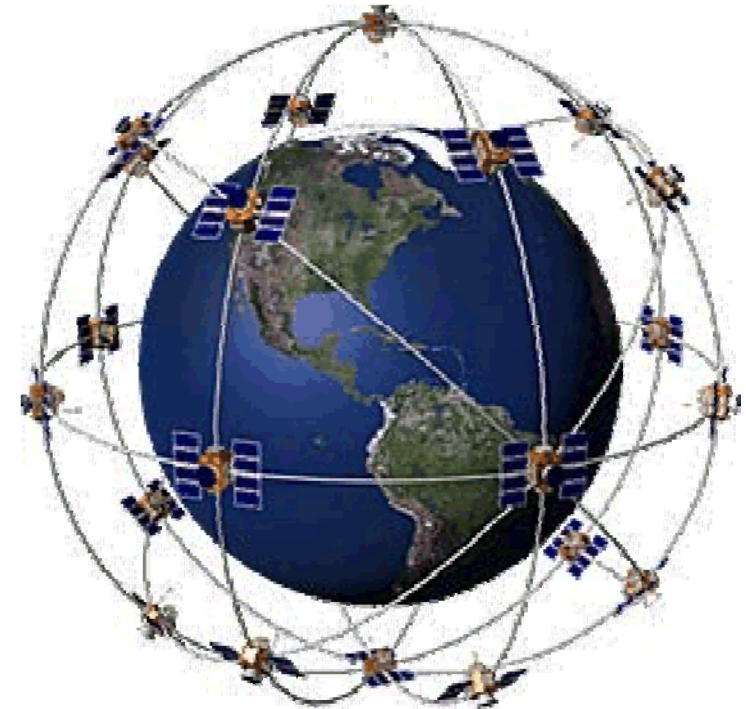
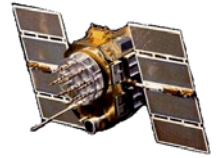


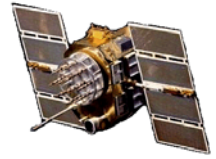
Active or Passive L1 *GPS* Antennas: Pictures, Outline Drawings, and Specifications



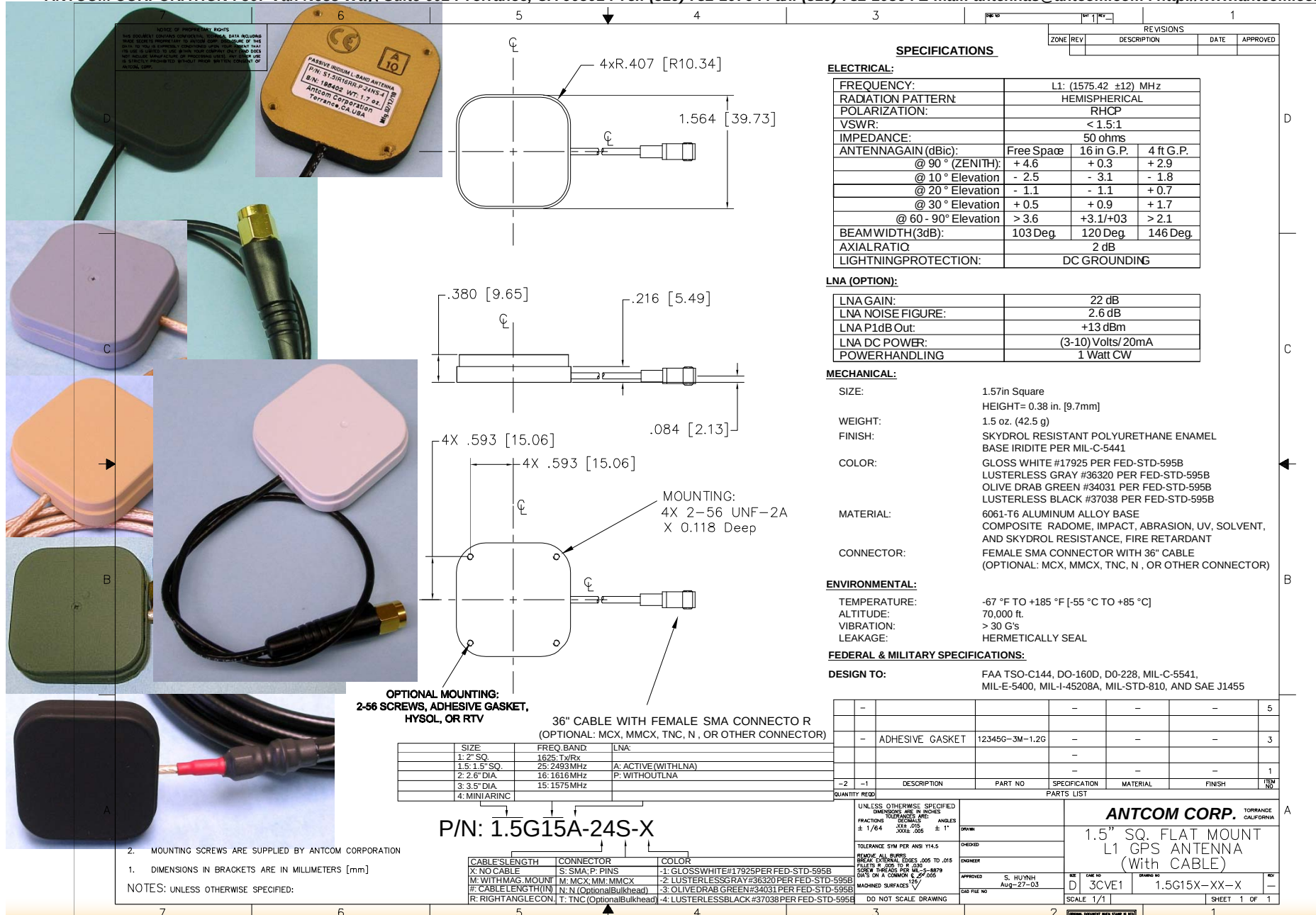


- 24 satellites (six orbital planes inclined at 55°)
- Altitude: 20,200km altitude
- Radius: 26,560 km
- Orbital period: 11h 58m (4km/s)
- 6 to 10 satellites always in view

L1 GPS Antennas, P/N: 1.5G15X-XX-X: 1.5" Square, Back Mount Configuration with Cable



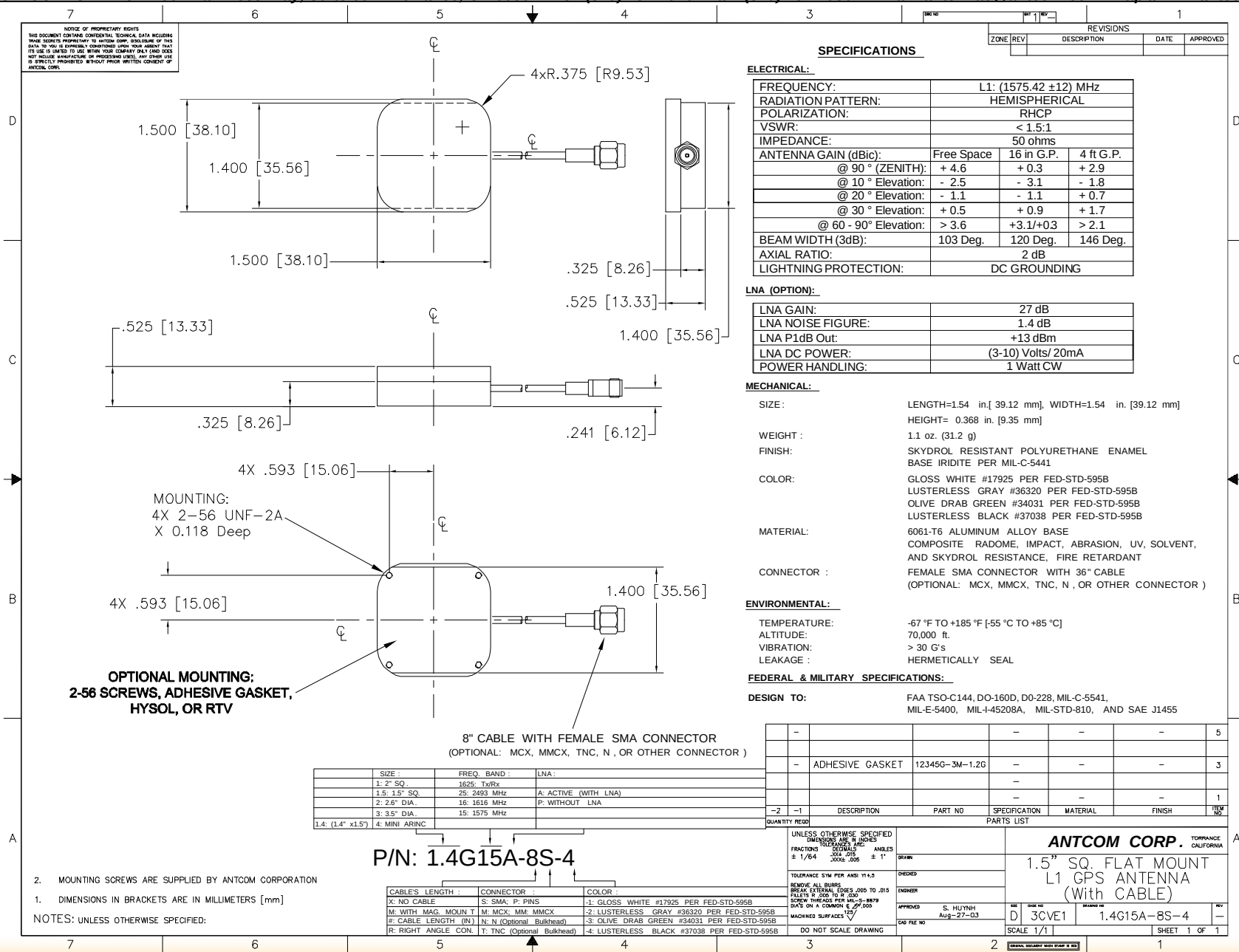
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Active L1 GPS Antenna, P/N: 1.4G15A-8S-4 : (1.4" x 1.5") Rectangular Configuration



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SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
ANTENNA GAIN(dBi):	Free Space 16 in G.P. 4 ft G.P.
@ 90 ° (ZENITH):	+ 4.6 + 0.3 + 2.9
@ 10 ° Elevation	- 2.5 - 3.1 - 1.8
@ 20 ° Elevation	- 1.1 - 1.1 + 0.7
@ 30 ° Elevation	+ 0.5 + 0.9 + 1.7
@ 60 - 90° Elevation	> 3.6 +3.1/+0.3 > 2.1
BEAM WIDTH(3dB):	103 Deg. 120 Deg. 146 Deg.
AXIAL RATIO:	2 dB
LIGHTNING PROTECTION:	DC GROUNDING

LNA (OPTION):

LNA GAIN:	22 dB
LNA NOISE FIGURE:	2.6 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	(3-10) Volts/20mA
POWER HANDLING	1 Watt CW

MECHANICAL:

SIZE: 1.57in Square
HEIGHT= 0.38 in. [9.7mm]
WEIGHT: 1.5 oz. (42.5 g)
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
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: FEMALE SMA CONNECTOR (TNC, N, OTHER CONNECTOR, OR CABLE IS OPTIONAL)

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE: 70,000 ft.
VIBRATION: > 30 G's
LEAKAGE: HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

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

QUANTITY REQUIRED

DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	QTY REQ
-	-	-	-	-	5
-	ADHESIVE GASKET	123456-3M-1.2G	-	-	3
-2	-1	-	-	-	1

PARTS LIST

CABLE LENGTH	CONNECTOR	COLOR
X NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE#17925PER FED-STD-595B
M: WITH MAG MOUNT	M: MCX MM: MMCX	-2: LUSTERLESS GRAY#36320PER FED-STD-595B
# CABLE LENGTH(IN)	N: N (Optional Bulkhead)	-3: OLIVE DRAB GREEN#34031PER FED-STD-595B
R: RIGHT ANGLE CONN	T: TNC (Optional Bulkhead)	-4: LUSTERLESS BLACK#37038PER FED-STD-595B

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:

FRACTIONS	DECIMALS	ANGLES
± 1/64	.XXX .005	± 1°

REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILLET R .005 TO R .010
SCREW HEADS FOR MIL-C-5541
DIMS IN A CIRCLE X OF .005
MACHINED SURFACES ✓
DO NOT SCALE DRAWING

ANTCOM CORP.
TORRANCE, CALIFORNIA

1.5" SQ. FLAT MOUNT L1 GPS ANTENNA

DWG NO: 3CVC1
SCALE: 1/1
SHEET 1 OF 1

P/N: 1.5G15A-XS-X

2. MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

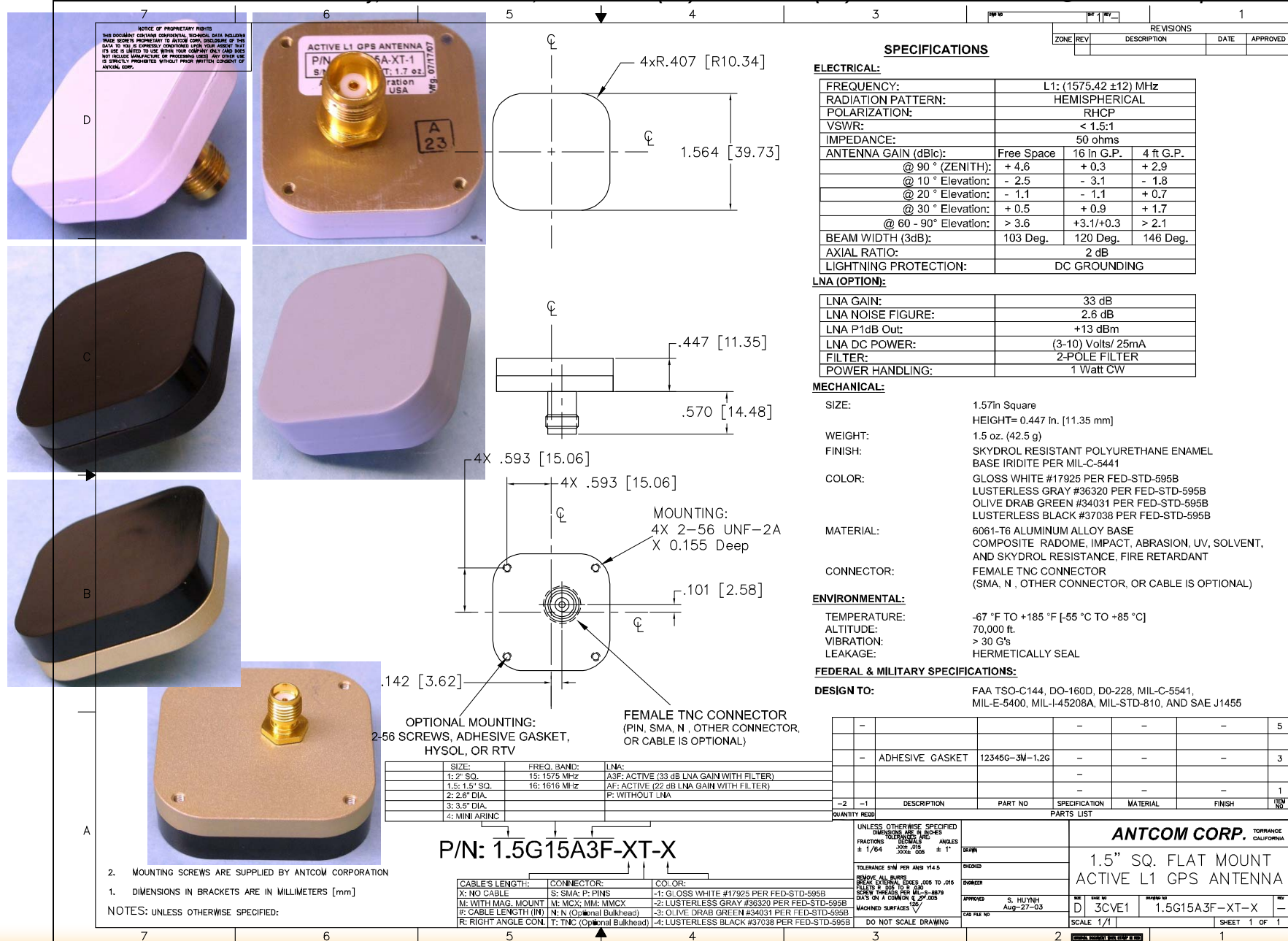
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

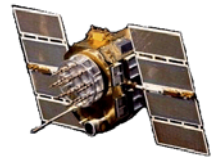
Passive L1 GPS Antennas, P/N: 1.5G15A3F-XT-1: 1.5" Square, Back Mount Configuration



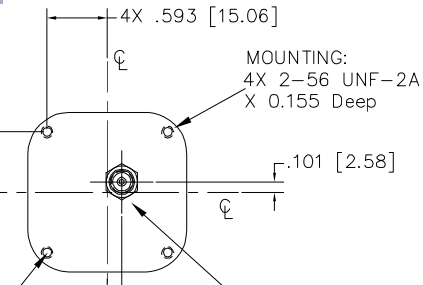
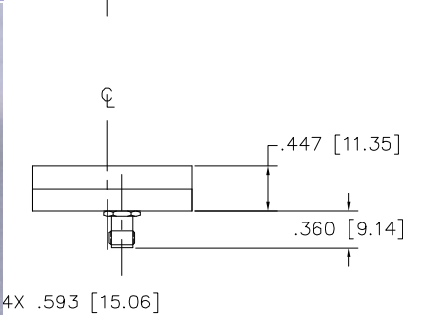
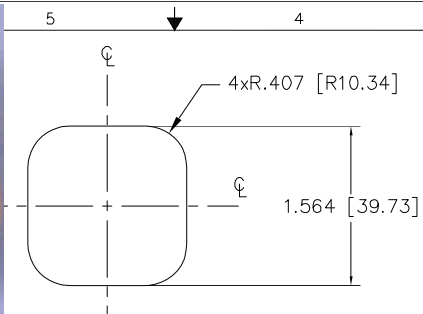
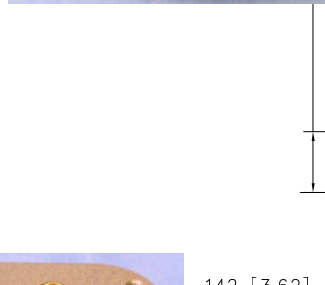
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Passive L1 GPS Antennas, P/N: 1.5G15P-XX-X: 1.5" Square, Back Mount Configuration



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OPTIONAL MOUNTING:
2-56 SCREWS, ADHESIVE GASKET,
HYGOL, OR RTV

FEMALE SMA CONNECTOR
(PIN, TNC, N, OTHER CONNECTOR,
OR CABLE IS OPTIONAL)

SIZE	FREQ. BAND	LNA
1: 2" SQ.	1625 Tx/Rx	
1.5: 1.5" SQ.	25: 2493MHz	A: ACTIVE (WITH LNA)
2: 2.6" DIA.	16: 1616MHz	P: WITHOUT LNA
3: 3.5" DIA.	15: 1575MHz	
4: MINIARC		

P/N: 1.5G15A-XS-X

CABLE LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA; P: PINS	1: GLOSS WHITE #17925 PER FED-STD-595B
M: WITH MAG. MOUNT	M: MCX; MM: MMCX	2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	N: N (Optional Bulkhead)	3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TNC (Optional Bulkhead)	4: LUSTERLESS BLACK #37038 PER FED-STD-595B

SPECIFICATIONS

FREQUENCY:	L1: (1575.42 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
ANTENNA GAIN (dBic):	Free Space 16 in G.P. 4 ft G.P.
@ 90° (ZENITH):	+4.6 +0.3 +2.9
@ 10° Elevation	-2.5 -3.1 -1.8
@ 20° Elevation	-1.1 -1.1 +0.7
@ 30° Elevation	+0.5 +0.9 +1.7
@ 60-90° Elevation	>3.6 +3.1/+0.3 >2.1
BEAMWIDTH (3dB):	103 Deg 120 Deg 146 Deg
AXIAL RATIO	2 dB
LIGHTNING PROTECTION:	DC GROUNDING

LNA (OPTION):

LNA GAIN:	22 dB
LNA NOISE FIGURE:	2.6 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	(3-10) Volts/20mA
POWER HANDLING	1 Watt CW

MECHANICAL:

SIZE:	1.57in Square
HEIGHT:	0.447 in. [11.35 mm]
WEIGHT:	1.5 oz. (42.5 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
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:	FEMALE SMA CONNECTOR (TNC, N, OTHER CONNECTOR, OR CABLE IS OPTIONAL)

ENVIRONMENTAL:

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

QUANTITY	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
1	ADHESIVE GASKET	12345G-3M-1.2G				3
1						1

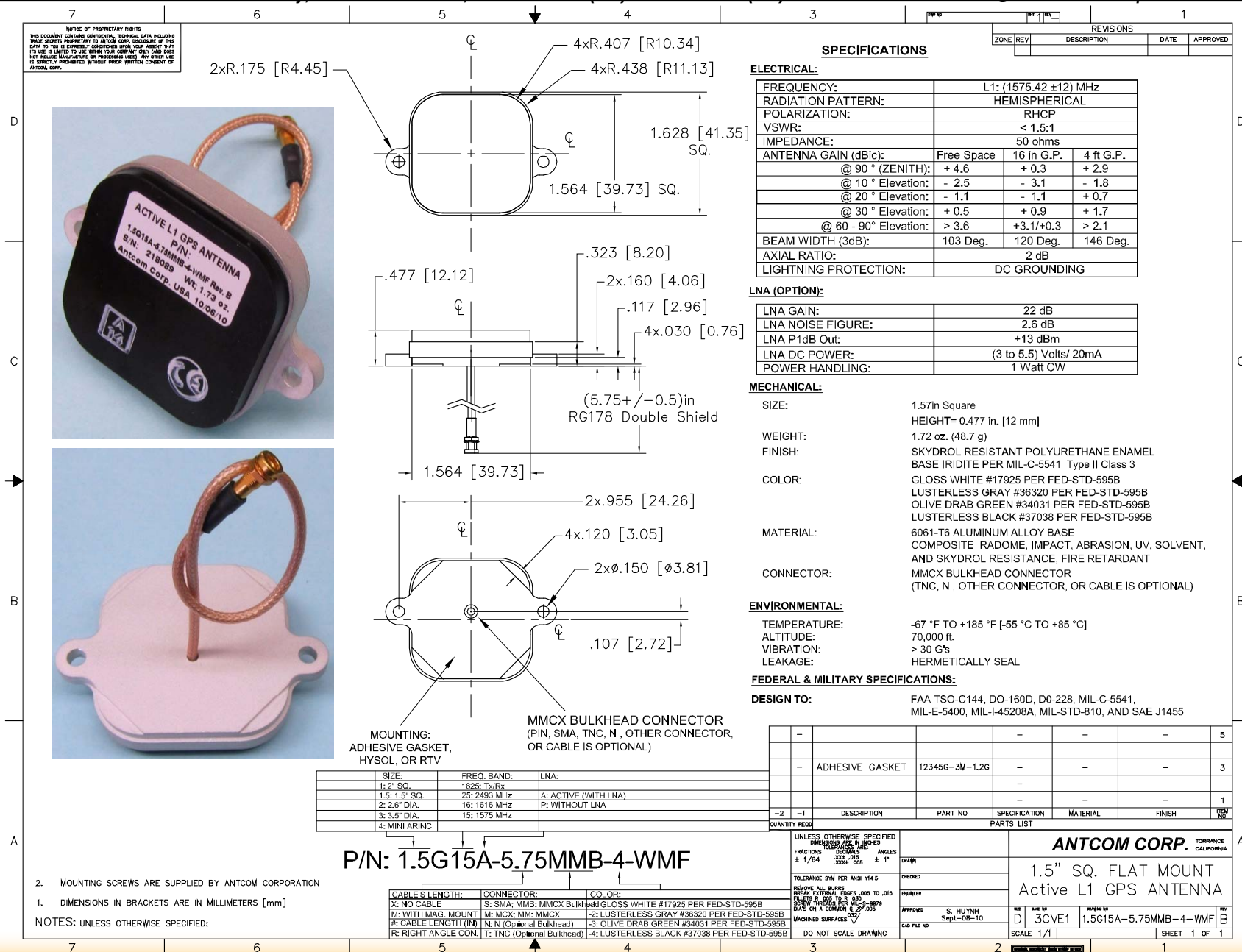
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 ± .005 ± .1° TOLERANCES SYM PER ANSI Y14.5 BREAK EXTERNAL EDGES .005 TO .015 CUT IN 45° TO R .030 SURF. FINISHES PER MIL-S-5879 MACHINED SURFACES 125	DESIGNED BY S. HUYNH Aug-27-03	CHECKED BY S. HUYNH Aug-27-03	APPROVED BY S. HUYNH Aug-27-03	CAD FILE NO	DO NOT SCALE DRAWING
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ANTCOM CORP. TORRANCE, CALIFORNIA	
1.5" SQ. FLAT MOUNT PASSIVE L1 GPS ANTENNA	
REV	DATE
1	Aug-27-03
SCALE 1/1	
SHEET 1 OF 1	

2. MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
NOTES: UNLESS OTHERWISE SPECIFIED:



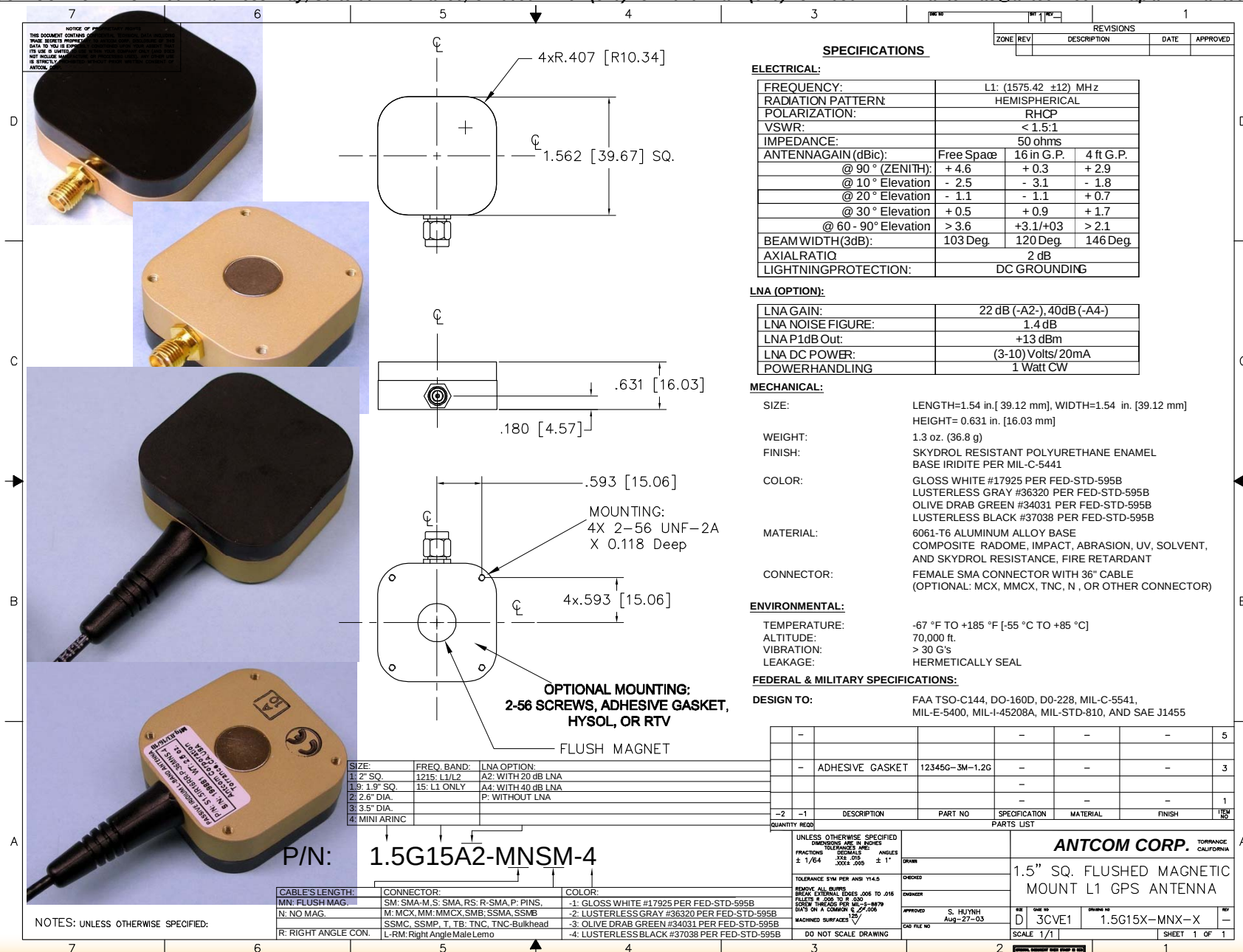
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L1 GPS Antennas, P/N: 1.5G15X-MNX-X: 1.5" Square, Flushed Magnetic/Back Mount Configuration



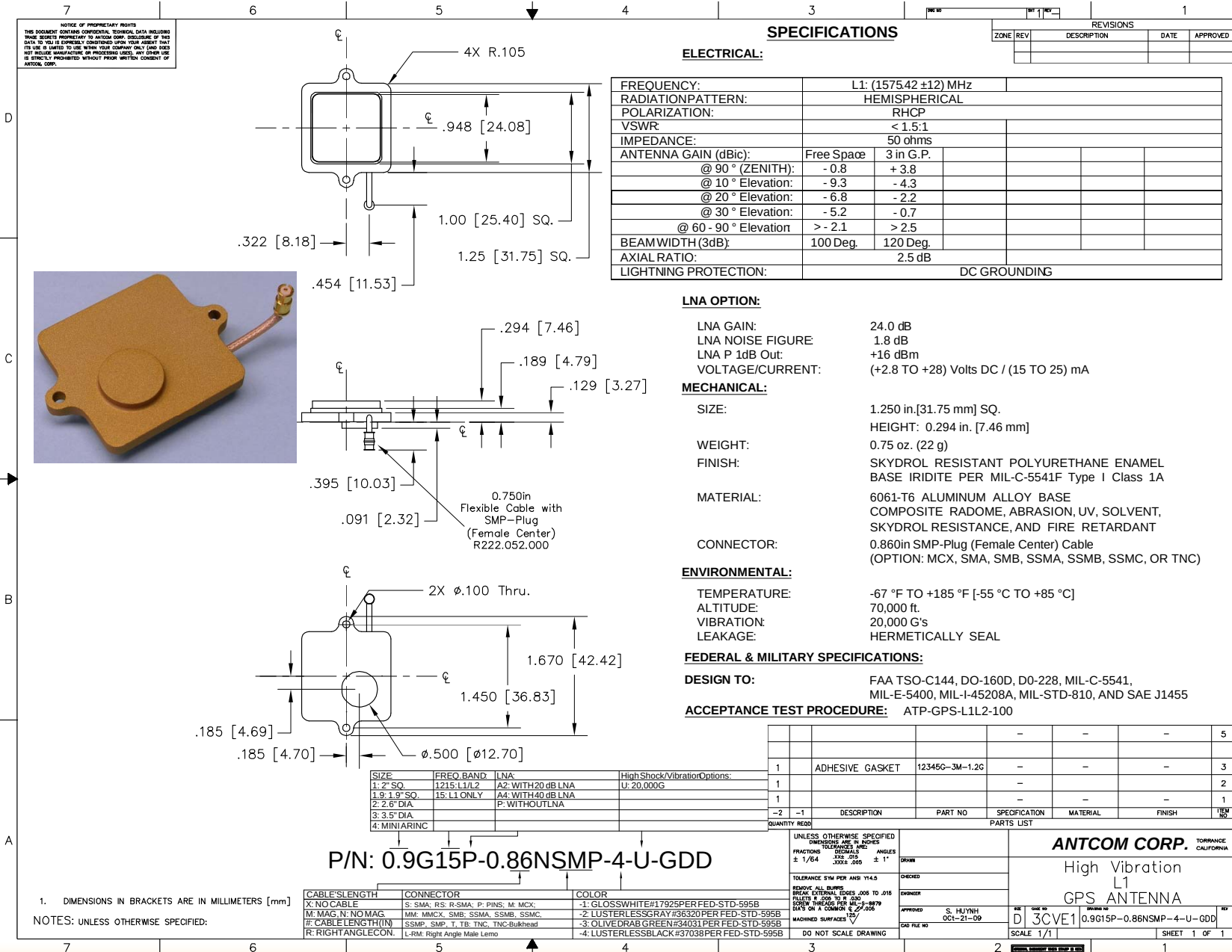
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20,000G L1 GPS Antenna, P/N: 0.9G15P-0.86NSMP-4-U-GDD: 1.2" Sq. x 0.294in Thick , Front Mount, Side Cable Configuration



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20,000G L1 GPS Antenna, P/N: 0.9G15P-XX-X-U Rev A : 1.2" Square, Front Mount, Back Cable Configurations



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ANTCOM CORP.

SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
ANTENNA GAIN (dBic):	Free Space 3 in G.P.
@ 90 ° (ZENITH):	- 0.8 + 3.8
@ 10 ° Elevation:	- 9.3 - 4.3
@ 20 ° Elevation:	- 6.8 - 2.2
@ 30 ° Elevation:	- 5.2 - 0.7
@ 60 - 90 ° Elevation:	> - 2.1 > 2.5
BEAM WIDTH (3dB):	100 Deg. 120 Deg.
AXIAL RATIO:	2.5 dB
LIGHTNING PROTECTION:	DC GROUNDING

LNA OPTION:

LNA GAIN:	24.0 dB
LNA NOISE FIGURE:	1.8 dB
LNA P 1dB Out:	+16 dBm
VOLTAGE/CURRENT:	(+2.8 TO +28) Volts DC / (15 TO 25) mA

MECHANICAL:

SIZE:	1.250 in.[31.75 mm] SQ.
HEIGHT:	0.547 in. [13.89 mm]
WEIGHT:	0.95 oz. (27 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	4.5" LONG FLEXIBLE CABLE WITH RIGHT ANGLE MMCX (OPTION: MCX, SMA, SMB, SSMA, SSMB, SSMC, OR TNC)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000 ft.
VIBRATION:	20,000 G's
LEAKAGE:	HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

DESIGN TO: 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	REGR	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	NEW
1		ADHESIVE GASKET	12345G-3M-1.2G				5
1							3
1							2
1							1
-2	-1						NEW

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

TOLERANCE S1M PER ANSI Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILLET .005 TO .015
DRILL DIA'S ON A COMMON ± .005
MACHINED SURFACES

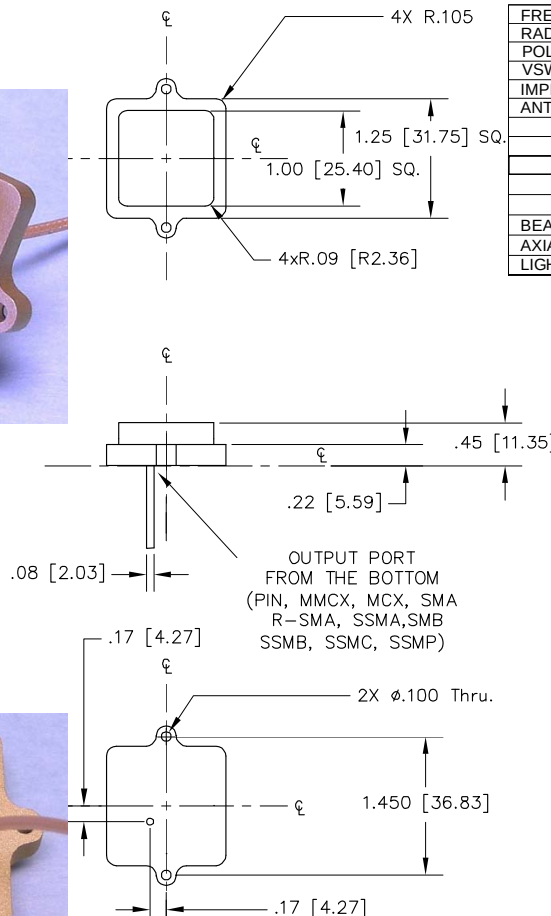
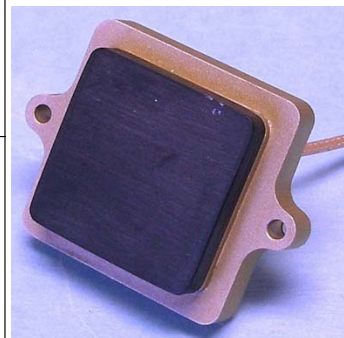
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

High Vibration
L1
GPS ANTENNA

3C1E1 0.9G15X-XX-X-U

SCALE 1/1 SHEET 1 OF 1



SIZE	FREQ. BAND	LNA	High Shock/Vibration Options:
1.2" SQ.	1215 L1/L2	A2: WITH 20 dB LNA	U: 20,000G
1.9" 1.9" SQ.	15: L1 ONLY	A4: WITH 40 dB LNA	
2.2" 6" DIA		P: WITHOUT LNA	
3.3" 5" DIA			
4: MINIARINC			

P/N: 0.9G15P-4.5MM-4-U

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

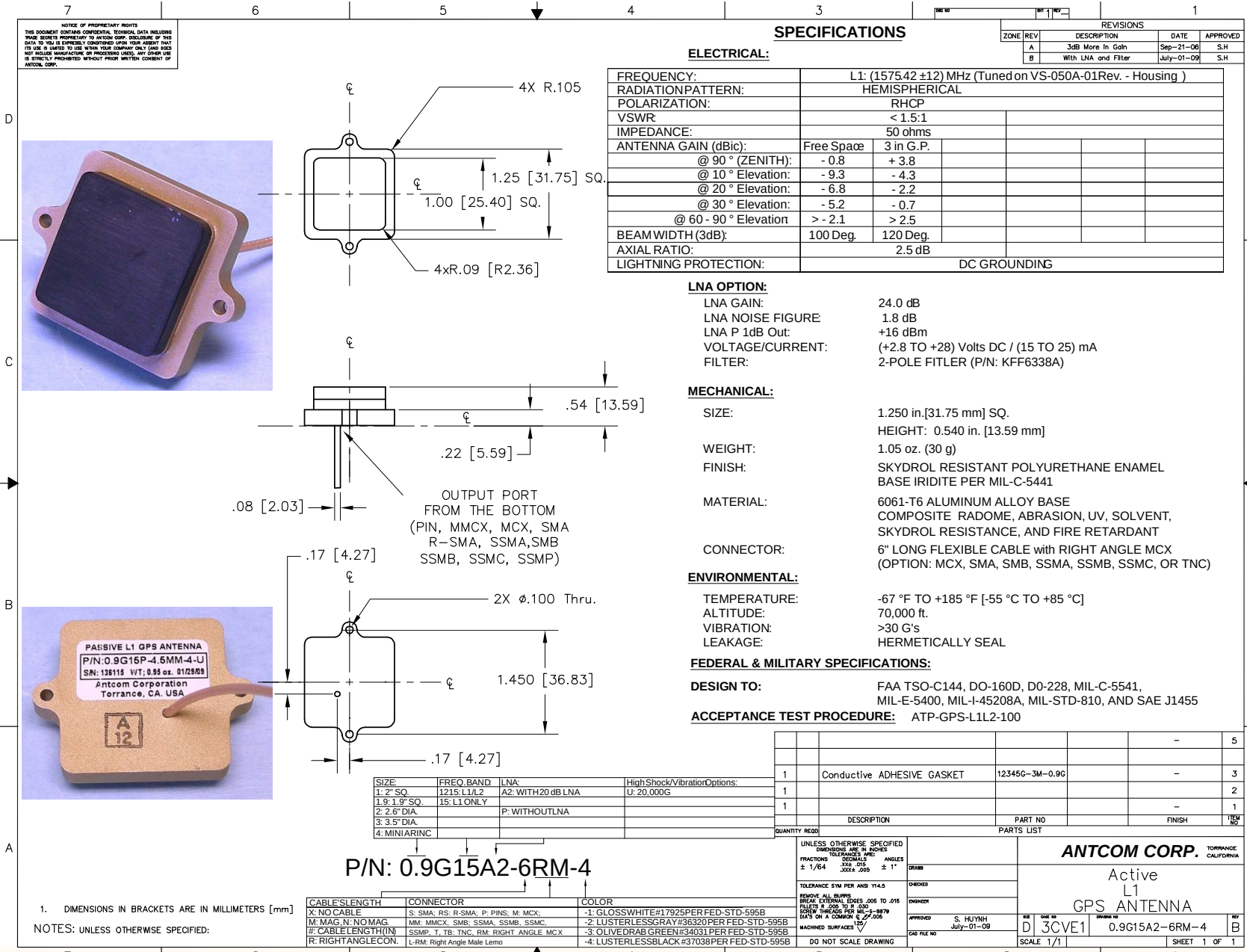
NOTES: UNLESS OTHERWISE SPECIFIED:

CABLE LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA, P: S: SMA, P: PINS, M: MCX	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG, N: NO MAG	MM: MMCX, SMB: SSMA, SSMB, SSMC	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
F: CABLE LENGTH (IN)	SSMP, T, TB: TNC, TNC Bulkhead	-3: OLIVEDRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	L-RM: Right Angle Male Lemo	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

Active L1 GPS Antenna, P/N: 0.9G15A2-6RM-4 Rev B: 1.2" Square, Front Mount, Back Cable Configurations



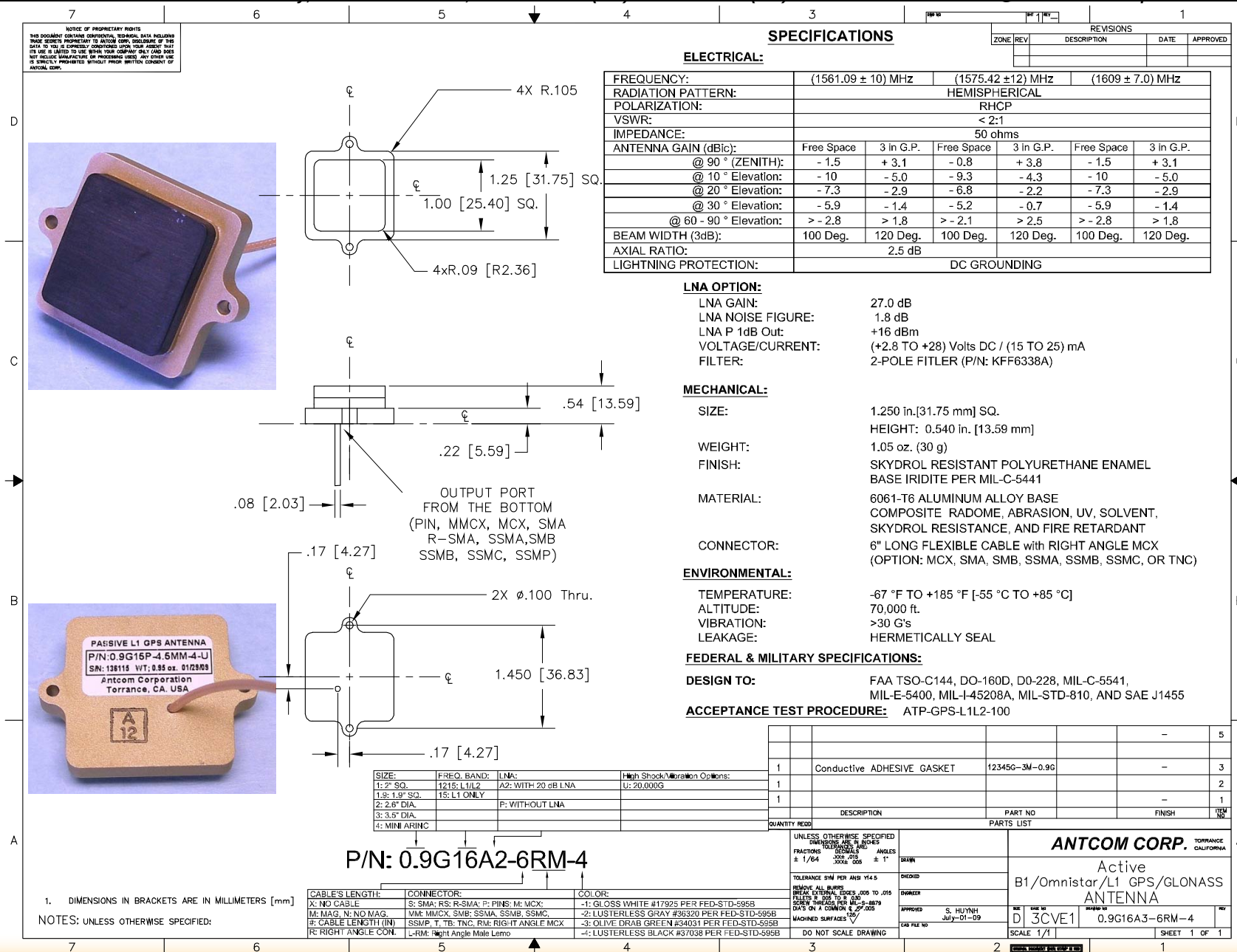
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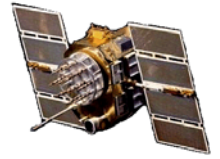
Active B3/Omnistar/L1 GPS/Glonass Antenna, P/N: 0.9G16A3-6RM-4: 1.2" Square, Front Mount, Back Cable Configurations



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Active L1 GPS Antennas, P/N: 1G15X-XX-X : 2.0" Square, Back Mount Configurations



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**P/N: 1G15X-XX-3
(Green)**



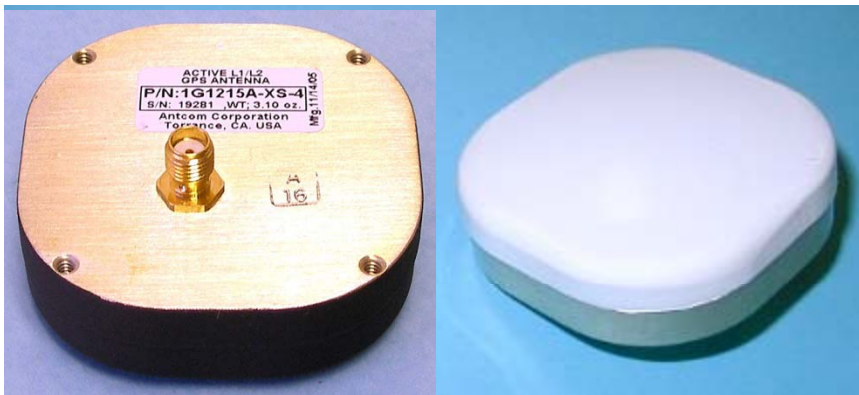
**P/N: 1G15X-XX-4
(Black)**



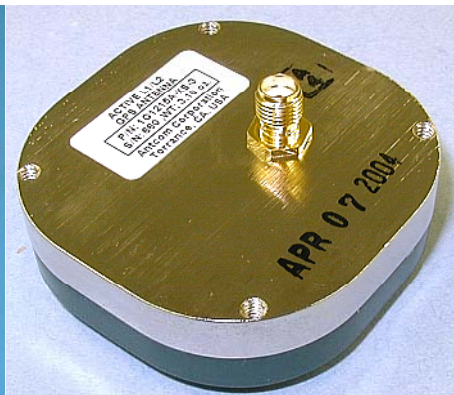
**P/N: 1G15X-XX-5
(Brown)**



**P/N: 21G15X-XX-5
(Brown)**



P/N: 1G15X-XS-1 (SMA , White)



**P/N: 1G15X-XS-3
(SMA, Green)**



**P/N: 21G15X-XX-5
(Brown)**

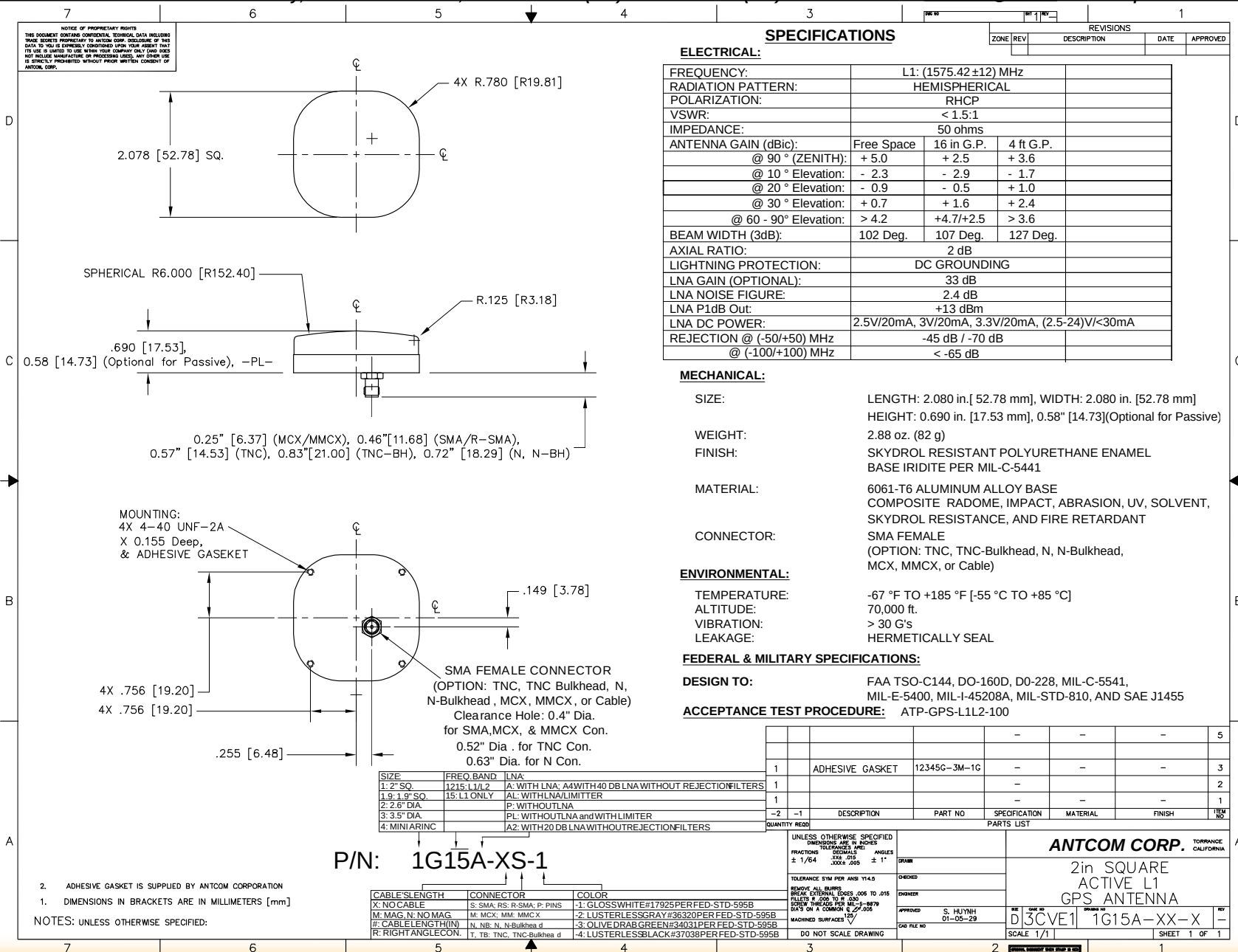
Hermetically Sealed, Designed for Harsh Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)

