

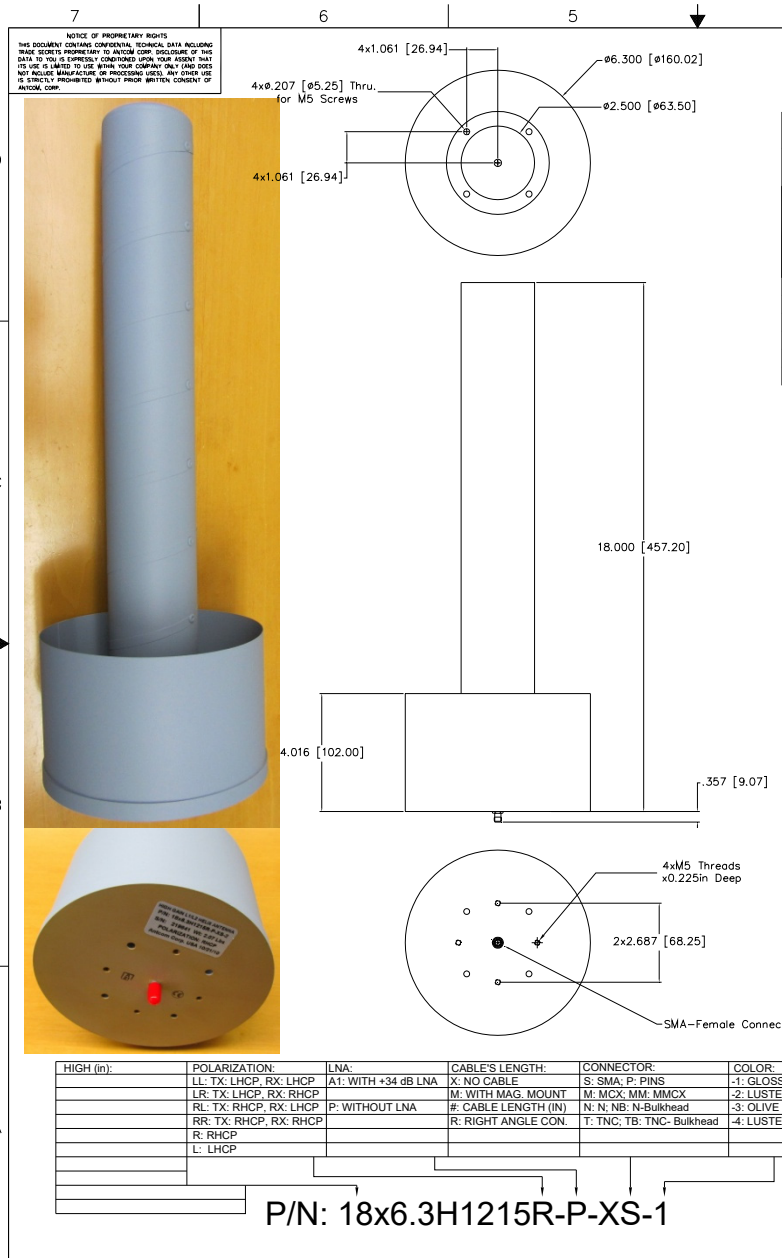


(1-2 GHz) Helix Antenna, P/N: 18x6.3H1215R-P-XS-1
2.5" Diameter x 18" Tall, Front/Back Mount Configuration, *for Space Applications*
with SMA, TNC, N, or BNC Connector Options



ISO 9001:2008/FAA Approved Facility Antenna Mounts/Adapters: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501, USA . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>



| HIGH (in): | POLARIZATION: | LNA: | CABLE'S LENGTH: | CONNECTOR: | COLOR: |
|------------------------|---------------------|---------------------------|----------------------|--|--------|
| LL: TX: LHCP, RX: LHCP | A1: WITH +34 dB LNA | X: NO CABLE | S: SMA, P: PINS | -1: GLOSS WHITE #17925 PER FED-STD-595B | |
| LR: TX: RHCP, RX: RHCP | M: WITHOUT LNA | M: WITH MAG. MOUNT | M: MCX, MM, MMCX | -2: LUSTERLESS GRAY #36320 PER FED-STD-595B | |
| RL: TX: RHCP, RX: LHCP | P: WITHOUT LNA | #: CABLE LENGTH (IN) | N: N, NB: N-Bulkhead | -3: OLIVE DRAB GREEN #34031 PER FED-STD-595B | |
| RR: TX: RHCP, RX: RHCP | R: RIGHT ANGLE CON. | T: TNC, TB: TNC- Bulkhead | | -4: LUSTERLESS BLACK #37038 PER FED-STD-595B | |
| R: RHCP | | | | | |
| L: LHCP | | | | | |

