulse Protection



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Wide Band GNSS Option Is Available



SPECIFICATIONS

ELECTRICAL:

| | L1: (1575.42 ±12) MHz | L2: (1227.60 ±12) MHz |
|------------------------------|-----------------------|--|
| FREQUENCY: | | |
| RADIATION PATTERN: | HEMISPHERICAL | |
| POLARIZATION: | RHCP | |
| VSWR: | < 1.5:1 | |
| IMPEDANCE: | 50 ohms | |
| ANTENNA ELEMENT GAIN (dBic): | Free Space | 3.5 in Dia. 4 ft G.P. |
| @ 90° (ZENITH): | +4.5 | +5.4 +4.1 +2.4 |
| @ 10° Elevation: | -1.5 | -1.6 -1.7 -4.3 -3.2 -2.8 |
| @ 20° Elevation: | 0.0 | 0.0 +0.9 -3.0 -1.6 +0.5 |
| @ 30° Elevation: | +1.1 | +1.3 +2.0 -1.5 -0.3 +2.4 |
| @ 60 - 90° Elevation: | > 3.0 | > 4.2 > 2.5 > 1.7 > 2.7 > 3.6 |
| BEAM WIDTH (3dB): | 112 Deg. | 102 Deg. 145 Deg. 104 Deg. 93 Deg. 80 Deg. |
| AXIAL RATIO: | 2 dB | |
| LIGHTNING PROTECTION: | DC GROUNDING | |
| POWER HANDLING: | 200 Watt CW | |

MECHANICAL:

| | |
|------------------------------------|---|
| SIZE: | DIAMETER: 10.500" HEIGHT: 0.690 in. [17.53 mm] XX oz. (XX Kg) |
| WEIGHT: | |
| FINISH: | SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441 |
| MATERIAL: | 8061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT |
| CONNECTOR: | SMA FEMALE (OPTION: TNC, TNC Bulkhead, N, N Bulkhead, MCX, MMOX, or Cable) |
| ENVIRONMENTAL: | TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C] ALTITUDE: 70,000 ft. [21,336 m] VIBRATION: > 30 G'S LEAKAGE: HERMETICALLY SEAL |
| FEDERAL & MILITARY SPECIFICATIONS: | |
| DESIGN TO: | 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 |

| QUANTITY REQD | DESCRIPTION | PART NO | FINISH | UOM |
|---------------|------------------------------|--------------|--------|-----|
| 4 | MOUNTING SCREWS: 10-32, 3/4" | MS24693C274 | - | 3 |
| A/R | WASHER, CUSTOM C'SINK | 3G15P1001-6 | - | |
| 1 | ADHESIVE GASKET | 12345G-3M-3G | - | 1 |
| -2 | | | | |

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE ANGLES

| | | |
|---|------------------------------------|--|
| FRACTIONS DECIMALS ± 1/64 .005 ± 1° | ORIGINALLY DRAWN S. HUYNH 01-05-29 | ANTCOM CORP. TORRANCE, CALIFORNIA 15 ELEMENT L1L2 GPS RHCP ANTENNA ARRAY P. TRAN S. HUYNH Dec-18-13 Dec-18-13 Dec-18-13 |
| TOLERANCE SURF PER AND Y14.6 REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 SURF FINISHES PER MIL-C-8879 DIA'S ON A CIRCLE E OF 009 WASHED SURFACES 12/ | ORIGINALLY DESIGNED S. HUYNH | |
| | UPDATED S. HUYNH | |
| | APPROVED S. HUYNH | |

SCALE 1/1 SHEET 1 OF 1

P/N: 15NF-10.5CG1215P-R-XS-X

| NUMBER OF ELEMENT SIZE (INCHES): | CONFORMALITY: | FREQ. BAND: | LNA: | CONNECTOR: | COLOR: |
|----------------------------------|--|-------------|---|---|--|
| 15: L1 ONLY | CC: CONFORMAL/CURVED CF: CONFORMAL/FLAT NF: NOT CONFORMAL/FLAT NC: NOT CONFORMAL/CURVED | 1215: L1/L2 | A: WITH LNA AL: WITH LNA/LIMITER P: WITHOUT LNA | S: SMA; P: PINS M: MCX; MM: MMCX N: NB; N: N-Bulkhead T: TB; TNC; TNC-Bulkhead | -1: GLOSS WHITE #17925 PER FED-STD-595B -2: LUSTERLESS GRAY #36320 PER FED-STD-595B -3: OLIVE DRAB GREEN #34031 PER FED-STD-595B -4: LUSTERLESS BLACK #37038 PER FED-STD-595B |

Antenna Mounts: http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf
Amplifiers/Power Divider/Combiner/Filters: http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts1.pdf