Active L1 GPS Antennas, P/N: 1G15X-XX-X : 2.0" Square, Back Mount Configurations



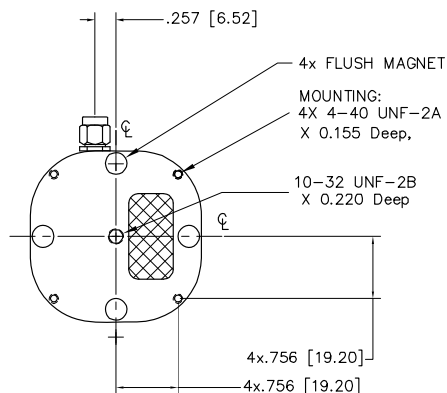
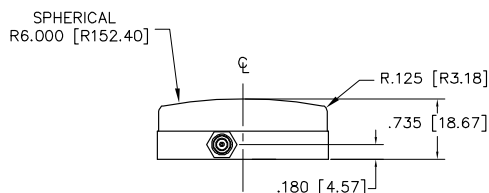
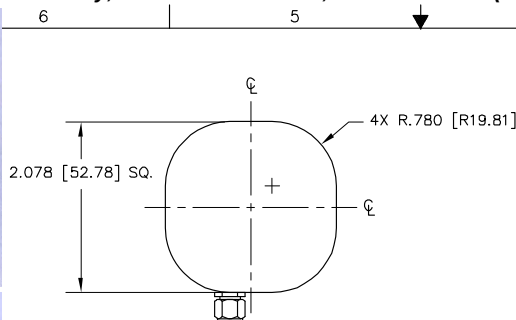
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Active or Passive L1 GPS Antennas, P/N: 1G15X-MNX-X: 2.0" Square, Flush Magnetic/Back Mount Side Connector Configuration



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M CORPORATION
DIMETERS [mm]

SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42±12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
ANTENNA GAIN (dBic):	Free Space 16 in G.P. 4 ft G.P.
@ 90 ° (ZENITH):	+ 5.0 + 2.5 + 3.6
@ 10 ° Elevation:	- 2.3 - 2.9 - 1.7
@ 20 ° Elevation:	- 0.9 - 0.5 + 1.0
@ 30 ° Elevation:	+ 0.7 + 1.6 + 2.4
@ 60 - 90 ° Elevation:	> 4.2 +4.7/+2.5 > 3.6
BEAM WIDTH (3dB):	102 Deg. 127 Deg. 127 Deg.
AXIAL RATIO:	2 dB
LIGHTNING PROTECTION:	DC GROUNDING
LNA GAIN (OPTIONAL):	33 dB
LNA NOISE FIGURE:	2.4 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/20mA, 3.3V/20mA, (2.5-24)V/<30mA
REJECTION @ (-50/+50) MHz	-45 dB / -70 dB
@ (-100/+100) MHz	< -65 dB

MECHANICAL:

SIZE:	LENGTH: 2.080 in. [52.78 mm], WIDTH: 2.080 in. [52.78 mm] HEIGHT: 0.735 in. [18.67 mm], 0.58" [14.73] (Optional for Passive)
WEIGHT:	2.88 oz. (82 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	SMA MALE (OPTION: SMA-F, TNC, TNC-Bulkhead, N, N-Bulkhead, MCX, MMCX, or Cable)
ENVIRONMENTAL:	TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C] ALTITUDE: 70,000 ft. VIBRATION: > 30 G's LEAKAGE: HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

DESIGN TO: 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

SIZE	FREQ. BAND	LNA:
1: 2" SQ.	1215 L1/L2	A: WITH LNA; A4 WITH 40 DB LNA WITHOUT REJECTION FILTERS
1.9: 1.9" SQ.	15: L1 ONLY	AL: WITH LNA/LIMITER
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		PL: WITHOUT LNA and WITH LIMITER
4: MINI ARINC		A2: WITH 20 DB LNA WITHOUT REJECTION FILTERS

P/N: 1G15A-MNSM-1

CABLE LENGTH	CONNECTOR	COLOR
MN: FLUSH MAGNET	SM: SMA-M/S: SMA; RS: R-SMA;	-1: GLOSS WHITE #17925 PER FED-STD-595B
N: NO MAG.	M: MCX; MM: MMCX; P: PINS	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
	N: NB; N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T, TB: TNC; TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

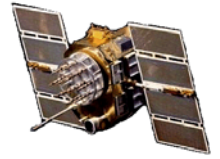
QUANTITY	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH	ITEM NO
1	ADHESIVE GASKET	12345G-3M-1G	-	-	-	5
1			-	-	-	3
1			-	-	-	2
1			-	-	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES 2 1/64 .005 .015 .005 ± 1°	DRIVER
TOLERANCE SYM PER ANSI Y14.5 REWORK ALL SURFACES BEFORE EXTERNAL DIMENSIONS TO .015 FILLING IN .005 IN .005 SCREW THREADS PER MIL-STD-8839 DAYS ON A CONFORM TO .005 MACHINED SURFACES 1/2"	CHECKED APPROVED S. HUYNH 01-05-29 CAG FILE NO

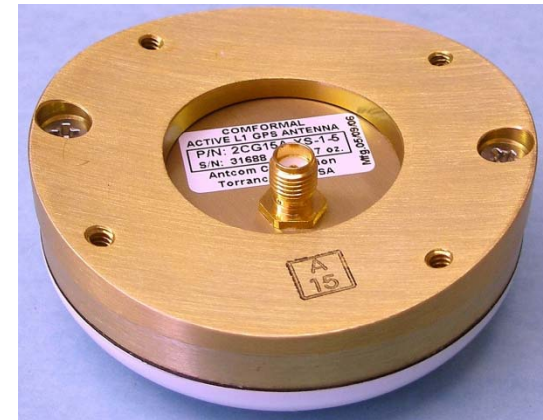
ANTCOM CORP. TORRANCE, CALIFORNIA

2in SQ. FLUSH MAGNETIC
MOUNT, SIDE CONNECTOR
L1 GPS ANTENNA
DR: 3CVE1 1G15A-MNSM-X
SCALE 1/1 SHEET 1 OF 1

Conformal L1 GPS FRPA Antenna Element
Can be Used to Form Multiple Element CRPA:
2.6" Diameter, P/N: 2CG15X-XS-2-X



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P/N: 2CG15A-XS-2-3.5N
SMA, Gray, 3.5in Radius Conformal

P/N: 2CG15A-XS-2-5
SMA, White, 5in Radius Conformal

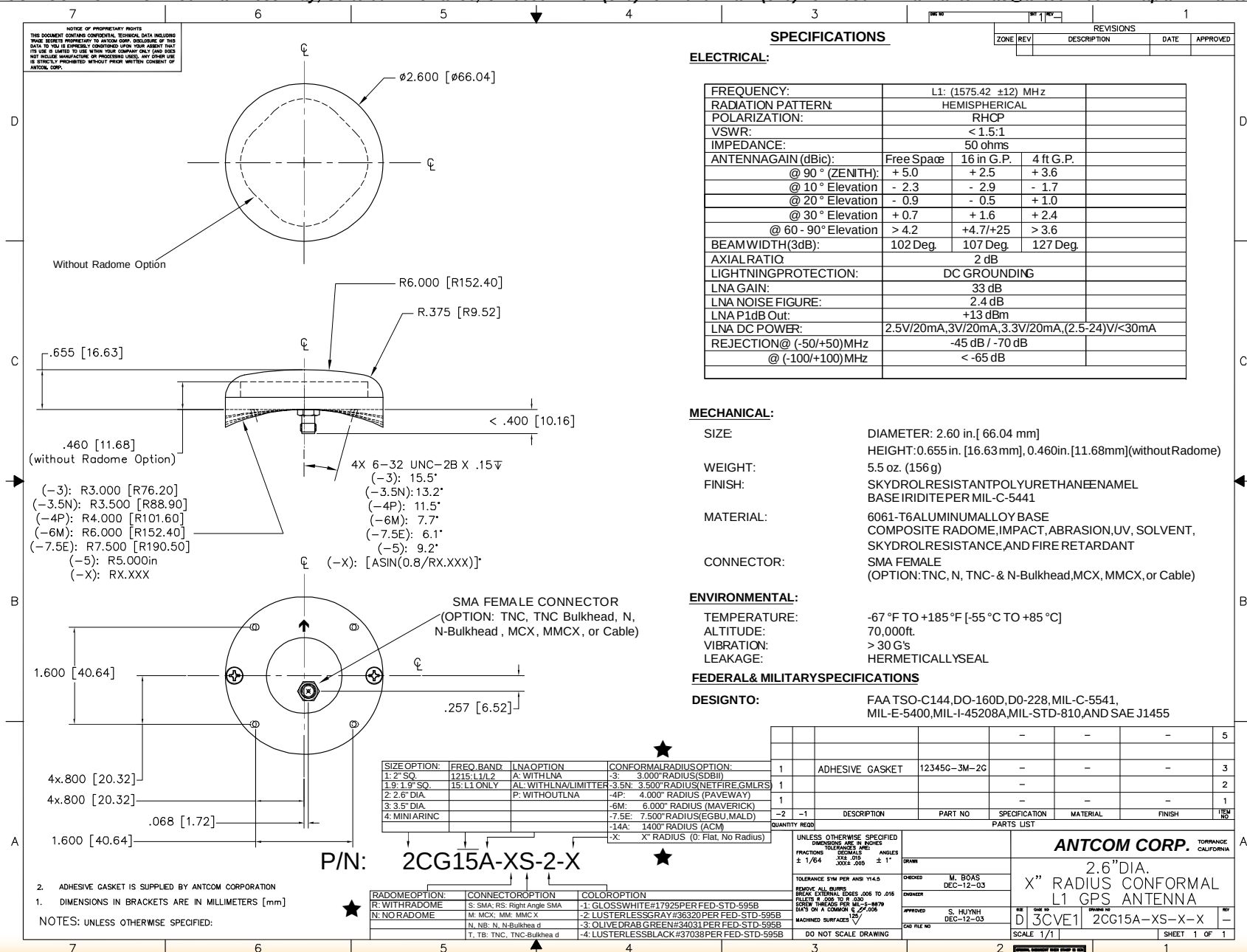
Conformal L1 GPS FRPA Antenna Element

Can be Used to Form Multiple Element CRPA:

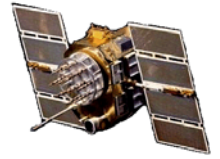
2.6" Diameter, P/N: 2CG15X-XS-2-X



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Active or Passive L1 GPS Antennas, P/N: 2G15X-XX-X: 2.6" Diameter, Bulkhead/Back Mount Configurations



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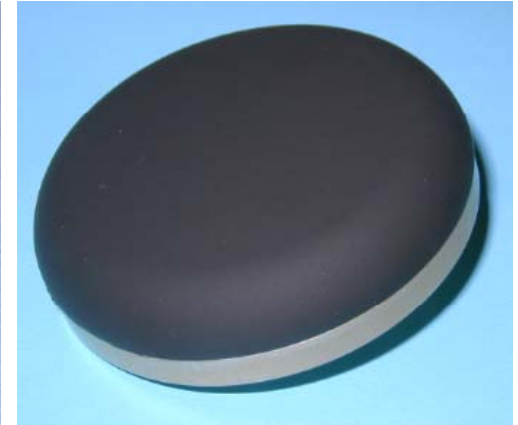
P/N: 2G15X-XX-1 (White)



P/N: 2G15X-XX-1 (Gray)



P/N: 2G15X-XX-3 (Green)



P/N: 2G15X-XX-4 (Black)

Hermetically Sealed, Designed for Harsh Environment Applications.

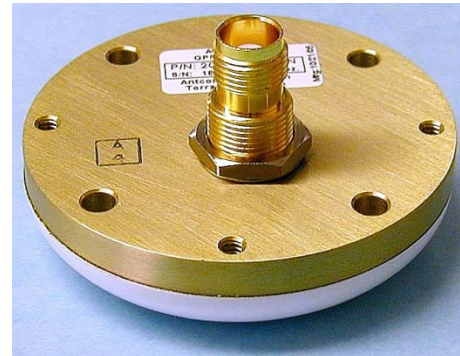
Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)



P/N: 2G15X-XS-X



P/N: 2G15X-XT-X



P/N: 2G15X-XTB-X

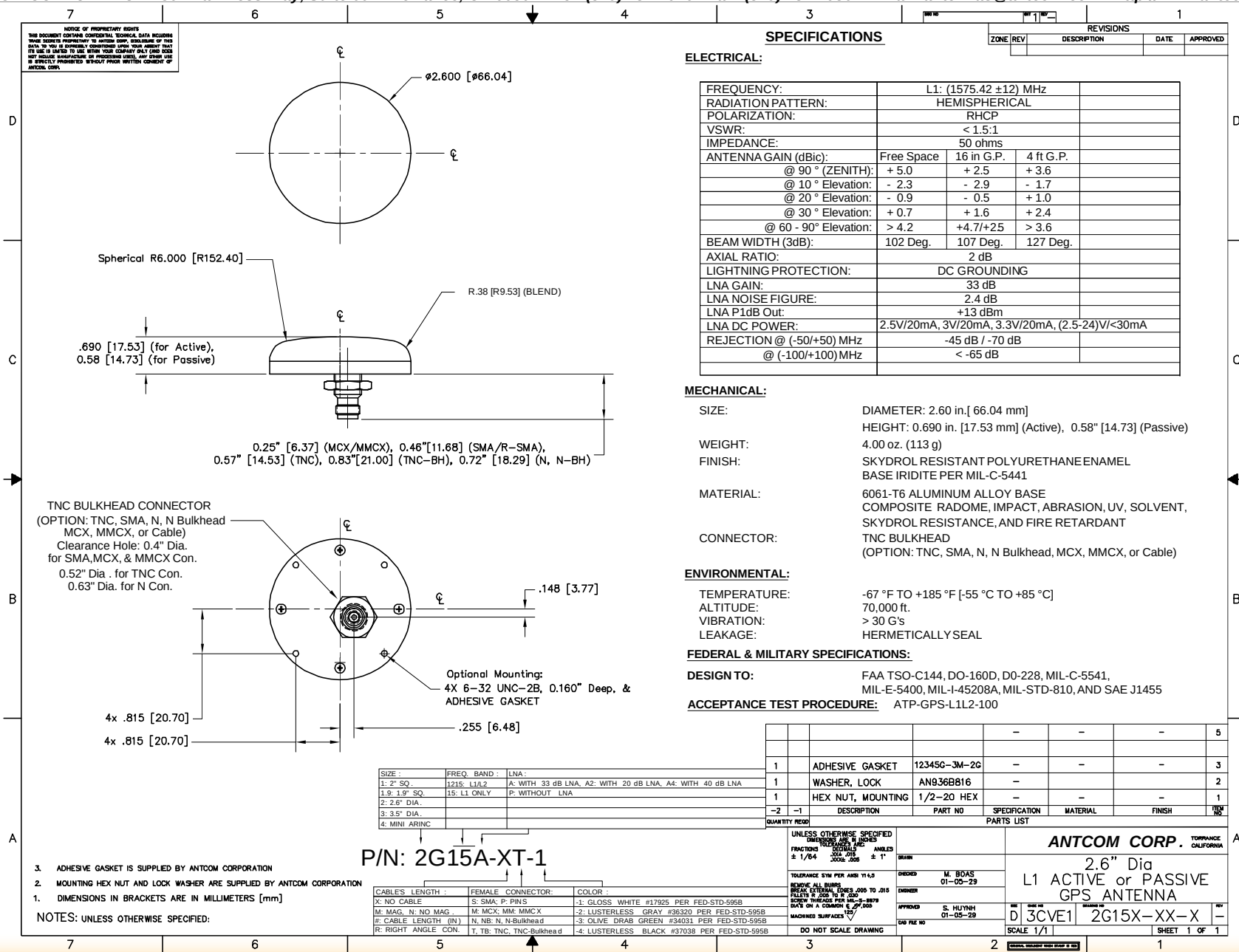


P/N: 2G15X-XN-X

Active or Passive L1 GPS Antenna, P/N: 2G15X-XX-X: 2.6" Diameter, Bulkhead/Back Mount Configuration



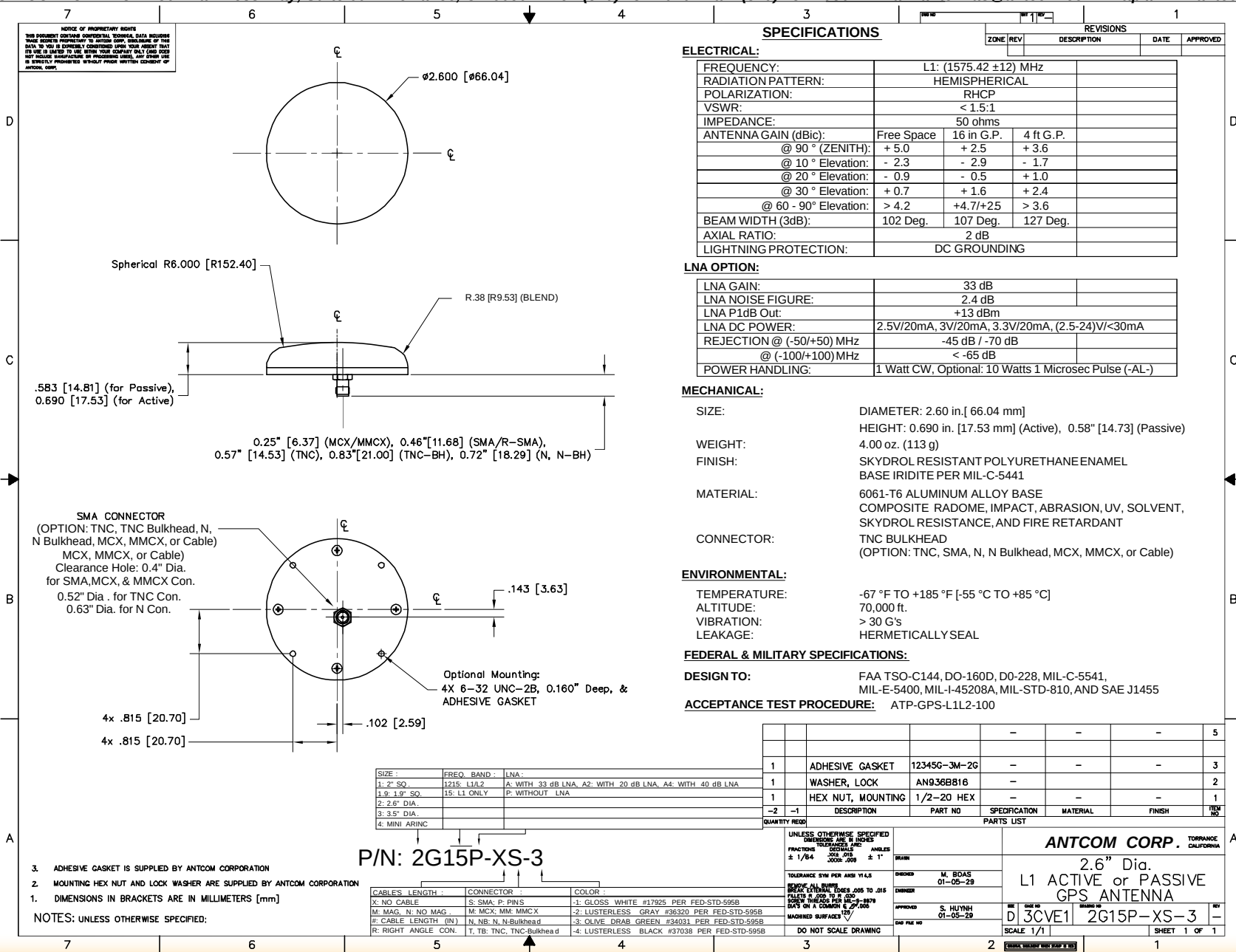
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Passive L1 GPS Antenna, P/N: 2G15P-XX-X: 2.6" Diameter, Bulkhead/Back Mount Configuration



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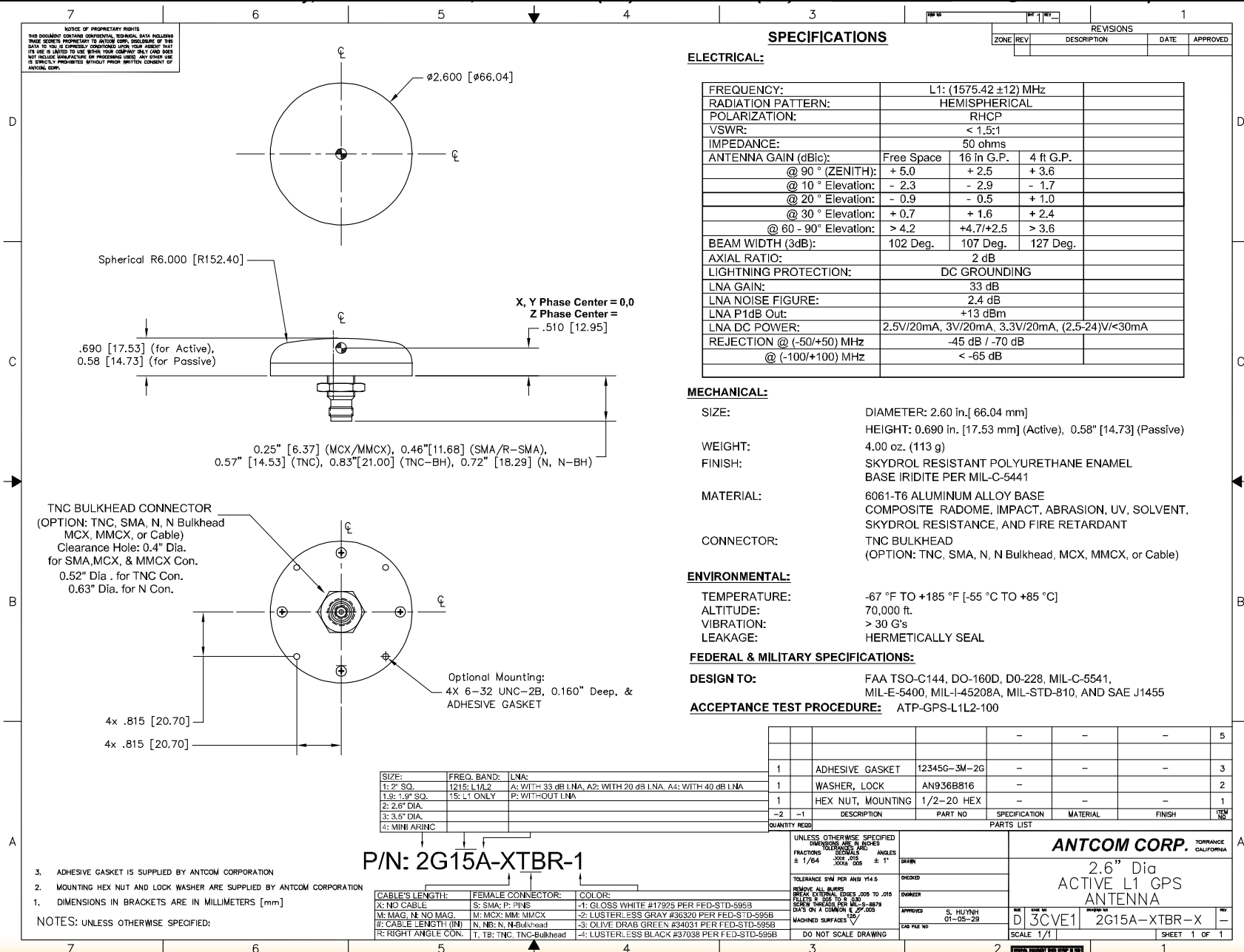


Active or Passive L1 GPS Antenna, P/N: 2G15A-XTBR-X:

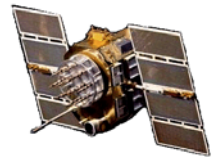
2.6" Diameter, Centered Bulkhead/Back Mount Configuration



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Active or Passive L1 GPS Antennas, P/N: 2G15X-XMT-X:
2.6" Diameter, Flat or Magnetic Mount Configurations



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P/N: 2G15X-XXT-3,
Green

**Hermetically Sealed,
Designed for Harsh
Environment
Applications.
Other Connector is
Available
(See Drawing)**

P/N: 2G15A-180MT-5



P/N: 2G15X-XXT-4,
Black



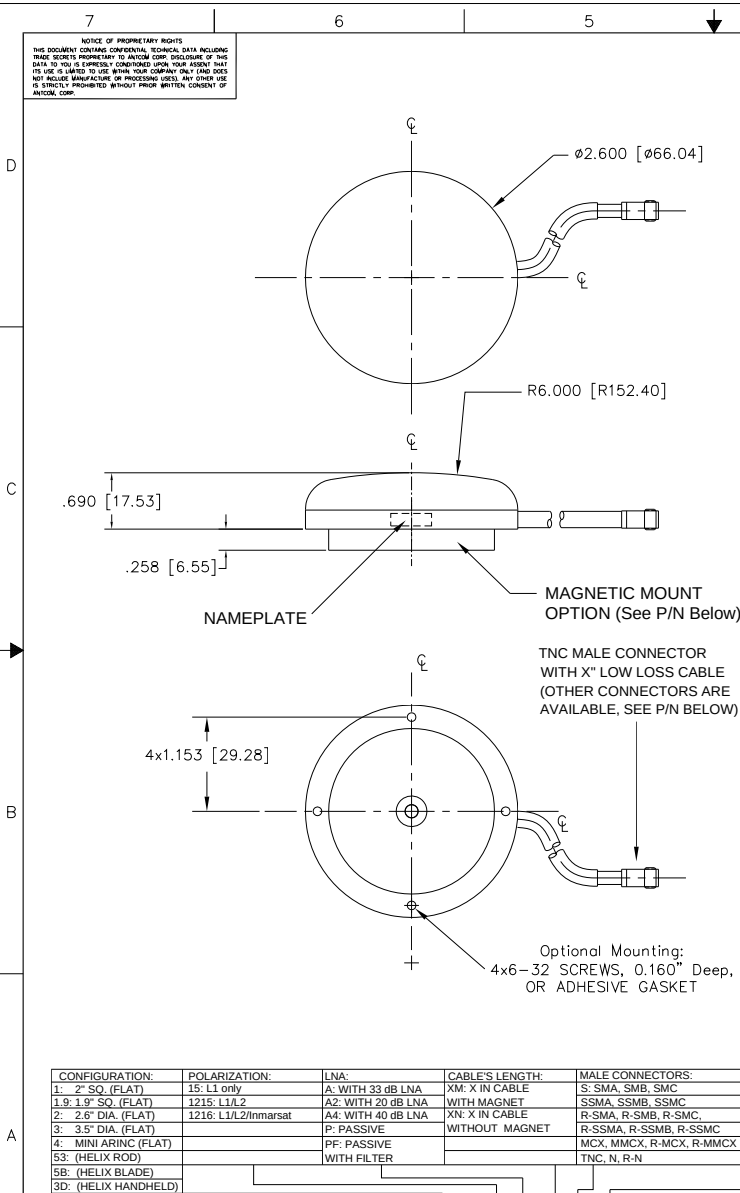
P/N: 2G15X-196MT-1,
White



Active or Passive L1 GPS Antenna, P/N: 2G15X-XX-X: 2.6" Diameter, Flat or Magnetic Mount Configuration