P/N: 18x6.3H1215R-P-XS-1

ELECTRICAL:

| FREQUENCY (MHz): | L5 GPS E5, E5a, E5b, Galileo L5 IRNSS | L2 GPS B2 Compass | L2 GLONASS E6 Galileo E9 Compass | OmniSTAR / L-Band L6 Galileo B1 Compass | L1 GPS E1, E2 Galileo L1 IRNSS | L1 GLONASS |
|--------------------|---|--|--|--|--|------------------|
| | 1176.45 ± 12.0 MHz 1164.45 - 1219.14 MHz 1176.45 ± 15.0 MHz | 1227.60 ± 12.0 MHz 1207.14 ± 10.0 MHz | 1252.50 ± 7.5 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10.0 MHz | 1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10.0 MHz | 1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz | 1609.0 ± 7.0 MHz |
| GAIN (dBic) in FS | + 11.5 dBic | | | | | |
| AXIAL RATIO (dB) | 1 to 2 | | | | | |
| RADIATION PATTERN: | HEMISPHERICAL | | | | | |
| POLARIZATION: | RHCP | | | | | |
| VSWR: | < 1.7 : 1 | | | | | |
| POWER HANDLING: | 200 watts | | | | | |

MECHANICAL:

SIZE: TOP DIA: = 2.50 in [63.50 mm], BASE DIA = 6.30 in[160.02 mm]
HEIGHT = 18 in. [457 mm]
WEIGHT: 16.75 oz. (475 +/-10) grams
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
 BASE IRIDITE PER MIL-C-5541F TYPE II CLASS 1A
COLOR: GLOSS WHITE #17925 PER FED-STD-595B
 LUSTERLESS GRAY #36320 PER FED-STD-595B
 OLIVE DRAB GREEN #34031 PER FED-STD-595B
 LUSTERLESS BLACK #37038 PER FED-STD-595B
MATERIAL: 6061-T6 ALUMINUM ALLOY BASE
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,
 AND SKYDROL RESISTANCE, FIRE RETARDANT
CONNECTOR: SMA-Female
 (OPTION: TNC, TNC-Bulkhead, N, N-Bulkhead, BNC)

ENVIRONMENTAL:

TEMPERATURE: -166 °F TO +248 °F [-110 °C TO +120 °C]
ALTITUDE: 70,000 ft.
VIBRATION: > 30 G's

FEDERAL & MILITARY SPECIFICATIONS:

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

| QUANTITY REQD | DESCRIPTION | PARTS LIST | PART NO | FINISH | ITEM NO |
|---------------|--|------------|-----------|--------|---------|
| 4 | MOUNTING SCREW: (M5 Pan Head Phillips, 10mm) | | 90116A250 | | 5 |
| 4 | MOUNTING SCREW: (M5 Pan Head Phillips, 20mm) | | 90116A260 | | 4 |
| 1 | | | | | 3 |
| 1 | | | | | 2 |
| 1 | | | | | 1 |

ANTCOM CORP. TORRANCE, CALIFORNIA

HIGH GAIN GPS/GLONASS/IRIDIUM/INMARSAT HELIX ANTENNA

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 ± .005 ± 1°

TOLERANCE SMI PER AMS Y14.5 REMOVE ALL BURRS BREAK EXTERNAL EDGES .000 TO .015 FILLETS R .005 TO R .250 SQUARE THREADS PER UNF-3-1079 DIA'S ON A COPLANAR ± .005 MACHINED SURFACES ✓ DO NOT SCALE DRAWING

DRAWN: S. HUYNH
 CHECKED: S. HUYNH
 ENGINEER: S. HUYNH
 APPROVED: S. HUYNH
 DATE: DEC-07-09

SHEET 1 OF 1