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SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 $\pm$ 12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
ANTENNA GAIN (dBic):	Free Space 16 in G.P. 4 ft G.P.
@ 90 ° (ZENITH):	+ 5.0 + 2.5 + 3.6
@ 10 ° Elevation:	- 2.3 - 2.9 - 1.7
@ 20 ° Elevation:	- 0.9 - 0.5 + 1.0
@ 30 ° Elevation:	+ 0.7 + 1.6 + 2.4
@ 60 - 90 ° Elevation:	> 4.2 +4.7/+2.5 > 3.6
BEAM WIDTH (3dB):	102 Deg. 107 Deg. 127 Deg.
AXIAL RATIO:	2 dB
LIGHTNING PROTECTION:	DC GROUNDING
LNA GAIN (OPTIONAL):	33 dB
LNA NOISE FIGURE:	2.4 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/20mA, 3.3V/20mA, (2.5-24)V/<30mA
REJECTION @ (-50/+50) MHz:	-45 dB / -70 dB
@ (-100/+100) MHz:	< -65 dB

MECHANICAL:

SIZE:	DIAMETER: 2.60 in. [66.04 mm] HEIGHT: 1.0 in. [25.4 mm], 0.742 [18.85] for No Magnet Option
WEIGHT:	7.00 oz. [0.198 Kg], 4.00 oz. [0.113 Kg] (WITHOUT MAGNET)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5541
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	SMA MALE WITH 36 IN CABLE (OPTION: TNC, N, MCX, MMCX, or Cable)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000 ft.
VIBRATION:	> 30 G's
LEAKAGE:	HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

DESIGN TO: 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

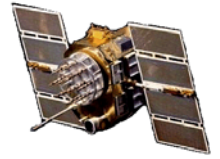
CONFIGURATION:	POLARIZATION:	LNA:	CABLE'S LENGTH:	MALE CONNECTORS:	COLOR:
1: 2" SQ. (FLAT)	15: L1 only	A: WITH 33 dB LNA	XM: X IN CABLE	S: SMA, SMB, SMC	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	1215: L1/L2	A2: WITH 20 dB LNA	WITH MAGNET	SSMA, SSMB, SSMC	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)	1216: L1/L2/marsat	A4: WITH 40 dB LNA	XM: X IN CABLE	R-SMA, R-SMB, R-SMC	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
3: 3.5" DIA. (FLAT)		P: PASSIVE	WITHOUT MAGNET	R-SSMA, R-SSMB, R-SSMC	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)		PF: PASSIVE		MCX, MMCX, R-MCX, R-MMCX	
53: (HELIX ROD)		WITH FILTER		TNC, N, R-N	
5B: (HELIX BLADE)					
3D: (HELIX HANDHELD)					

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

P/N: 2G15P-XX-X

QUANTITY REQD	DESCRIPTION	PART NO	MATERIAL	FINISH	ITEM NO
1	ADHESIVE GASKET	12345G-3M-3G			5
1					3
1					1
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 ± .015 ± 1° TOLERANCE .5MM PER ANSI Y14.5 REMOVE ALL BURRS BREAK OFF TOP EDGES .005 TO .015 FILLER IF .005 TO .015 SCREW THREADS PER MIL-S-8879 DATA IS A COMMON & OF .005 MACHINED SURFACES 125					
DO NOT SCALE DRAWING	DATE NO	SCALE 1/1	SHEET 1 OF 1	ANTCOM CORP. TORRANCE, CALIFORNIA	
DRAWN		2.6" Dia. FLAT OR MAGNETIC MOUNT L1 GPS ANTENNA (with X in Cable)		P/N: 2G15X-XX-X	
CHECKED		D 3CVE1		SHEET 1 OF 1	
ENGINEER		S. HUYNH DEC-13-02			
APPROVED		CAP FILE NO			

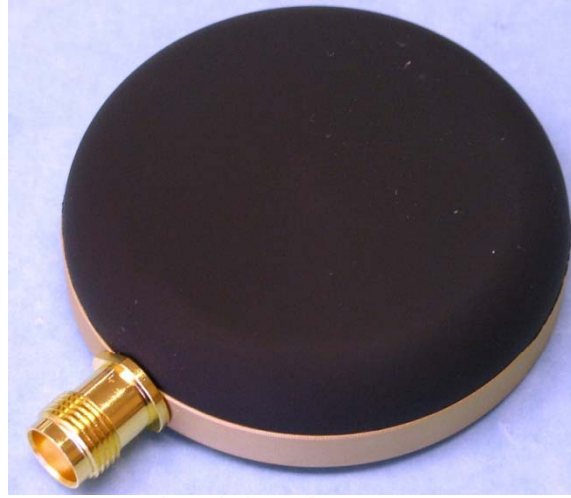
Active or Passive L1 GPS Antenna, P/N: 2G15X-XX-X: 2.6" Diameter, Flat or Magnetic Mount Configuration



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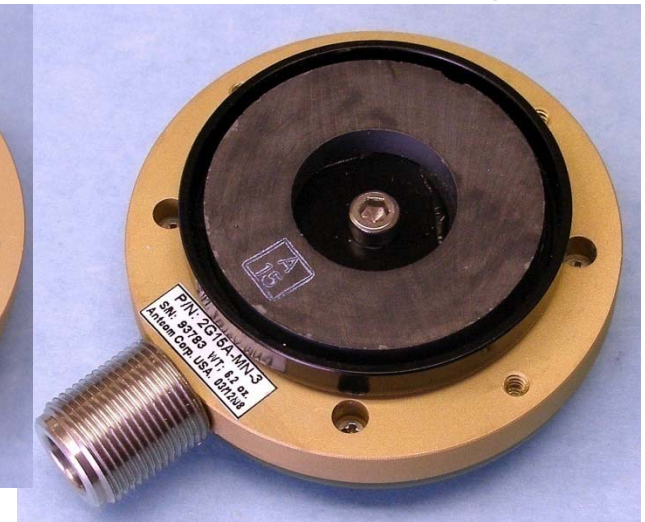
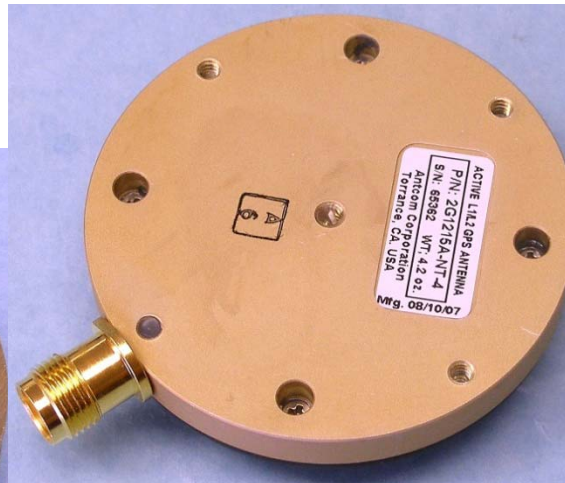
P/N: 2G15A-XMT-4
TNC Connector, Black, Magnet



P/N: 2G15A-XNT-4
TNC Connector, Black, No Magnet



P/N: 2G15A-XMN-4
N Connector, Black, Magnet

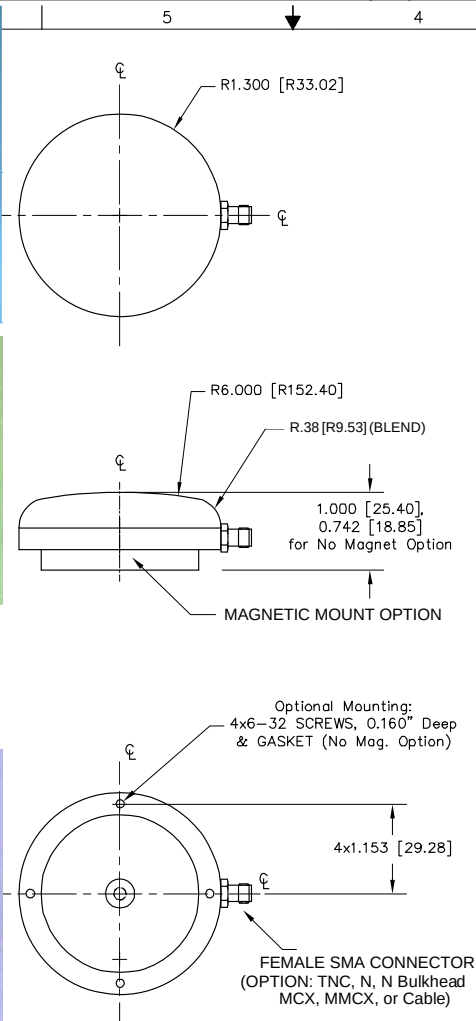
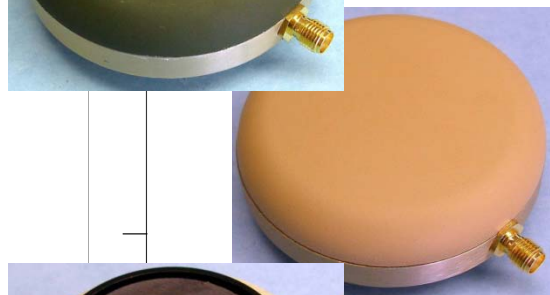


Hermetically Sealed, Designed for Harsh Environment Applications.
Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)

Active or Passive L1 GPS Antenna, P/N: 2G15X-MX-X: 2.6" Diameter, Flat or Magnetic Mount Configuration



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SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
ANTENNA GAIN (dBic):	Free Space 16 in G.P. 4 ft G.P.
@ 90° (ZENITH):	+5.0 +2.5 +3.6
@ 10° Elevation:	-2.3 -2.9 -1.7
@ 20° Elevation:	-0.9 -0.5 +1.0
@ 30° Elevation:	+0.7 +1.6 +2.4
@ 60 - 90° Elevation:	>4.2 +4.7/+25 >3.6
BEAM WIDTH (3dB):	102 Deg. 107 Deg. 127 Deg.
AXIAL RATIO:	2 dB
LIGHTNING PROTECTION:	DC GROUNDING
LNA GAIN:	33 dB
LNA NOISE FIGURE:	2.4 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/20mA, 3.3V/20mA, (2.5-24)V / <30mA
REJECTION @ (-50/+50) MHz:	-45 dB / -70 dB
@ (-100/+100) MHz:	< -65 dB
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)

MECHANICAL:

SIZE:	DIAMETER: 2.60 in. [66.04 mm] HEIGHT: 1.0 in. [25.4 mm], 0.742 [18.85] for No Magnet Option
WEIGHT:	7.00 oz. [0.198 Kg], 4.00 oz. [0.113 Kg] (WITHOUT MAGNET)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	SMA FEMALE (OPTION: TNC, N, MCX, MMCX, or Cable)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000 ft.
VIBRATION:	> 30 G's
LEAKAGE:	HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

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

QTY	DESCRIPTION	PART NO	MATERIAL	FINISH	REV
1	ADHESIVE GASKET	12345G-3M-2G	-	-	3
1					2
1					1
-2	-1	DESCRIPTION	PART NO	MATERIAL	FINISH

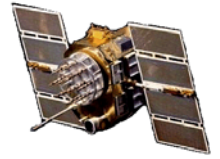
SIZE	FREQ. BAND	LNA:
1: 2" SQ	1215 L1/L2	A: WITH 33 dB LNA, A2: WITH 20 dB LNA, A4: WITH 40 dB LNA
1.9: 1.9" SQ	15: L1 ONLY	
2: 2.6" DIA.		P: WITHOUT LNA
3: 3.5" DIA.		
4: MINI ARINC		

P/N: 2G15A-MS-1

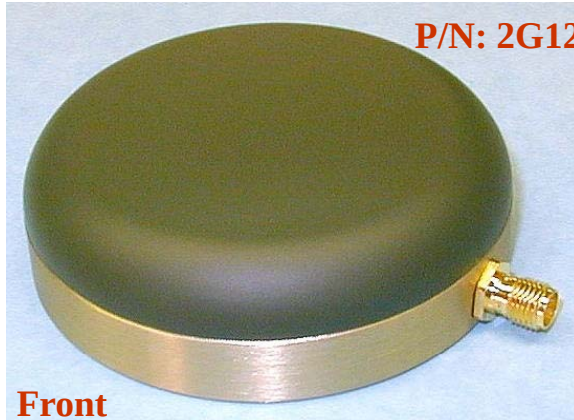
CABLE LENGTH	FEMALE CONNECTOR	COLOR
M: MAG, N: NO MAG	S: SMA, P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
	M: MCX, MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
	N: NB, N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
	T: TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 ± .005 ± .005 ± .1°		ANTCOM CORP. TORRANCE, CALIFORNIA	
CHECKED	M. BOAS 01-05-29	2.6 in Dia. Flat or Mag. Mount ACTIVE or PASSIVE L1 GPS ANTENNA	REV
APPROVED	S. HUYNH 01-05-29	D3CVE1 2G15X-MX-X	1
DATE	01-05-29	SCALE 1/1	1

Combined Inmarsat & L1/L2 GPS Antennas, P/N: 2G1216P-NS-3 : 2.6" Diameter, Shoulder Mount Configurations



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P/N: 2G1216P-NS-3



Antenna/Cable

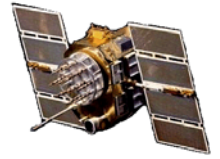


**Hermetically Sealed,
Designed for Harsh
Environment
Applications.**

**Connector is Available in
SMA, MCX, MMCX,
TNC, TNC-B, N, or N-
Bulkhead (See Drawing)**

**Manual electrical switch can
be added on to switch to
LHCP signal reception**

**Glass Mount GPS Antennas, P/N: 2G15A-GMT-1:
2.6" Diameter, Glass/Magnetic Mount Configurations**



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P/N: 2G15A-60GMT-1,

(-1: White, -2: Gray, -3: Green, -4: Black, -5: Desert Sand)

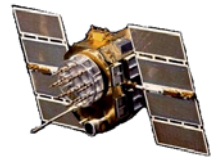


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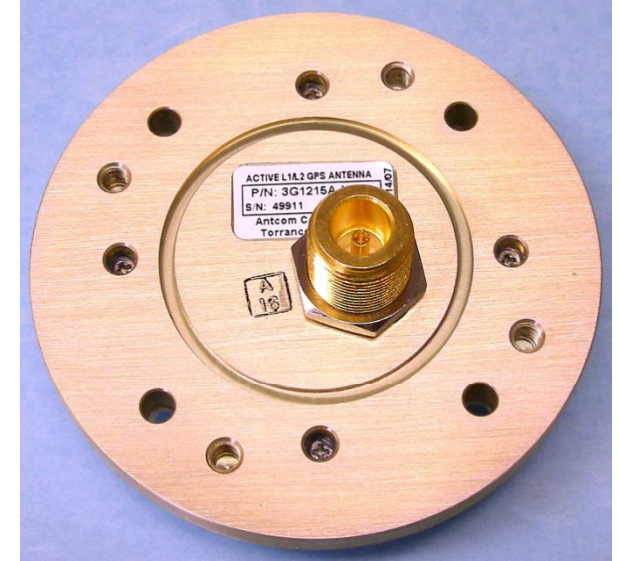
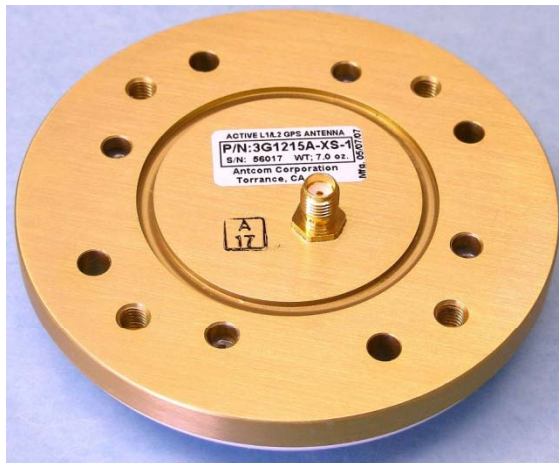
**(-1: White, -2: Gray, -3: Green,
-4: Black, -5: Desert Sand)**

Hermetically Sealed, Designed for Harsh Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)



P/N: 3G15X-XX-1 (White) P/N: 3G15X-XX-2 (Gray) P/N: 3G15X-XX-3 (Green) P/N: 3G15X-XX-4 (Black)



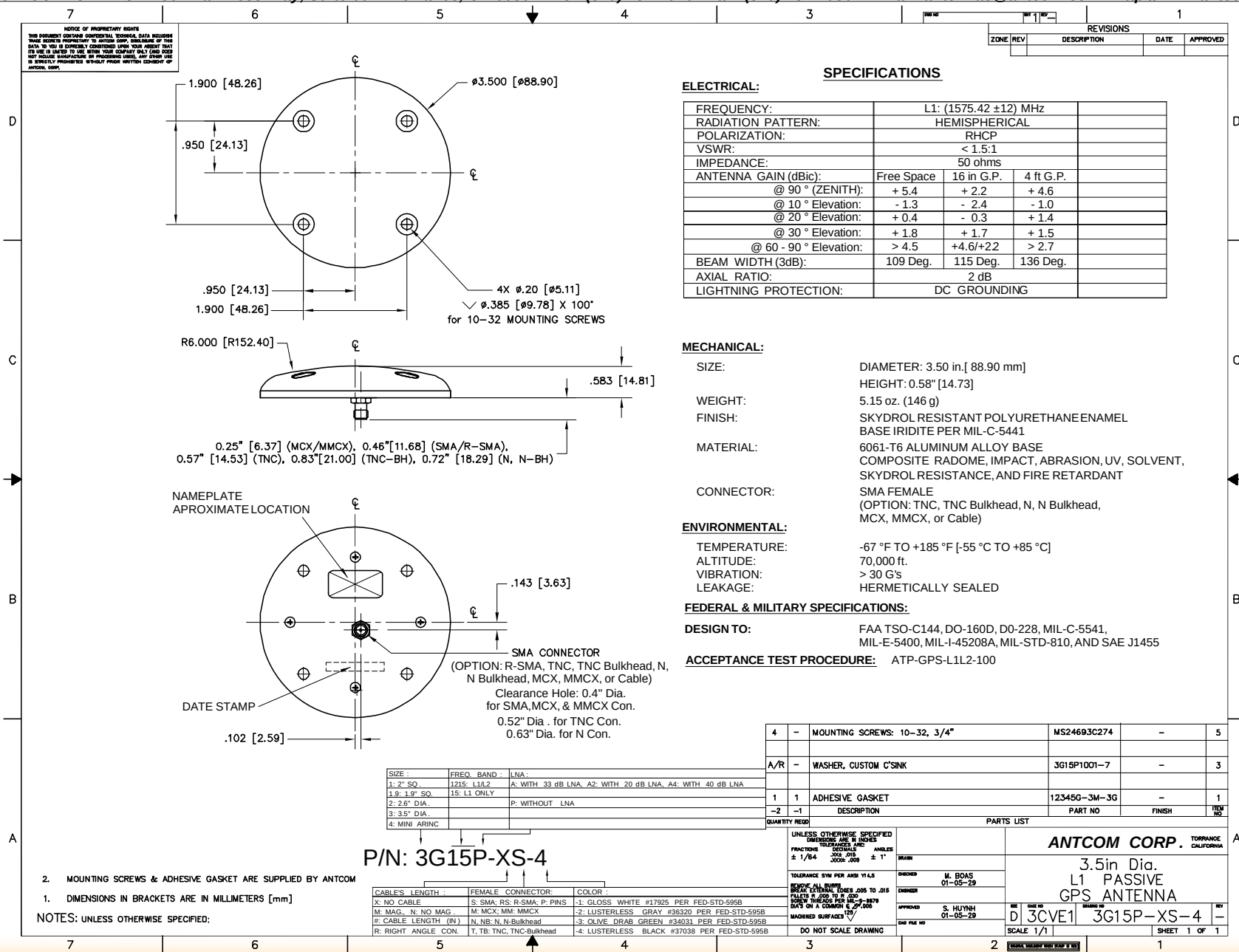
P/N: 3G15X-XS-X (SMA)

P/N: 3G15X-XT-X (TNC)

P/N: 3G15X-XN-X (N)

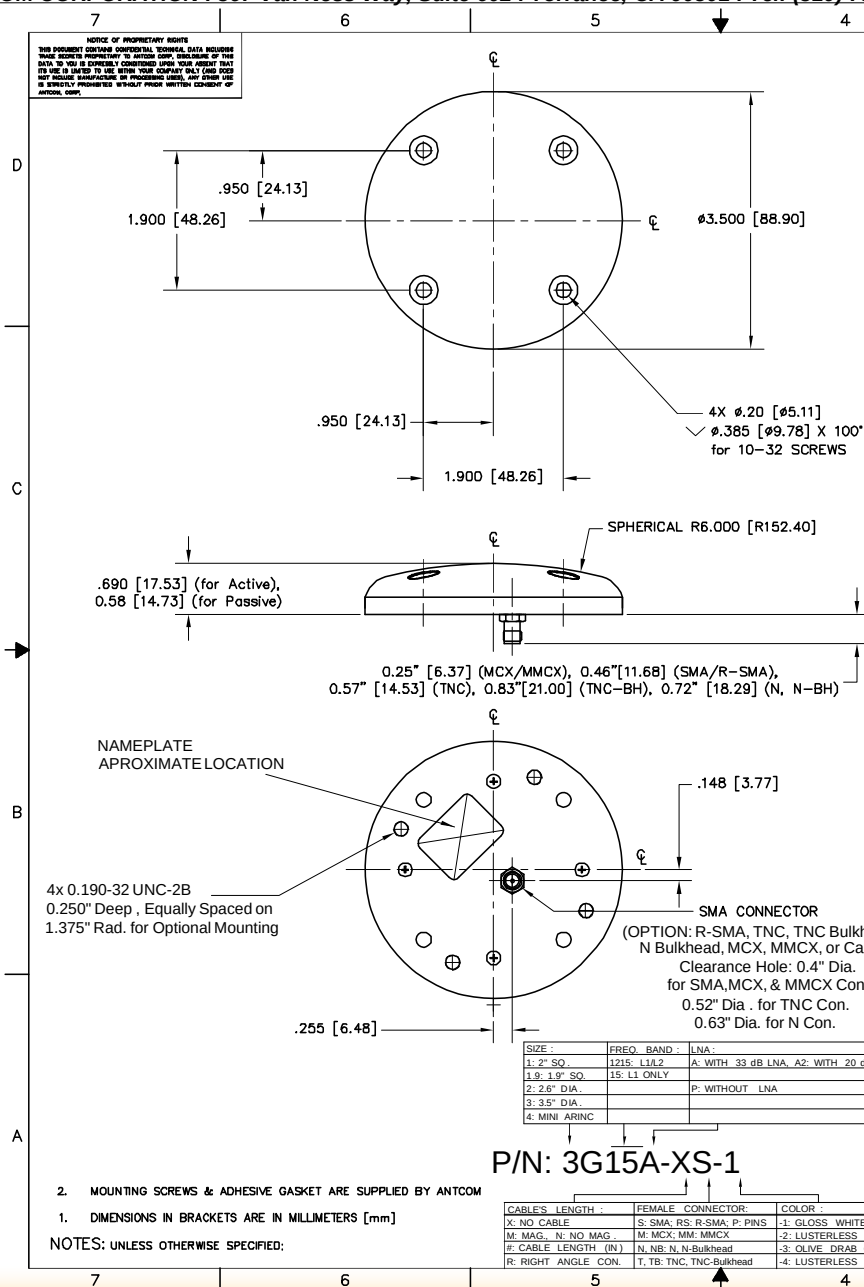
Hermetically Sealed, Designed for Harsh Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)





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ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
ANTENNA GAIN (dBic):	Free Space 16 in G.P. 4 ft G.P.
@ 90 ° (ZENITH):	+ 5.4 + 2.2 + 4.6
@ 10 ° Elevation:	- 1.3 - 2.4 - 1.0
@ 20 ° Elevation:	+ 0.4 - 0.3 + 1.4
@ 30 ° Elevation:	+ 1.8 + 1.7 + 1.5
@ 60 - 90 ° Elevation:	> 4.5 +4.6/+22 > 2.7
BEAM WIDTH (3dB):	109 Deg. 115 Deg. 136 Deg.
AXIAL RATIO:	2 dB
LIGHTNING PROTECTION:	DC GROUNDING

LNA OPTION:

LNA GAIN:	33 dB
LNA NOISE FIGURE:	2.2 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/20mA, 3.3V/20mA, (2.5-24)V/<30mA
REJECTION @ (-50/+50) MHz	-45 dB / -70 dB
@ (-100/+100) MHz	< -65 dB
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)

MECHANICAL:

SIZE:	DIAMETER: 3.50 in. [88.90 mm] HEIGHT: 0.690 in. [17.53 mm] (for Active), 0.58" [14.73] (for Passive)
WEIGHT:	5.15 oz. (146 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL:	6061-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, MMCX, or Cable)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000 ft.
VIBRATION:	> 30 G's
LEAKAGE:	HERMETICALLY SEALED

FEDERAL & MILITARY SPECIFICATIONS:

DESIGN TO:	FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455
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ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

QTY	DESCRIPTION	PART NO	FINISH	QTY
4	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	-	5
A/R	WASHER, CUSTOM C'SINK	3G15P1001-7	-	3
1	ADHESIVE GASKET	123450-3M-3G	-	1
-2	DESCRIPTION			

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS DECIMALS ANGLES
± 1/64 .005 .010 ± 1°
TOLERANCE 5% PER ANSI Y14.5
REWORK ALL SURFACES
BREAK EXTERNAL EDGES .015 TO .018
FILLS IN .015 TO .020
DIPS ON A CONCAVE SURFACE .015 TO .020
MAGNIFIED SURFACES

DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

3.5" Dia.
L1 ACTIVE, OR PASSIVE
GPS ANTENNA

D 3CVE1 3G15X-XX-X

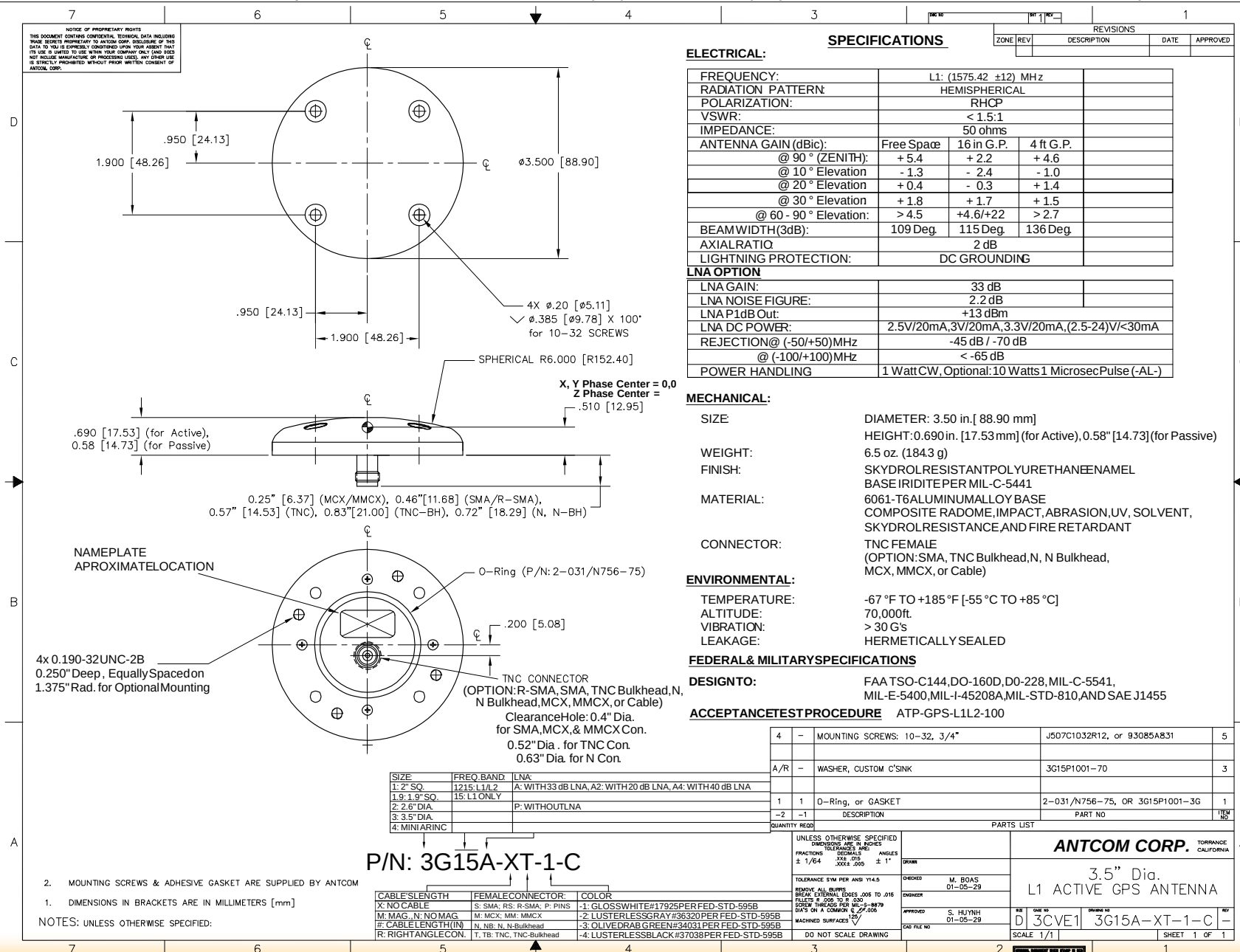
SCALE 1/1 SHEET 1 OF 1

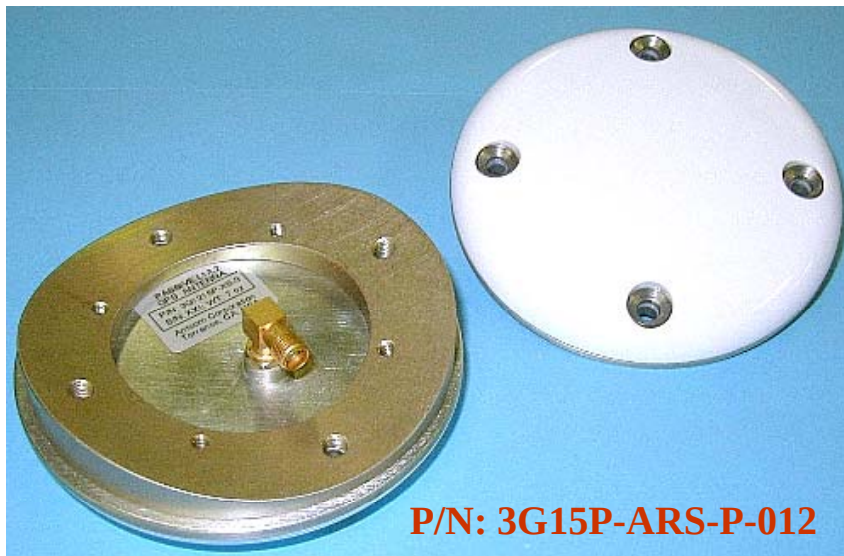
Active or Passive L1 GPS Antenna, P/N: 3G15A-XT-1-NC:

3.5" Diameter Configuration with Additional Back Mounting Option



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P/N: 3G15P-AS-P-012

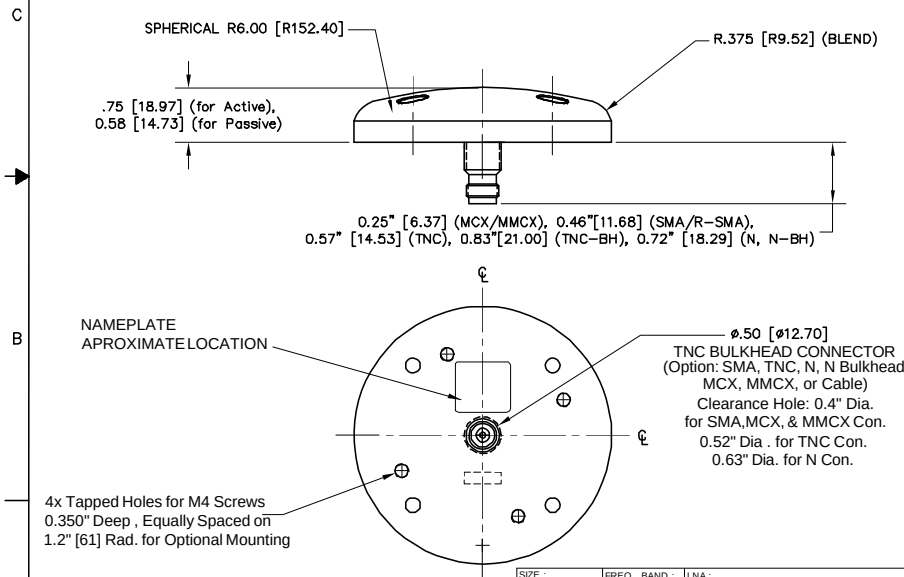
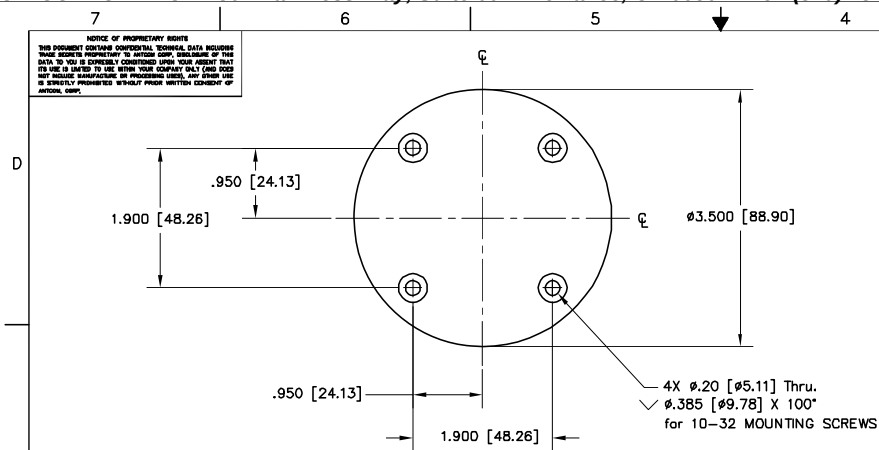


Hermetically Sealed, Designed for Harsh Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)

Active L1 GPS Antenna, P/N: 3G15A-XXR-X: 3.5" Diameter, Pipe Mount Configuration

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SIZE	FREQ. BAND	LNA
1: 2" SQ.	1215-1312	A: WITH 33 dB LNA, A2: WITH 20 dB LNA, A4: WITH 40 dB LNA
1.9-1.9" SQ.	15: L1 ONLY	P: WITHOUT LNA
2: 2.6" DIA.		
3: 3.5" DIA.		
4: MINI ARINC		

P/N: 3G15A-XTR-1

CABLE'S LENGTH	FEMALE CONNECTOR	COLOR
X: NO CABLE	S: SMA, RS: R-SMA, P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG, N: NO MAG	M: MCX, MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
N: CABLE LENGTH (IN)	N, NB: N, N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T, TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
ANTENNA GAIN (dBic):	Free Space 16 in G.P. 4 ft G.P.
@ 90 ° (ZENITH):	+ 5.4 + 2.2 + 4.6
@ 10 ° Elevation:	- 1.3 - 2.4 - 1.0
@ 20 ° Elevation:	+ 0.4 - 0.3 + 1.4
@ 30 ° Elevation:	+ 1.8 + 1.7 + 1.5
@ 60 - 90 ° Elevation:	> 4.5 +4.6/+22 > 2.7
BEAM WIDTH (3dB):	109 Deg. 115 Deg. 136 Deg.
AXIAL RATIO:	2 dB
LIGHTNING PROTECTION:	DC GROUNDING
LNA GAIN:	33 dB
LNA NOISE FIGURE:	2.2 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/20mA, 3.3V/20mA, (2.5-24)V/<30mA
REJECTION @ (-50/+50) MHz	-45 dB / -70 dB
@ (-100/+100) MHz	< -65 dB
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)

MECHANICAL:

SIZE:	DIAMETER: 3.50 in. [88.90 mm] HEIGHT: 0.75 in. [18.97 mm] (for Active), 0.58" [14.73] (Passive)
WEIGHT:	7.90 oz. (224 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDIUM PER MIL-C-5441
MATERIAL:	6061-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, MMCX, or Cable)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000 ft.
VIBRATION:	> 30 G's
LEAKAGE:	HERMETICALLY SEALED

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:

QTY	DESCRIPTION	PART NO	MATERIAL	FINISH	QTY
1	Antenna Mount	MTR-1	-	-	6
4	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	-	-	5
A/R	WASHER, CUSTOM C'SINK	3G15P1001-7	-	-	3
1	ADHESIVE GASKET	123456-3M-3G	-	-	1
-2	-	-	-	-	-

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS DECIMALS ANGLES
± 1/64 .002 .015 ± 1°
TOLERANCE 5% PER AMS Y14.5
BREAK ALL SHARP
BREAK EXTERNAL EDGES .005 TO .015
CUT TO .002 TO .015
DAYS ON A COASTAL & 2000
MACHINED SURFACES
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

3.5" Dia.
L1 ACTIVE, OR PASSIVE
GPS ANTENNA

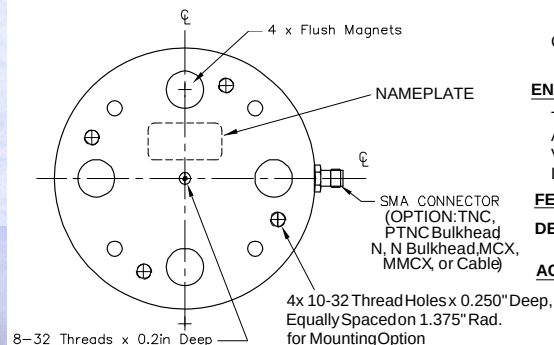
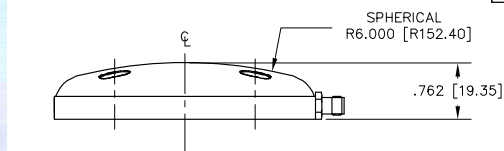
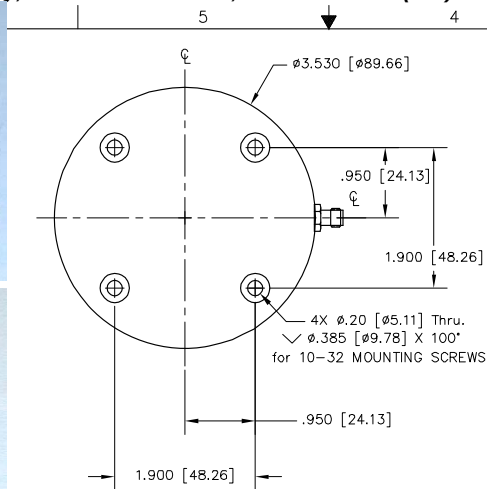
DESIGNED BY	DATE	REV	QTY
M. BOAS	01-05-29		
ENGINEER			
APPROVED	DATE	REV	QTY
S. HUYNH	01-05-29		
DATE FILED			

SCALE 1/1 SHEET 1 OF 1

Active or Passive L1/L2 GPS Antennas, P/N: 3G1215X-MNX-X: 3.5" Diameter Configurations, Flat, Front/Back Flush Magnetic Mount



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P/N: 3G1215A-MNS-1

D BY ANTCOM

CABLE LENGTH	CONNECTOR	COLOR
X: Bottom Connector	S: SMA; RD: R-SMA; P: PINS	1: GLOSS WHITE #17925 PER FED-STD-595B
N: No MAG	M: MCX; MM: MMCX	2: LUSTERLESS GRAY #36320 PER FED-STD-595B
MN: FLUSH MAG	N: NB; N: N-Bulkhead	3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
M: Big Non-Flush Mag	T: TB; TNC; TNC-Bulkhead	4: LUSTERLESS BLACK #37038 PER FED-STD-595B

SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±15) MHz	L2: (1227.60 ±15) MHz
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	RHCP
VSWR:	< 1.5:1	< 1.5:1
IMPEDANCE:	50 ohms	50 ohms
ANTENNA GAIN (dBic):	Free Space 16 in G.P.	Free Space 16 in G.P.
@ 90° (ZENITH):	+4.7	+3.5
@ 10° Elevation	-1.8	-3.2
@ 20° Elevation	-0.3	-1.0
@ 30° Elevation	+1.4	+0.9
@ 60 - 90° Elevation:	> 3.9	> 2.8
BEAM WIDTH (3dB):	114 Deg.	106 Deg.
AXIAL RATIO	2 dB	2 dB
LIGHTNING PROTECTION:	DC GROUNDING	
LNA GAIN:	33 dB	35 dB
LNA NOISE FIGURE:	3.0 dB	3.0 dB
LNA P1dB Out:	+13 dBm	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24V)/<50mA	
REJECTION @ (-50/+50) MHz	-41 dB / -59 dB	-40 dB / -40 dB
@ (-100/+100) MHz	< -65 dB	< -65 dB
POWER HANDLING	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)	

MECHANICAL:

SIZE	DIAMETER: 3.53 in. [89 mm] HEIGHT: 0.76 in. [19 mm]
WEIGHT:	6.8 oz. (191 g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL:	6061-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, MMCX, or Cable)
ENVIRONMENTAL:	TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C] ALTITUDE: 70,000 ft. VIBRATION: > 30 G's LEAKAGE: HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS

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

ACCEPTANCE TEST PROCEDURE ATP-GPS-L1L2-100 2-031/N756-75, or 123456-3M-3G

QTY	DESCRIPTION	PART NO	QTY
4	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	5
A/R	WASHER, CUSTOM C'SINK	3G15P1001-6	3
1	GASKET	3G15P1001-3G	1
-2	DESCRIPTION	PART NO	ITEM NO

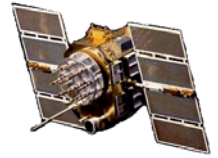
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES 1/64 .005 .005 1°	DRIVER	CHECKED	ENGINEER	APPROVED	DATE	SCALE	SHEET
TOLERANCE 1/16 PER ANSI Y14.5 REMOVE ALL DIMENSIONS BEFORE INTERNAL DIMENSIONS .005 TO .015 SCREW THREADS PER MIL-STD-8839 BASED ON A STANDARD 1/2-13.5 MACHINED SURFACES 1/2				S. HUYNH April-27-07		1/1	1

ANTCOM CORP.

FLUSH MAGNETIC MOUNT
L1/L2 ACTIVE, OR PASSIVE
GPS ANTENNA

3G1215X-MNX-X

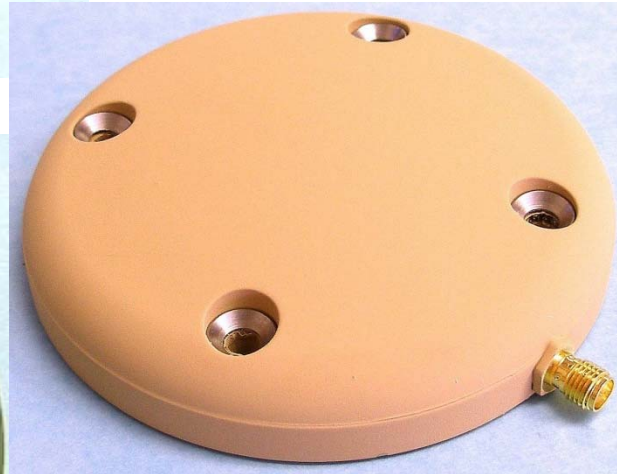
Active or Passive L1 GPS Antennas, P/N: 3G15X-NX-X:
3.5" Diameter Configurations, Flat, Front/back Mount, Side Connector



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P/N: 3G15X-XS-4,
SMA, Black



P/N: 3G15X-XS-5,
SMA, Tan

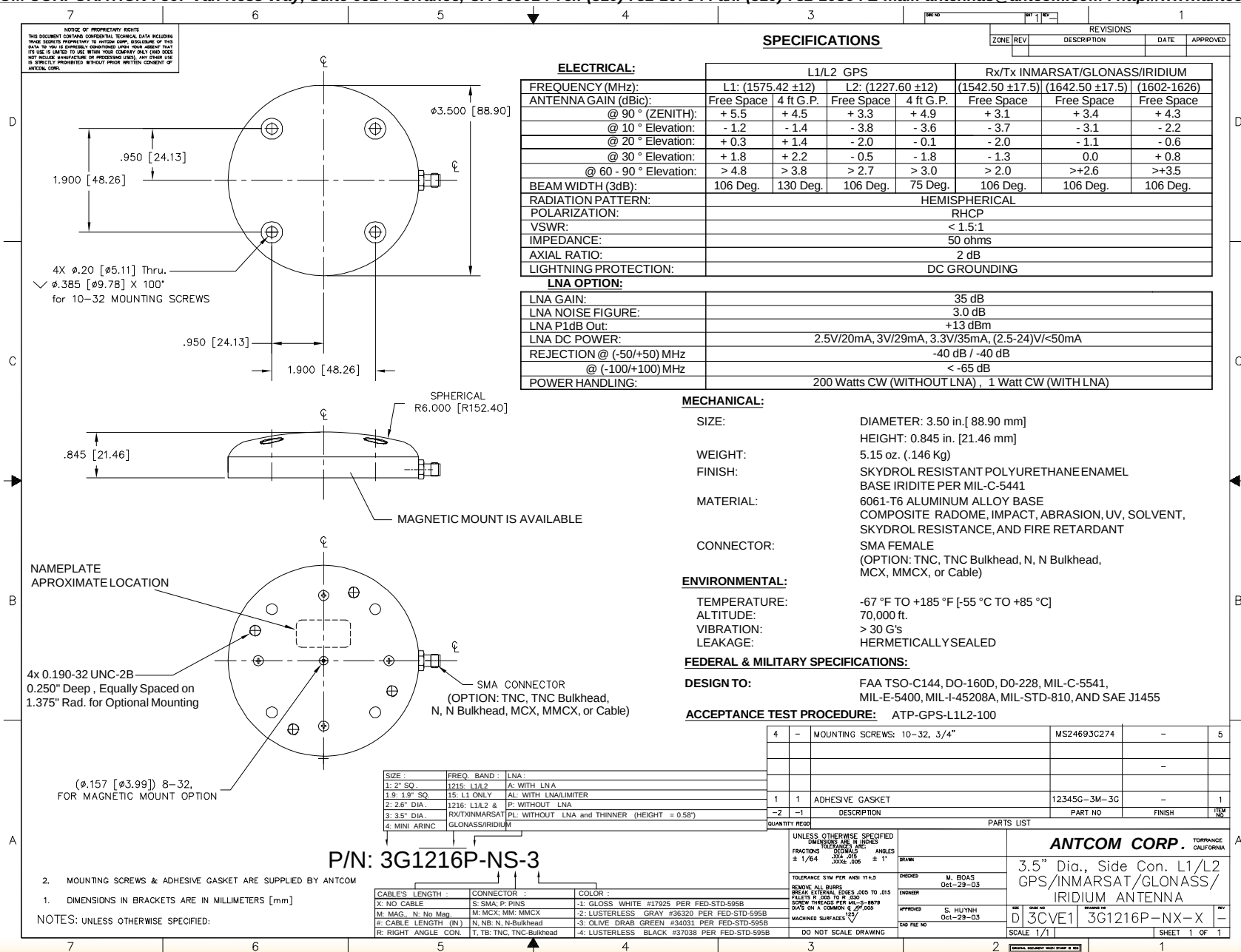


Hermetically Sealed, Designed for Harsh Environment Applications.

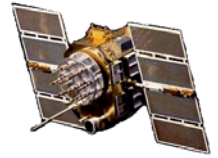
Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)



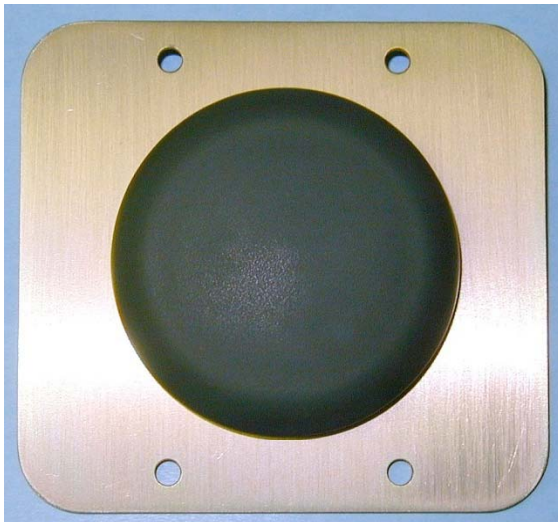
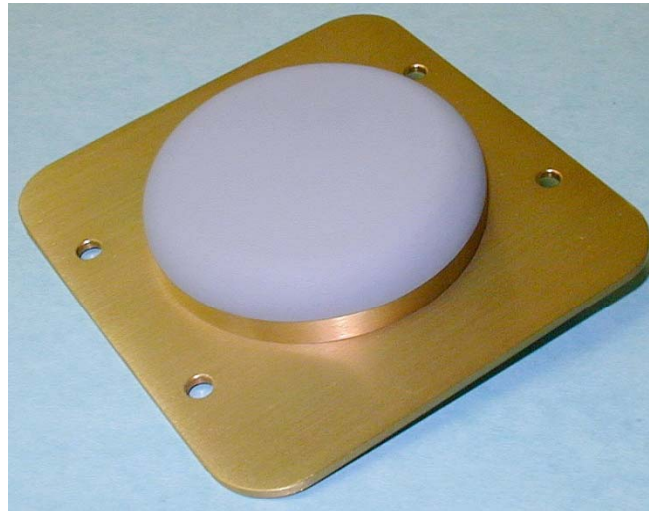
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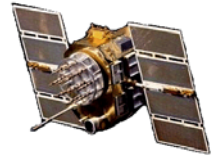
Active or Passive L1 GPS Antennas, P/N: 3.75G15X-XX-X: (3.75"x4.0") Configurations



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Active or Passive L1 GPS Antennas, P/N: 3CG15X-XX-X: 3.5" Square, Conformal Configurations



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P/N: 3CG15P-RS-E-3



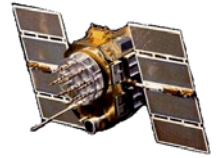
P/N: 3CG15P-RS-E-4



Hermetically Sealed, Designed for Harsh Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)

Active or Passive L1 GPS Antennas, P/N: 31G15X-XX-X: 3.5" Diameter, Low Weight Configurations



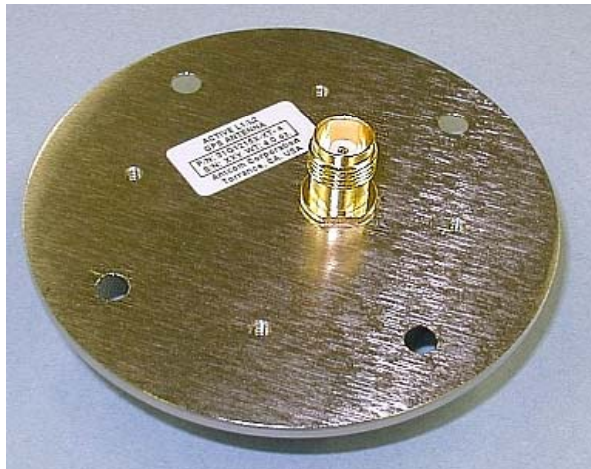
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P/N: 31G15X-XX-4 (Black)



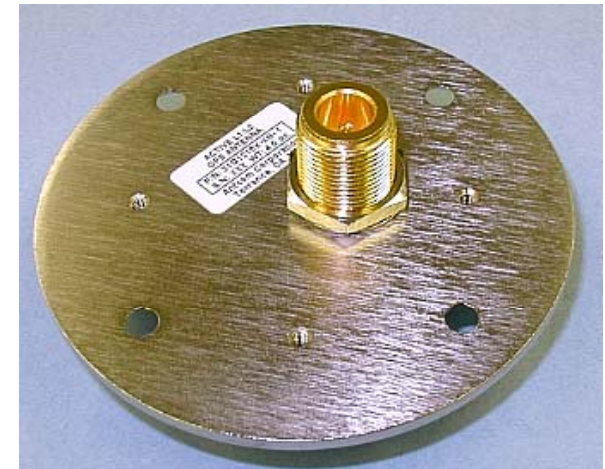
P/N: 31G15X-XX-1 (White)



P/N: 31G15X-XT-X (TNC)



P/N: 31G15X-XS-X (SMA)

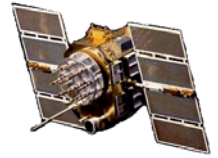


P/N: 31G15X-XN-X (TNC)

Hermetically Sealed, Designed for Harsh Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)

Active or Passive L1 GPS Antennas, P/N: 4G15X-XX-X: (3.4" x 2.2") Mini Arinc Configurations



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P/N: 4G15X-XX-2



P/N: 4G15X-XX-3



P/N: 4G15X-XX-4



P/N: 4G15X-XX-1

P/N: 4G15X-XS-X



P/N: 4G15X-XTB-X

P/N: 4G15X-XN-X

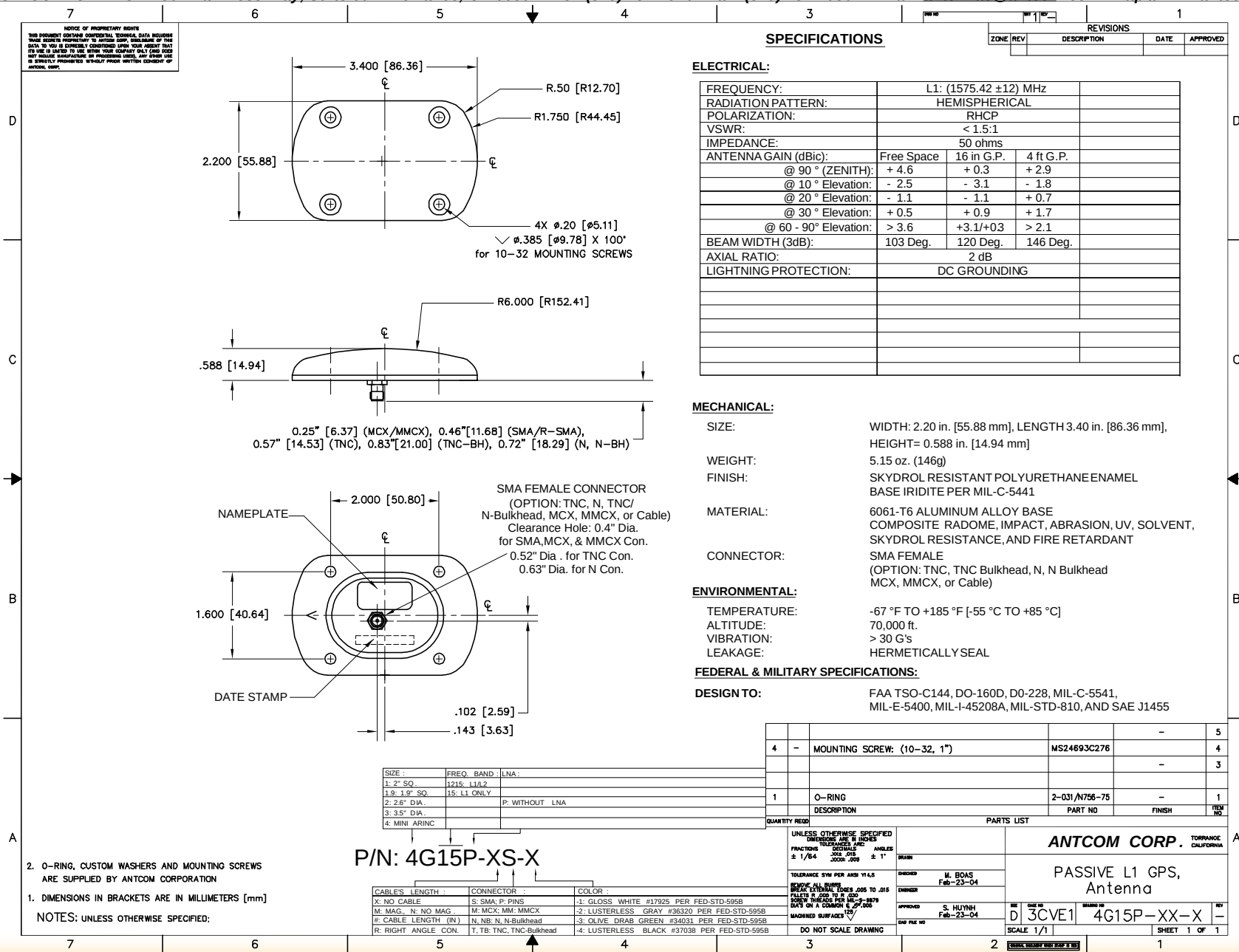
P/N: 4G15X-XS-X

Hermetically Sealed, Designed for Harsh Environment Applications. Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)

Passive L1 GPS Antenna, P/N: 4G15P-XX-X: (3.4" x 2.2") Mini Arinc Configuration



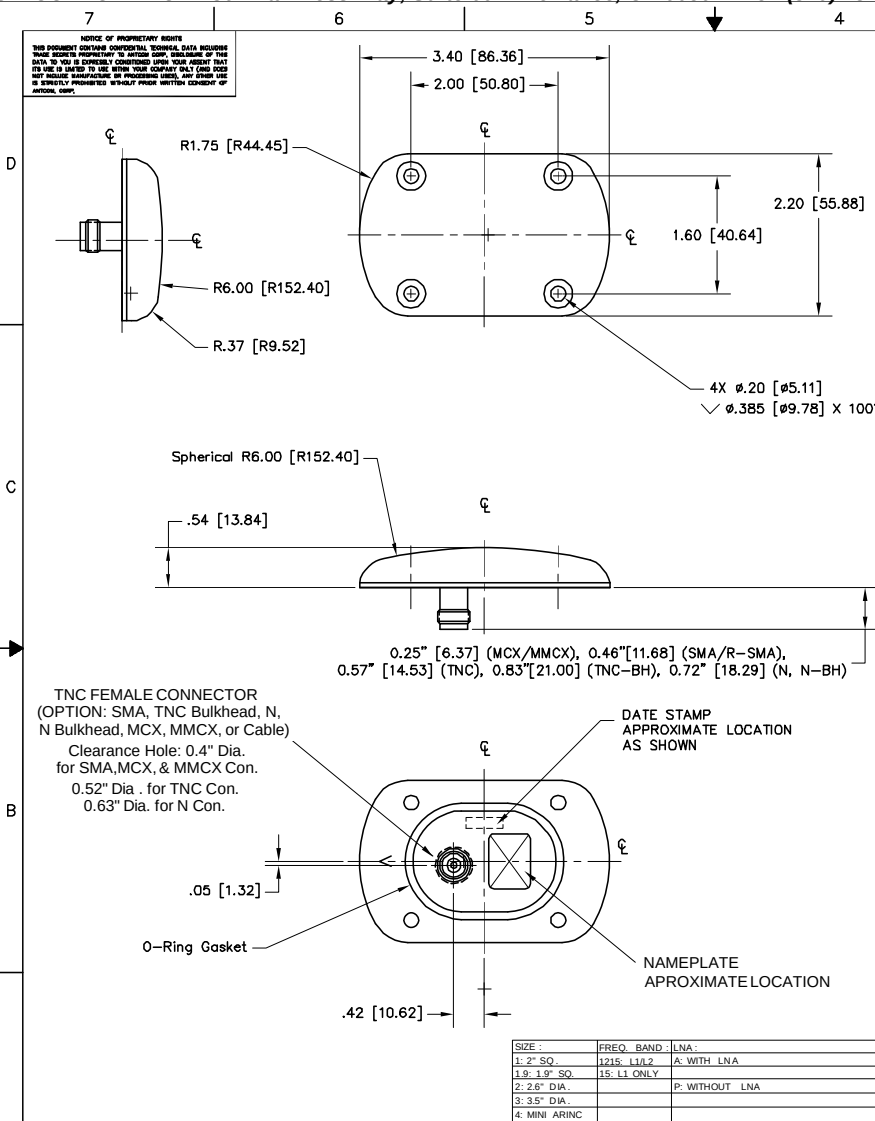
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Active L1 GPS Antenna, P/N: 4G15A-XX-X-L: (3.4" x 2.2") Mini Arinc Configuration



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SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±12) MHz
RADIATION PATTERN:	HEMISPHERICAL
POLARIZATION:	RHCP
VSWR:	< 1.5:1
IMPEDANCE:	50 ohms
ANTENNA GAIN (dBic):	Free Space 16 in G.P. 4 ft G.P.
@ 90 ° (ZENITH):	+ 4.6 + 0.3 + 2.9
@ 10 ° Elevation:	- 2.5 - 3.1 - 1.8
@ 20 ° Elevation:	- 1.1 - 1.1 + 0.7
@ 30 ° Elevation:	+ 0.5 + 0.9 + 1.7
@ 60 - 90 ° Elevation:	> 3.6 +3.1/+0.3 > 2.1
BEAM WIDTH (3dB):	103 Deg. 120 Deg. 146 Deg.
AXIAL RATIO:	2 dB
LIGHTNING PROTECTION:	DC GROUNDING
LNA GAIN:	27 dB
LNA NOISE FIGURE:	1.4 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	(3-10) Volts/ 20mA

MECHANICAL:

SIZE:	WIDTH: 2.20 in. [55.88 mm], LENGTH 3.40 in. [86.36 mm], HEIGHT: 0.54 in [13.84 mm]
WEIGHT:	5.15 oz. (146g)
FINISH:	SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	TNC FEMALE (OPTION: SMA, TNC Bulkhead, N, N Bulkhead MCX, MMCX, or Cable)

ENVIRONMENTAL:

TEMPERATURE:	-67 °F TO +185 °F [-55 °C TO +85 °C]
ALTITUDE:	70,000 ft.
VIBRATION:	> 30 G's
LEAKAGE:	HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

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

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	QTY REQD
4	MOUNTING SCREW: (10-32, 1")	MS24693C276	-	5
1	O-RING	2-031/N756-75	-	1

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
FRACTIONS DECIMALS ANGLES
± 1/64 .002 .015 ± 1°
TOLERANCE 5% PER ANSI Y14.5
BREAK ALL SHARP
BREAK EXTERNAL EDGES .005 TO .015
FILL IN .002 TO .015
DAYS ON A COUGH & 2000
MACHINED SURFACES
DO NOT SCALE DRAWING

ANTCOM CORP. TORRANCE, CALIFORNIA

LOW COST
ACTIVE L1 GPS,
GSD Antenna

D 3CVE1 4G15A-XT-X-L-1

SCALE 1/1

SHEET 1 OF 1

P/N: 4G15A-XT-1-L

CABLES LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAC, N: NO MAG	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
P: CABLE LENGTH (IN)	N, NB, N, N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T, TB: TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

2. O-RING, CUSTOM WASHERS AND MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
- NOTES: UNLESS OTHERWISE SPECIFIED:



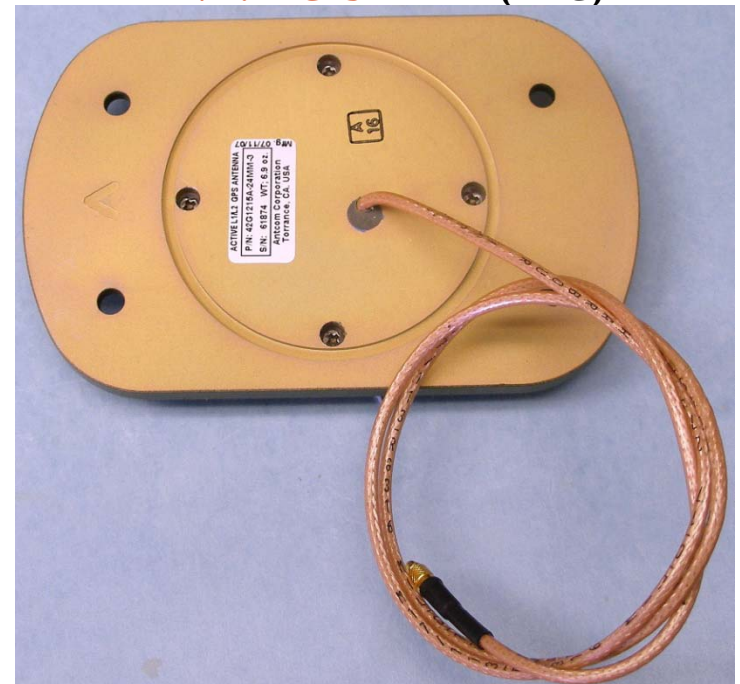
P/N: 42G15A-XT-1 (White)



P/N: 42G15A-XT-X (TNC)



P/N: 42G15A-XT-3 (Green)

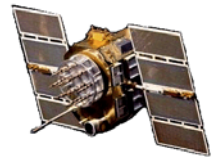


P/N: 42G1215A-24MM-3

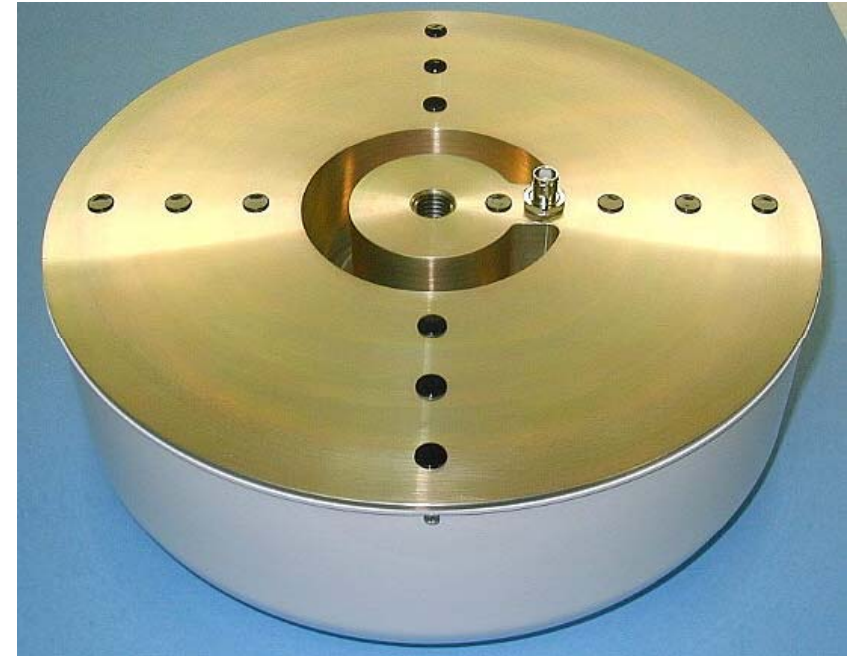
**Hermetically Sealed,
Designed for Harsh
Environment
Applications.**

**Connector is Available
in SMA, MCX,
MMCX, TNC, TNC-B,
N, or N-Bulkhead (See
Drawing)**

Active L1 GPS Antennas, P/N: 123G15A-XT-1:
12" Diameter Choke Ring, Pipe Mount Configuration

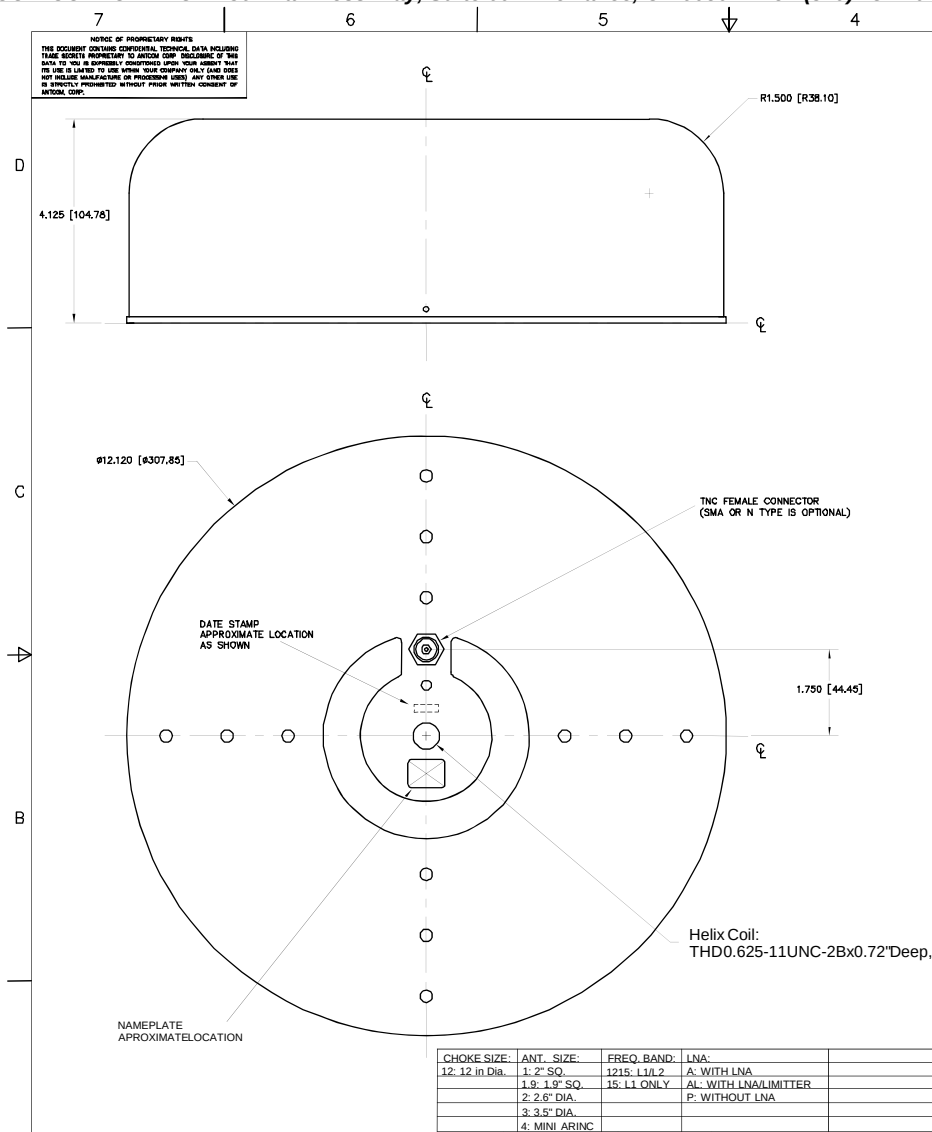


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P/N: 123G1215A-XT-1

2. MOUNTING SCREWS ARE SUPPLIED BY ANTCDM CORPORATION
1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

CABLE LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG., N: NO MAG.	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	N: NB, N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TB; TNC, TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

SPECIFICATIONS

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROV

ELECTRICAL:

FREQUENCY:	L1: (1575.42 ±13) MHz	
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
GAIN (dBiC) & AR (dB)	GAIN	AR
@ 90° (Zenith):	+8.2	2.4
@ 10° Elevation:	-5.0	3.0
@ 20° Elevation:	-2.3	3.0
@ 30° Elevation:	-0.5	3.0
@ 45° Elevation:	+3.0	3.0
@ 70° Elevation:	+7.0	2.0
BEAM WIDTH (3dB)	70.0 Deg.	
LIGHTNING PROTECTION:	DC GROUNDING	
LNA GAIN:	33 dB	
LNA NOISE FIGURE:	2.2 dB	
LNA P1dB Out:	+13 dBm	
LNA DC POWER:	2.5V/20mA, 3V/20mA, 3.3V/20mA, (2.5-24)V/ <30mA	
REJECTION @ (-50/+50) MHz	-45 dB / -70 dB	
@ (-100/+100) MHz	< -65 dB	
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)	

MECHANICAL:

SIZE:	DIAMETER: 12.120 in [307.85mm] HEIGHT: 4.125 in [104.78 mm]
WEIGHT:	4.5 lbs. (2.04 Kg)
FINISH:	SKYDROLRESISTANTPOLYURETHANEENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL:	6061-T6ALUMINUMALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,SKYDROLRESISTANCE
CONNECTOR:	TNC FEMALE (SMA, OR N TYPE IS OPTIONAL)

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
 ALTITUDE: 70,000 ft.
 VIBRATION: > 30 G's
 LEAKAGE: HERMETICALLY SEALED

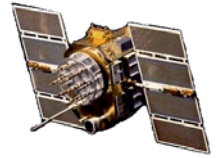
FEDERAL & MILITARY SPECIFICATIONS:

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

4	-	MOUNTING SCREWS	MS24693C273	
1	1	INTERNAL ANTENNA / CABLE	3G15A-XS-1 / RG316-2134- 5.5"	
1	1	CHOKE RING ADAPTER	12G121SP001-B4	
1	1	CHOKE RING / PLUGS	12G121SP001-B3 / 85985K12	
1	1	RADOME	12G1215-R2-1	
-2	-1	DESCRIPTION	PART NO	
QUANTITY REQD		PARTS LIST		

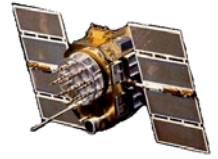
[illegible]

Active L1 GPS Antenna, P/N: 123GM15A-XT-1:
12" Diameter Choke Ring, Pipe Mount Configuration



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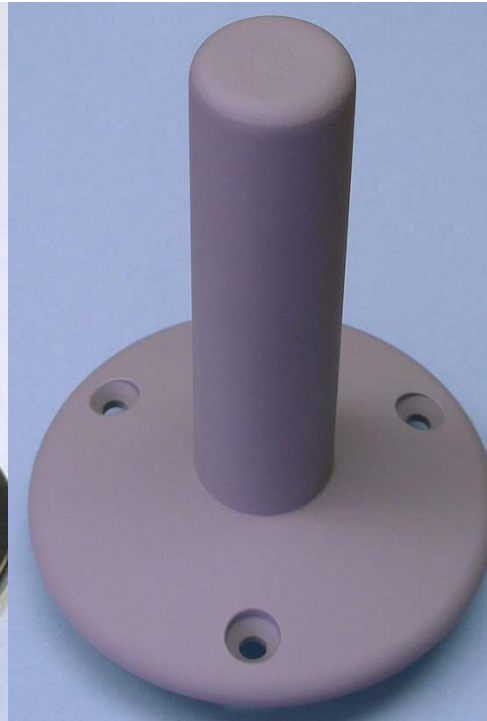




S53IR16RR-P-XTB-1
(White)



S53IR16RR-P-XTB-4
(Black)



S53IR16RR-P-XTB-2
(Gray)



S53IR16RR-P-XTB-3
(Green)

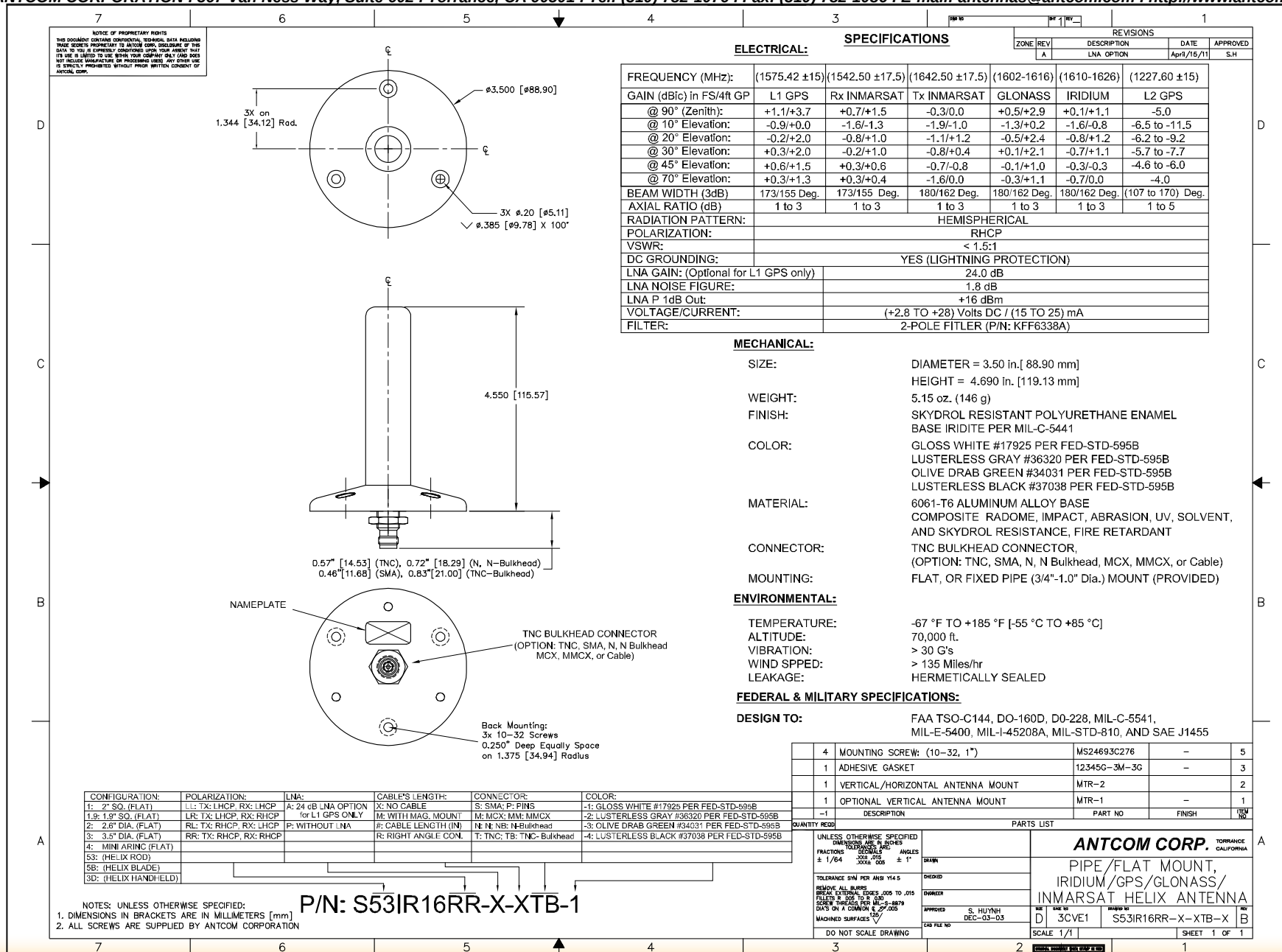
Hermetically Sealed, Designed for Harsh Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)

L1 or L1L2 GPS & Inmarsat/Iridium/Glonass Antennas, P/N: S53IR16RR-X-XX-X: 3.5" Diameter x 4.5" Tall, Pipe/Flat Mount Configurations

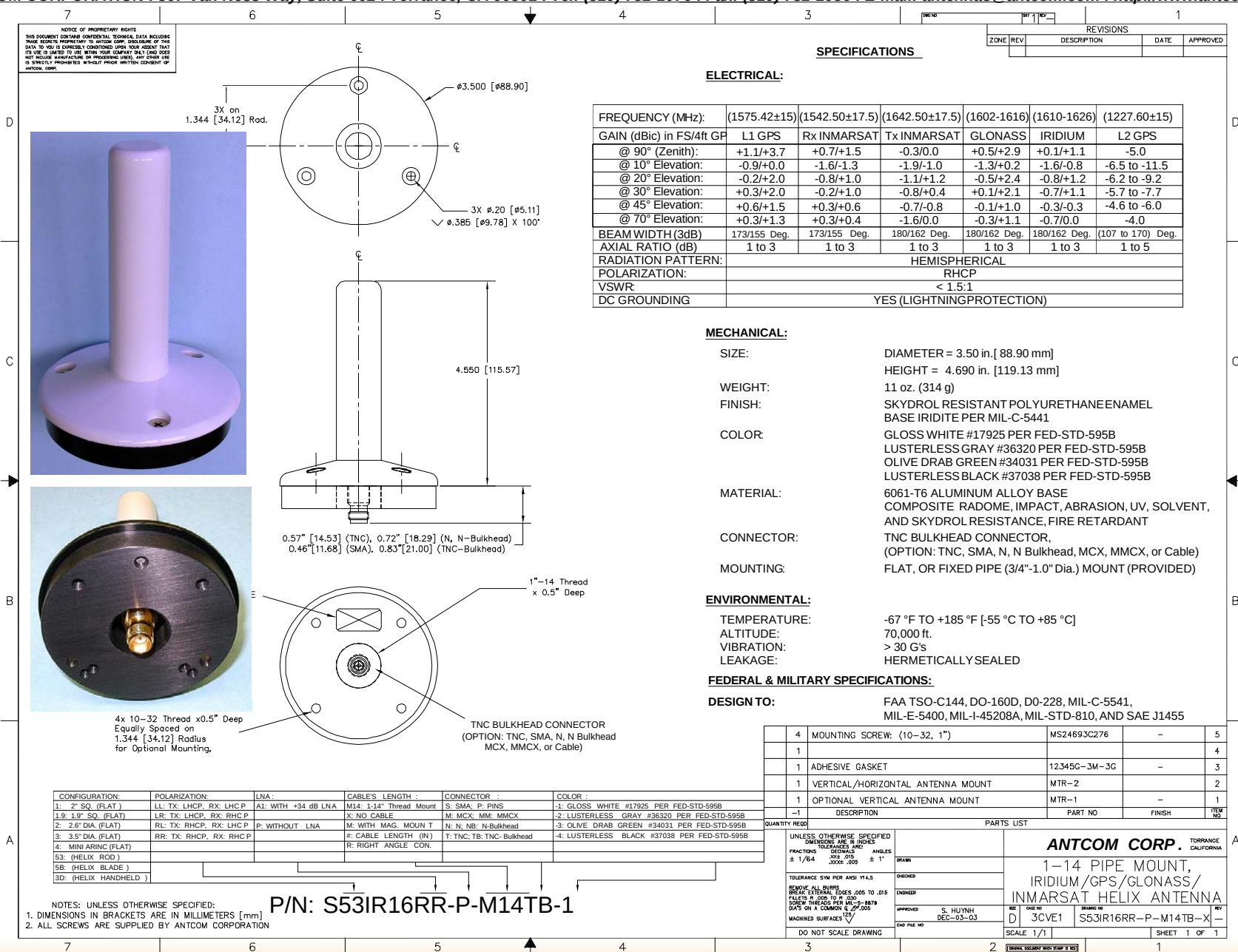


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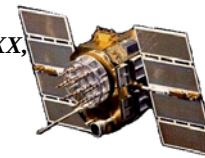


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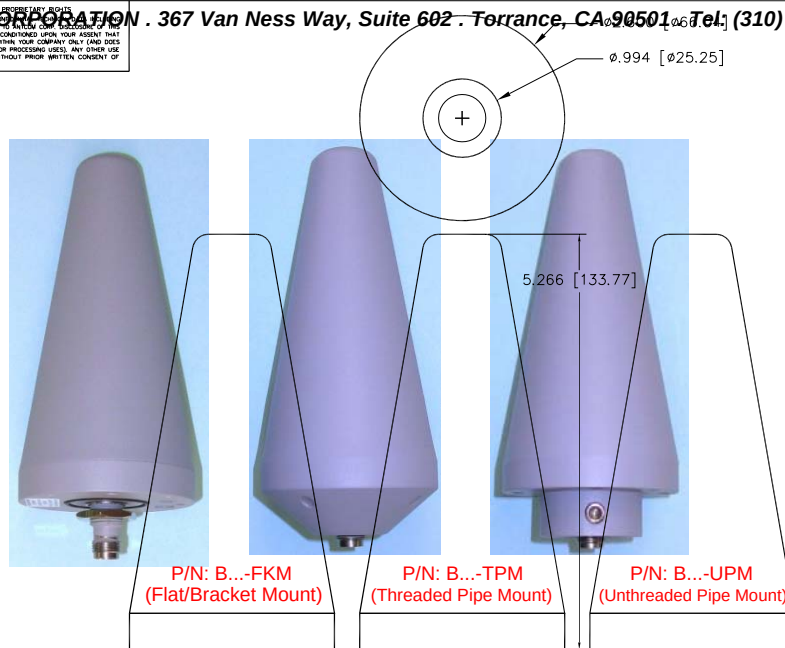


New Ruggedized, High Corrosion/Harsh Environmental Resistant Helix Antennas
Inmarsat/Iridium/L1GPS/Glonass/Omnistar: P/N: **BLNR-X-XX-U-XXX**, **Iridium/L1GPS/Glonass/Omnistar:** P/N: **BLRR-X-XX-U-XXX**,
Thuraya/Tx-Globalstar: P/N: **BTL-X-XX-U-XXX**, **Active L1 GPS:** P/N: **BLI-A-XX-U-XXX**,
Active L1 GPS/Glonass/L-Band: P/N: **BG3-A-XX-U-XXX**, **for Active L1/L2:** P/N: **BL1L2-A-XX-U-XXX**
for Buoy, Marines, Underwater, Ground, Weather Balloon, and Helicopter Applications
ISO9001 Also Available in other Mounting Configurations of 3G, 4G, 42G, 5G, S5, Mini-Arinc, and Arinc-743 Antenna Series



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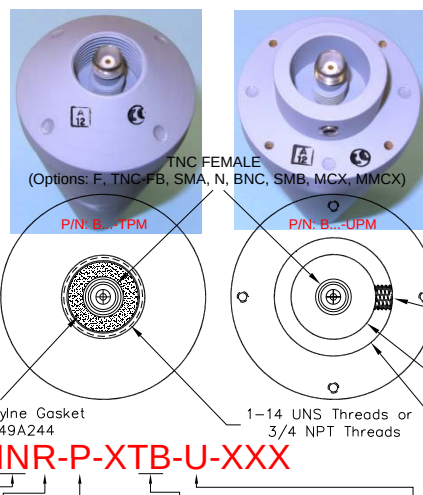
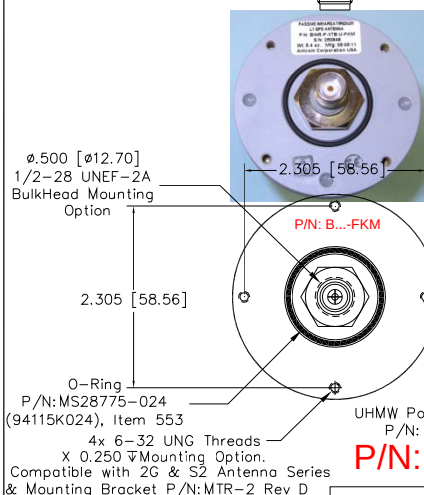
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P/N: B...-FKM
(Flat/Bracket Mount)

P/N: B...-TPM
(Threaded Pipe Mount)

P/N: B...-UPM
(Unthreaded Pipe Mount)



FREQUENCY (MHz):	(1575.42 ±15)	(1542.50 ±17.5)	(1642.50 ±17.5)	(1602-1616)	(1610-1626.5)	(1217.42 ±15)
GAIN (dBi) in FS/4ft GP	L1 GPS	Rx Inmarsat/B1 or Thuraya	Tx Inmarsat or Thuraya	GLONASS	IRIDIUM or Tx Globalstar	L2 GPS for L1/L2 Version
@ 90° (Zenith):	+1.1/+3.7	+0.7/+1.5	-0.3/0.0	+0.5/+2.9	+0.1/+1.1	0.0
@ 10° Elevation:	-0.9/+0.0	-1.6/-1.3	-1.9/-1.0	-1.3/+0.2	-1.6/-0.8	-2.4 to -6.3
@ 20° Elevation:	-0.2/+2.0	-0.8/+1.0	-1.1/+1.2	-0.5/+2.4	-0.8/+1.2	-1.8 to -4.8
@ 30° Elevation:	+0.3/+2.0	-0.2/+1.0	-0.8/+0.4	+0.1/+2.1	-0.7/+1.1	-1.3 to -3.4
@ 45° Elevation:	+0.6/+1.5	+0.3/+0.6	-0.7/-0.8	-0.1/+1.0	-0.3/-0.3	-0.5 to -1.5
@ 70° Elevation:	+0.3/+1.3	+0.3/+0.4	-1.6/0.0	-0.3/+1.1	-0.7/0.0	0.0 to -0.5
BEAM WIDTH (3dB)	173/155 Deg.	173/155 Deg.	180/162 Deg.	180/162 Deg.	180/162 Deg.	120/165 Deg.
AXIAL RATIO (dB)	1 to 3	1 to 3	1 to 3	1 to 3	1 to 3	1 to 5
RADIATION PATTERN:	HEMISPHERICAL					
POLARIZATION:	RHCP	RHCP or LHCP	RHCP or LHCP	RHCP	RHCP or LHCP	RHCP
VSWR:	< 2:1					
DC GROUNDING:	YES (LIGHTNING PROTECTION)					

LNA OPTION (for GNSS or GNSS/Rx only VERSIONS (...-A-...)):

LNA GAIN (OPTION):	33 dB
LNA NOISE FIGURE:	3.0 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	(2.5 to 24)V / < 50mA
POWER HANDLING:	PASSIVE:10W; LNA ACTIVE: 1 Watt CW

MECHANICAL:

SIZE: DIAMETER: 2.600in. [66 mm]
HEIGHT: 5.266 in. [133 mm]
WEIGHT: < 8oz. (226g)
FINISH: HERMETICALLY SEAL & TEFLON COATED

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE & RUGGEDIZED RADOME
IMPACT, ABRASION, UV, SOLVENT, SKYDROL,
CORROSION RESISTANCE, AND FIRE RETARDANT
CONNECTOR: TNC FEMALE
(OPTION: TNC-BK, F, SMA, BNC, N, MCX, MMCX)

ENVIRONMENTAL:

TEMPERATURE: -95 °F TO +194 °F [-70 °C TO +90 °C]
-2000ft to +70,000 ft. (for -U-FKM/-U-TPM, from Mounting Surface)
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, MIL-STD-461E/F, AND SAE J1455

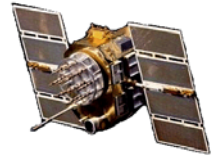
ACCEPTANCE TEST PROCEDURE:

ATP-GPS-L1L2-100

M8-1.25
Set Screw
P/N: 92015A139
(Item 573)
Ø1.075 [Ø27.31]
will Fit in 1-14 UNS PIPE
& 3/4 NPT PIPE
Ø1.500 [Ø38.10]

1	Additional SILICON GASKET (Item 539a) for -FKM	3G15P1001-2-2G
DESCRIPTION		
PART NO		
QUANTITY REQD		
PARTS LIST		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES TOLERANCES ARE ± 1/64 ± .005 ± 1°		
TOLERANCE SW PER ANSI Y14.5		
REMOVE ALL BURRS BREAK EXTERNAL EDGES .005 TO .015 FILLET R .005 TO R .020 SEWER THREADS PER MIL-S-8879 DIA'S ON A COMMON C/P .005		
MACHINED SURFACES		
DO NOT SCALE DRAWING		
ANTCOM CORP. TORRANCE, CA		
Imarsat/Iridium/L1GPS, or Thuraya/Tx-Globalstar or L1-GPS, or L1-GPS/Glonass/L-Band/B1, or L1/L2-GPS, or L1/L2-GPS/Glonass/B1/B3/B2/L5 Antenna		
APPROVED S. HUYNH April-11-11	DATE 3C11 3C11	DRAWING NO BXXR-X-XX-X-XXX
CAD FILE NO	SCALE 1/1	SHEET 1 OF 1

FREQUENCY (GHz):	POLARIZATION:	LNA:	FEMALE CONNECTOR:	COLOR:
IN: Imarsat/Iridium/L1GPS/Glonass (RHCP); IR: Iridium/L1GPS/Glonass (RHCP)	R: RHCP	P: PASSIVE	T: TNC; TB: TNC-Bulkhead; F: F	-1: GLOSS WHITE #17925 PER FED-STD-595B PAINT
T: Thuraya/Tx Globalstar (LHCP); G: Tx only Globalstar (LHCP)	L: LHCP	A: with LNA/FILTERS for Rx only VERSIONS	S: SMA; SMB; SMR; B: BNC	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B PAINT
L1: L1 GPS Only; G3: L1 GPS/GLONASS/L-Band/B1; L1L2: L1/L2 GPS only	R: RHCP		M: MCX; MM: MMCX; MMR: MMCX-R	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B PAINT
G5: L1/L2 GPS/GLONASS/L-Band/B1/B3/B2/L5	R: RHCP		N: NIN-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B PAINT
L01: QUAD-BAND (GSM/PCS/L-Band/Locata/Wi-Fi/S/C-Band)	V: Linear (Vertical)		-5: TAN #1: FS 23446 or 33446, FED-STD-595 PAINT	



S5BIR16RR-P-XT-2

**Hermetically Sealed, Designed for
Harsh Environment Applications.**

**Connector is Available in SMA,
MCX, MMCX, TNC, TNC-B, N, or
N-Bulkhead (See Drawing)**



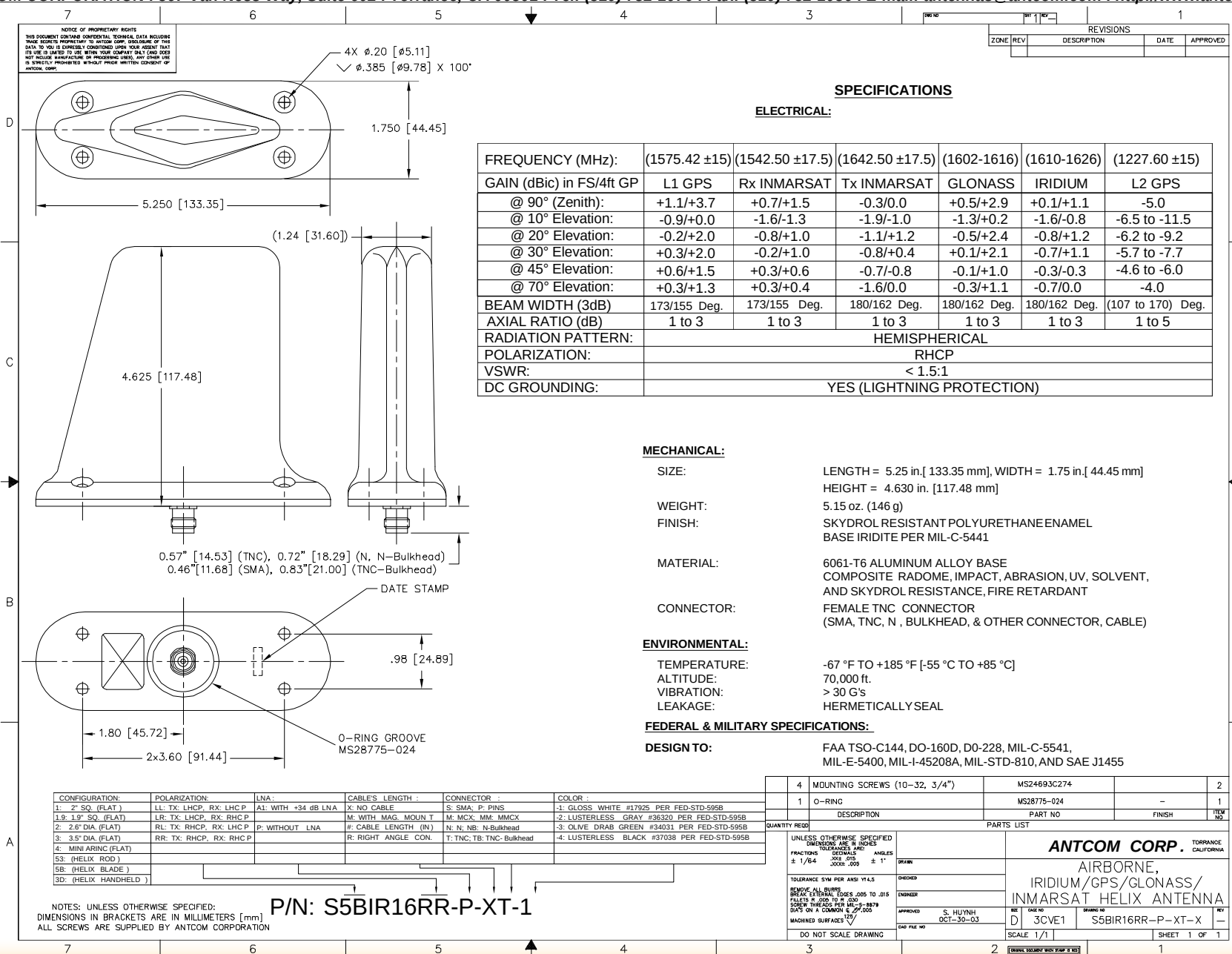
ISO9001

L1 or L1L2 GPS & Inmarsat/Iridium/Glonass Antennas, P/N: S5BIR16RR-P-XX-X:

4.6" Tall Blade Configurations



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P/N: 3D16RR-P-6PT-4



P/N: 3D16RR-P-6PT-3



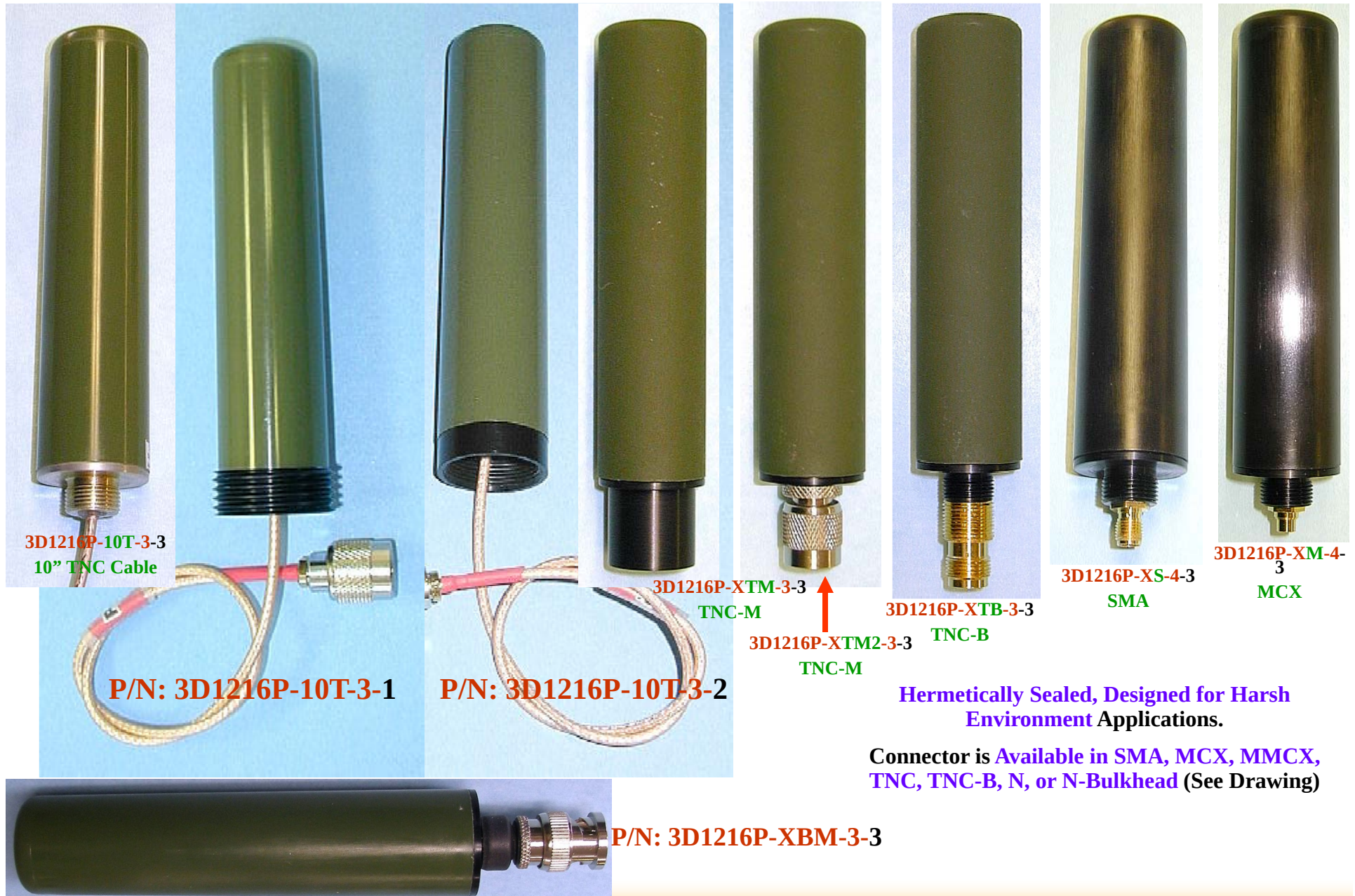
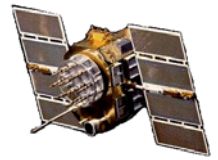
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P/N: 3D16RR-P-XPT-1



P/N: 3D16RR-P-XT-1

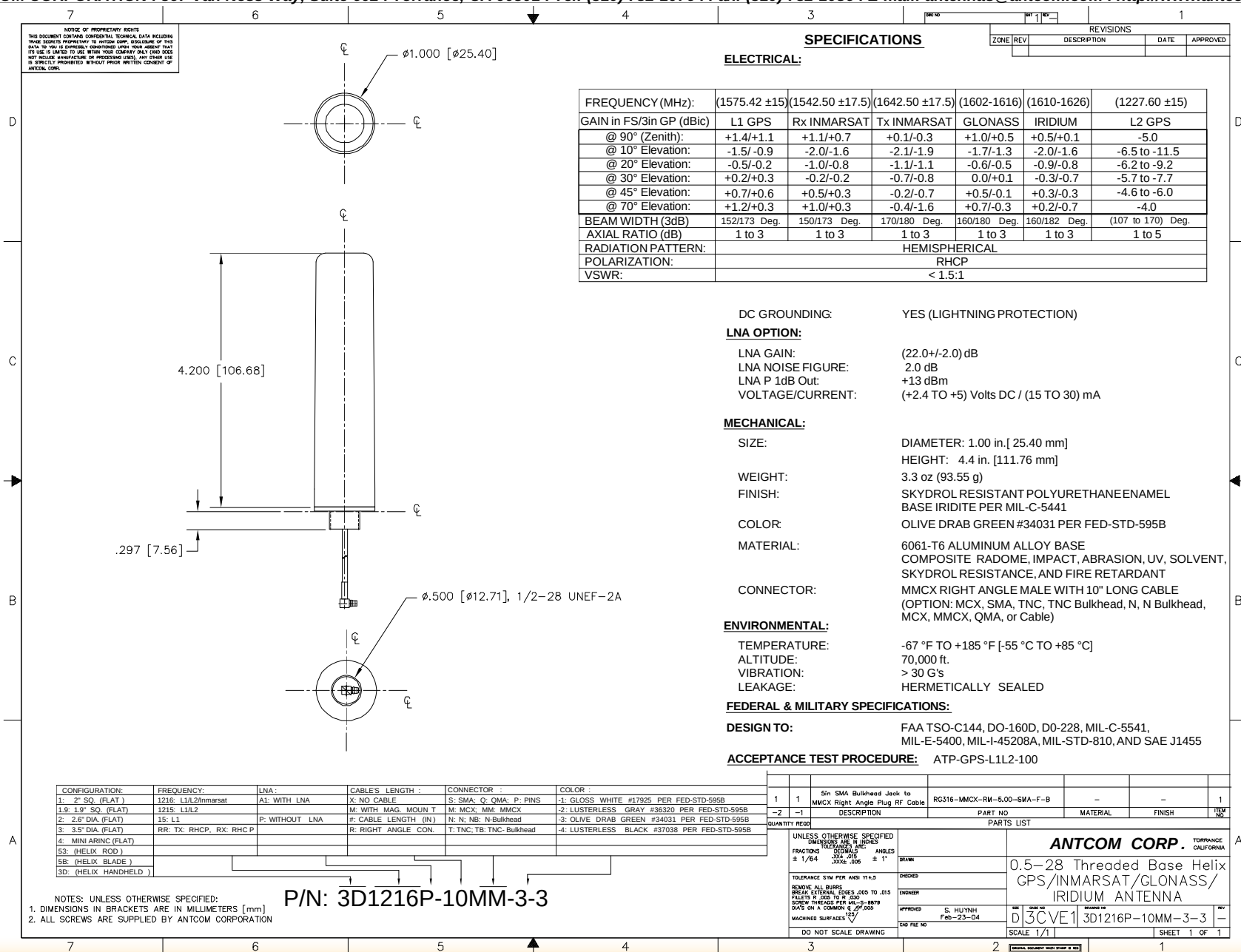


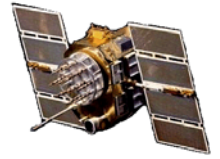


ISO9001

L1 or L1L2 GPS & Inmarsat/Iridium/Glonass Antennas, P/N: 3D1216P-10MM-X-X:**1" Diameter x 4.2" Tall, Threaded Bottom Mount Configuration**

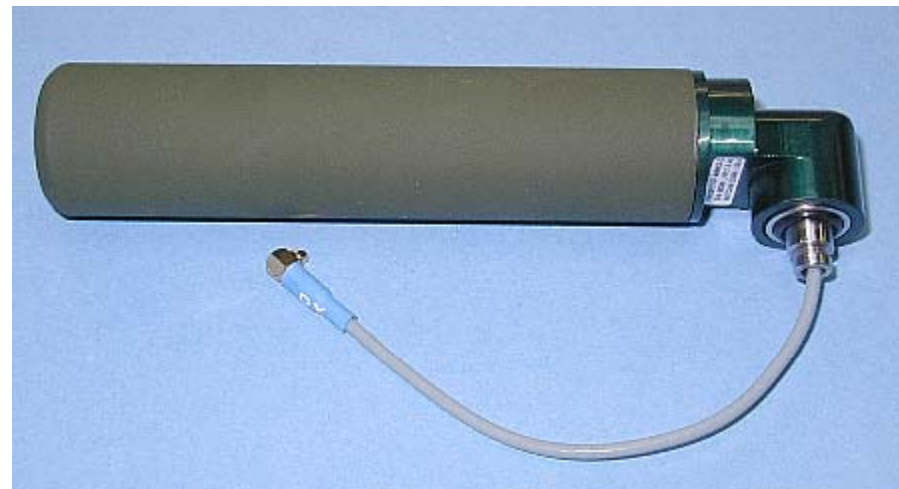
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**Hermetically Sealed,
Designed for Harsh
Environment
Applications.**

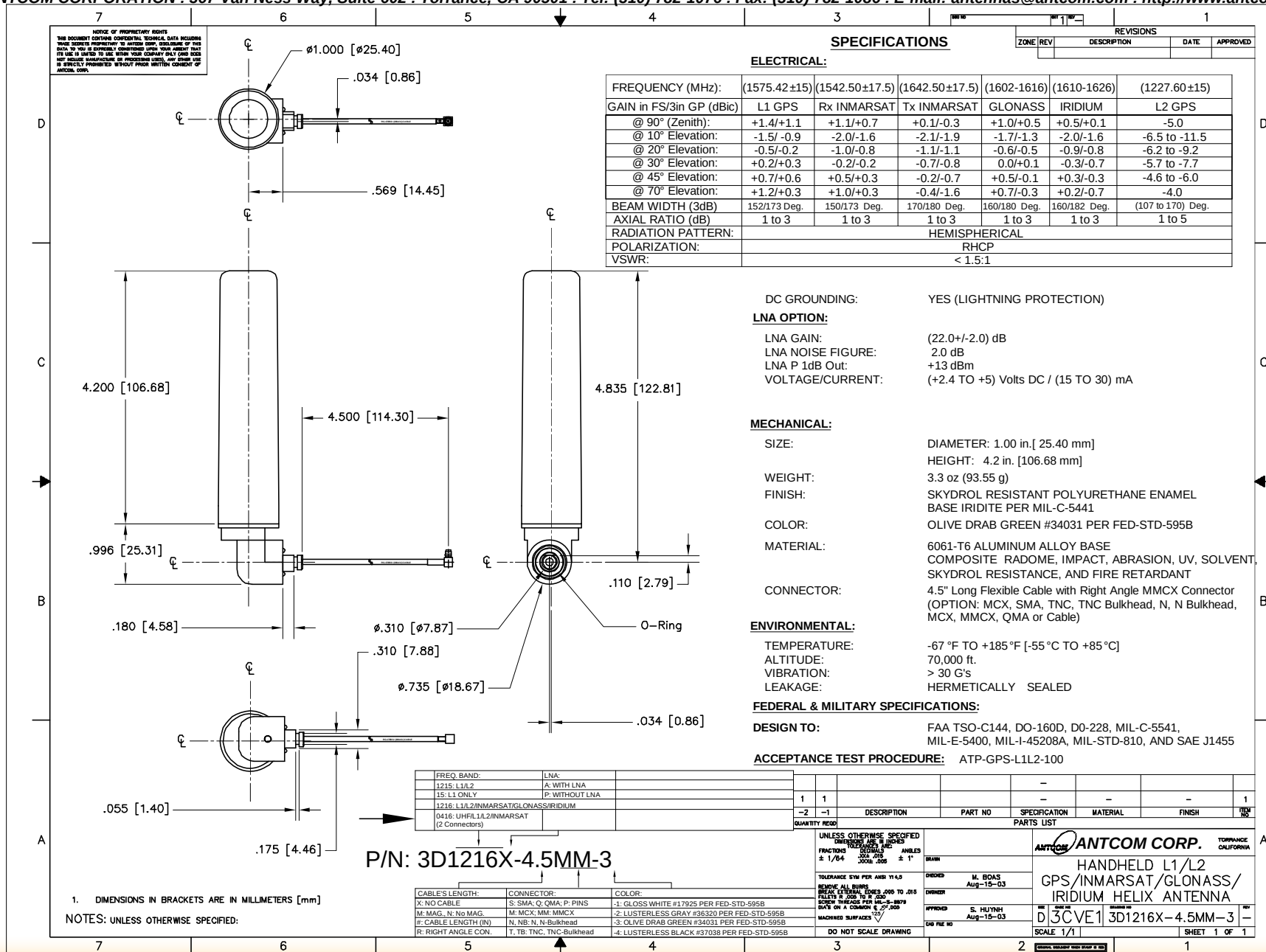
**Connector is Available
in SMA, MCX, MMCX,
TNC, TNC-B, N, or N-
Bulkhead (See Drawing)**



L1 or L1L2 GPS & Inmarsat/Iridium/Glonass Antennas, P/N: 3D1216P-4.5MM-3: 1" Diameter x 4.2" Tall, Swivel, Side Mount Configurations



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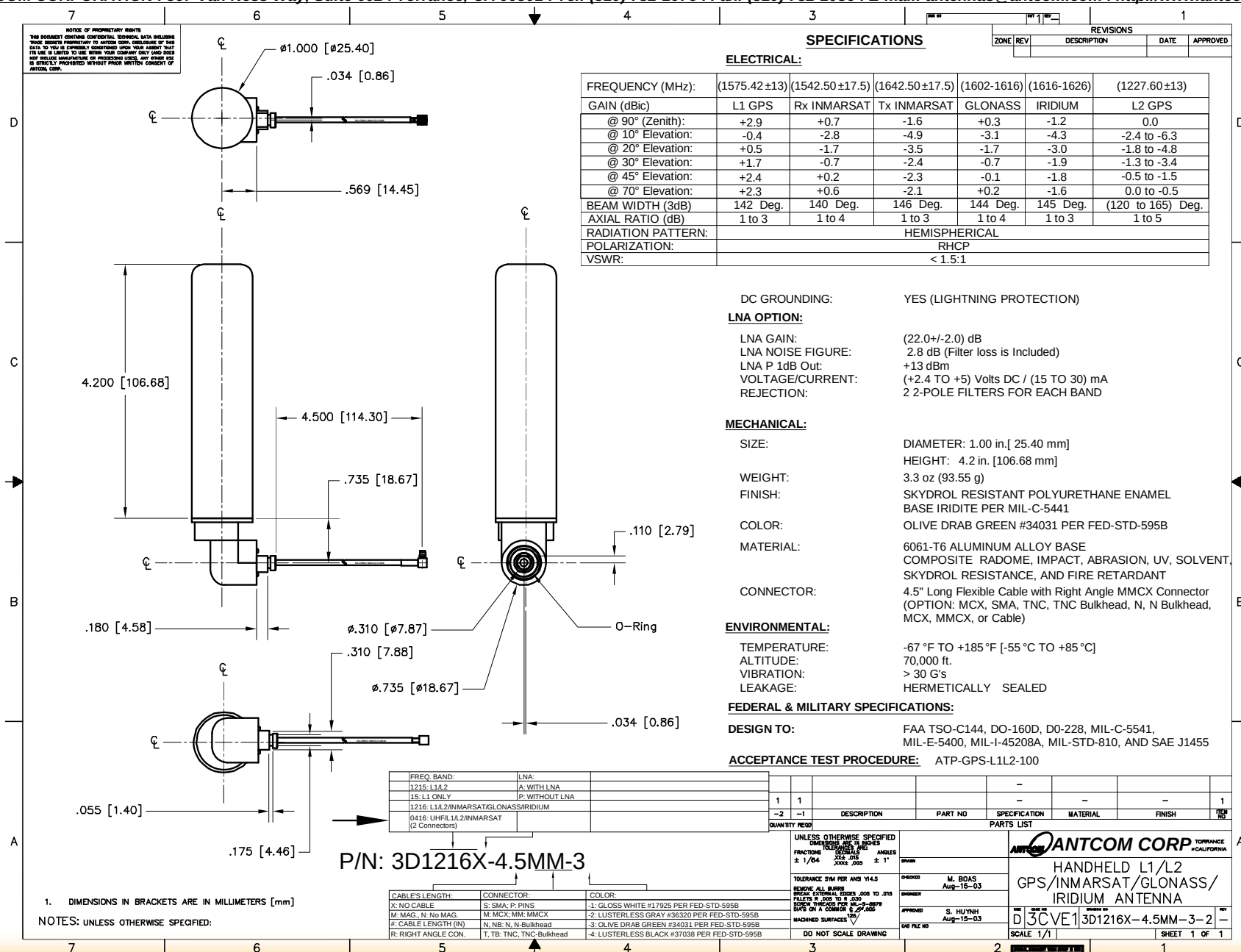




ISO9001

L1 or L1/L2 GPS & Inmarsat/Iridium/Glonass Antennas, P/N: 3D1216P-4.5MM-X-2:**1" Diameter x 4.2" Tall, Swivel, Side Mount (Better L2) Configurations**

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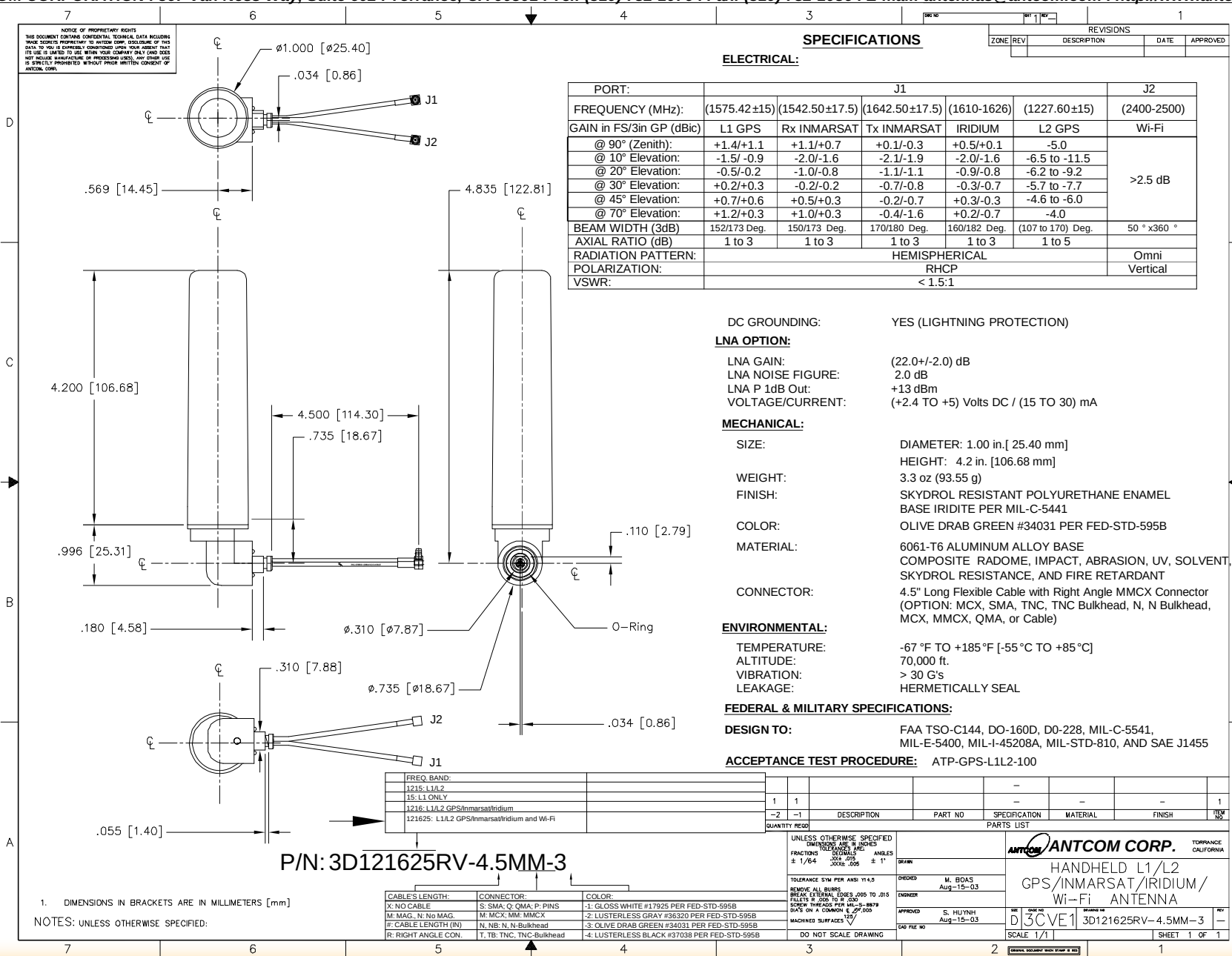
ISO9001

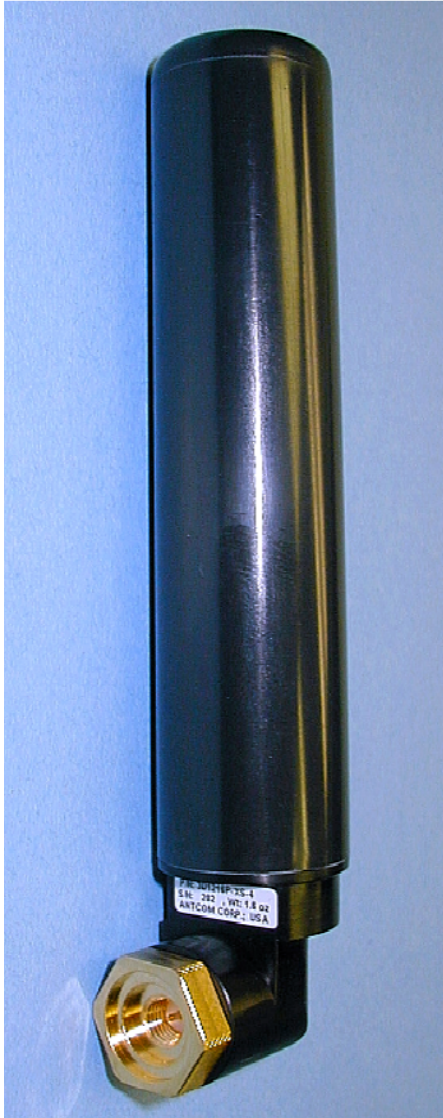
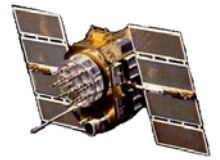
L1 or L1L2 GPS & Inmarsat/Iridium/Glonass & Wi-Fi Antennas, P/N: 3D121625RV-4.5MM-3:

1" Diameter x 4.2" Tall, Swivel, Side Mount Configurations

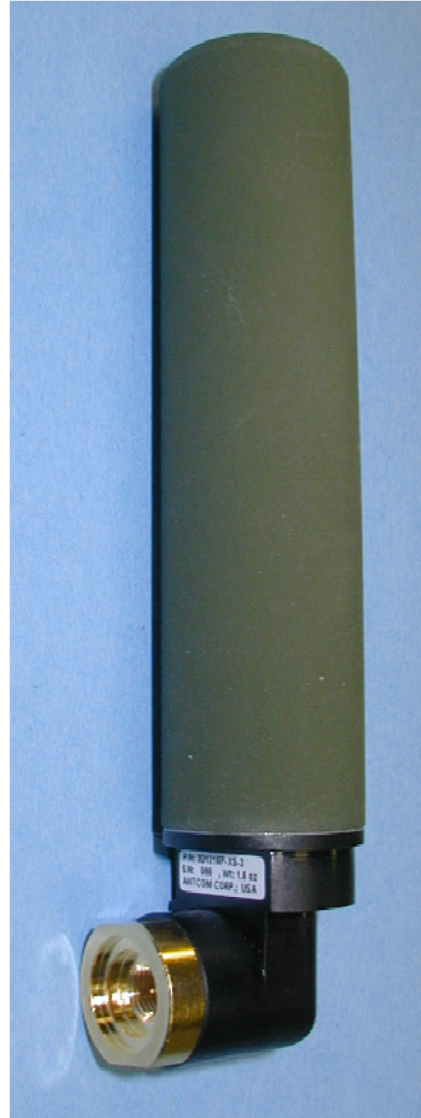


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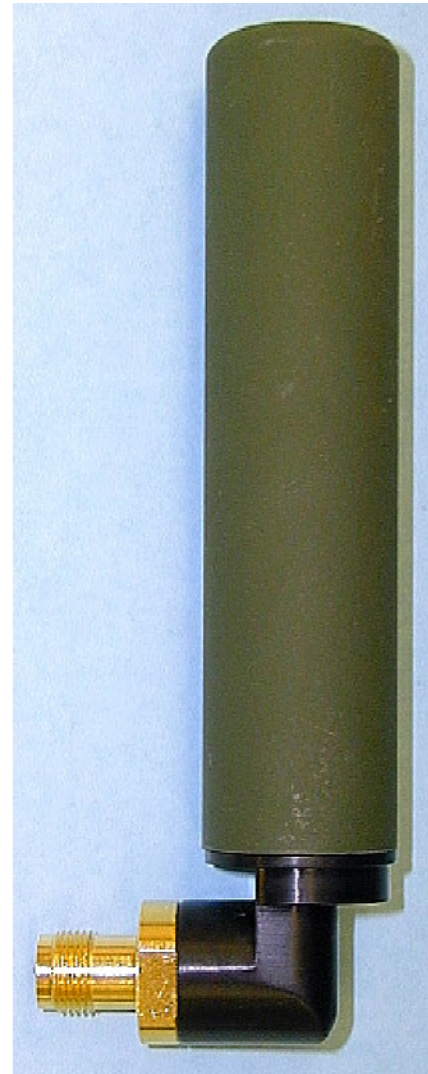




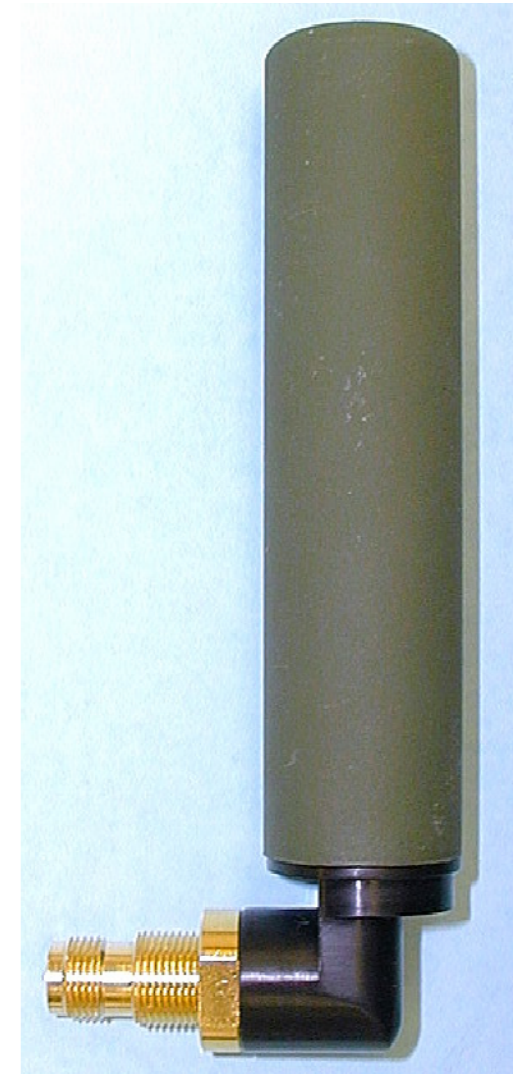
**P/N: 3D1216P-XS-4,
Black, SMA**



**P/N: 3D1216P-XS-3,
Green, SMA**



**P/N: 3D1216P-XT-3,
Green, TNC**

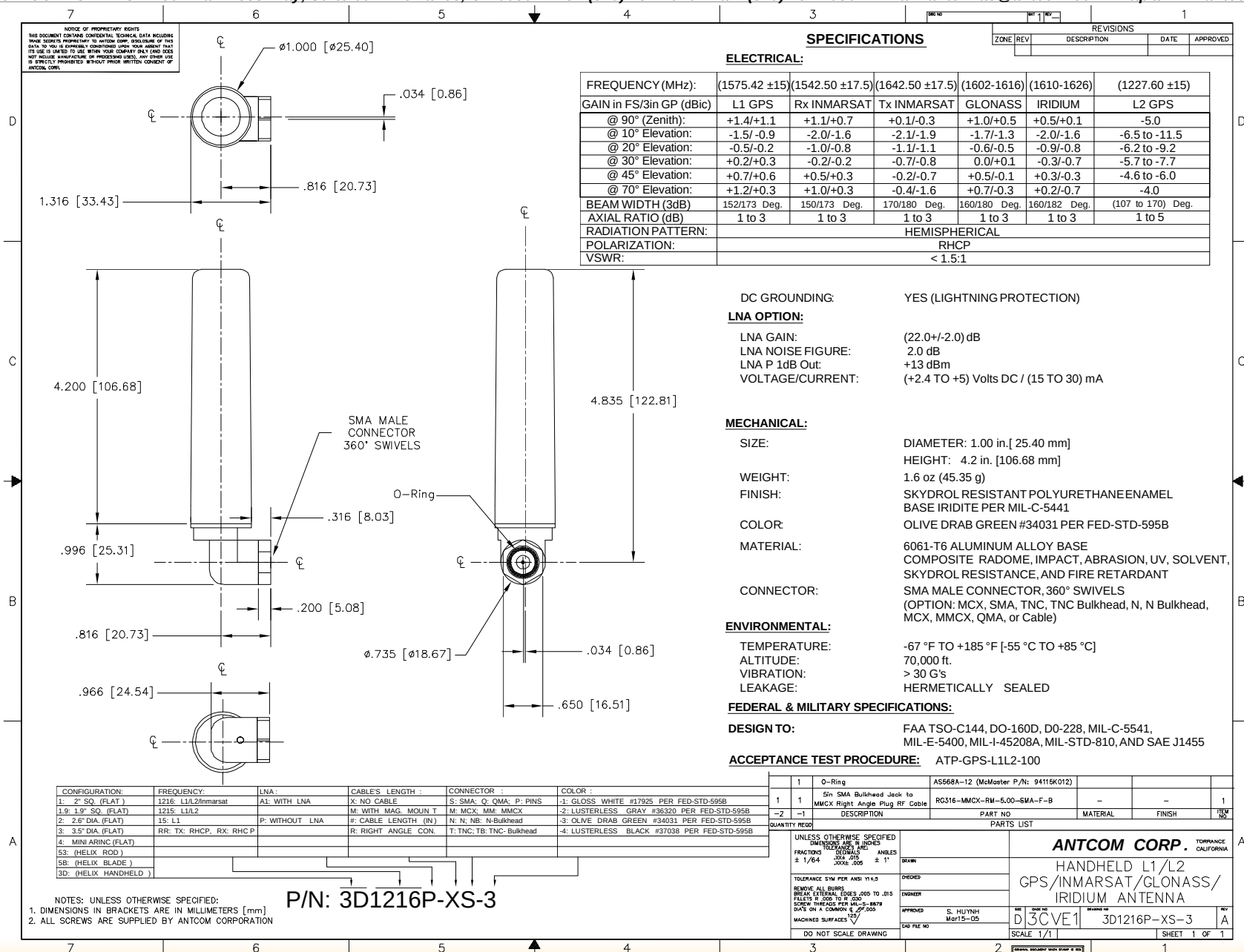


**P/N: 3D1216P-XTB-3,
Green, TNC-B**

L1 or L1L2 GPS & Inmarsat/Iridium/Glonass Antennas, P/N: 3D1216P-XS-X: 1" Diameter x 4.2" Tall, Swivel, Side Mount Configurations



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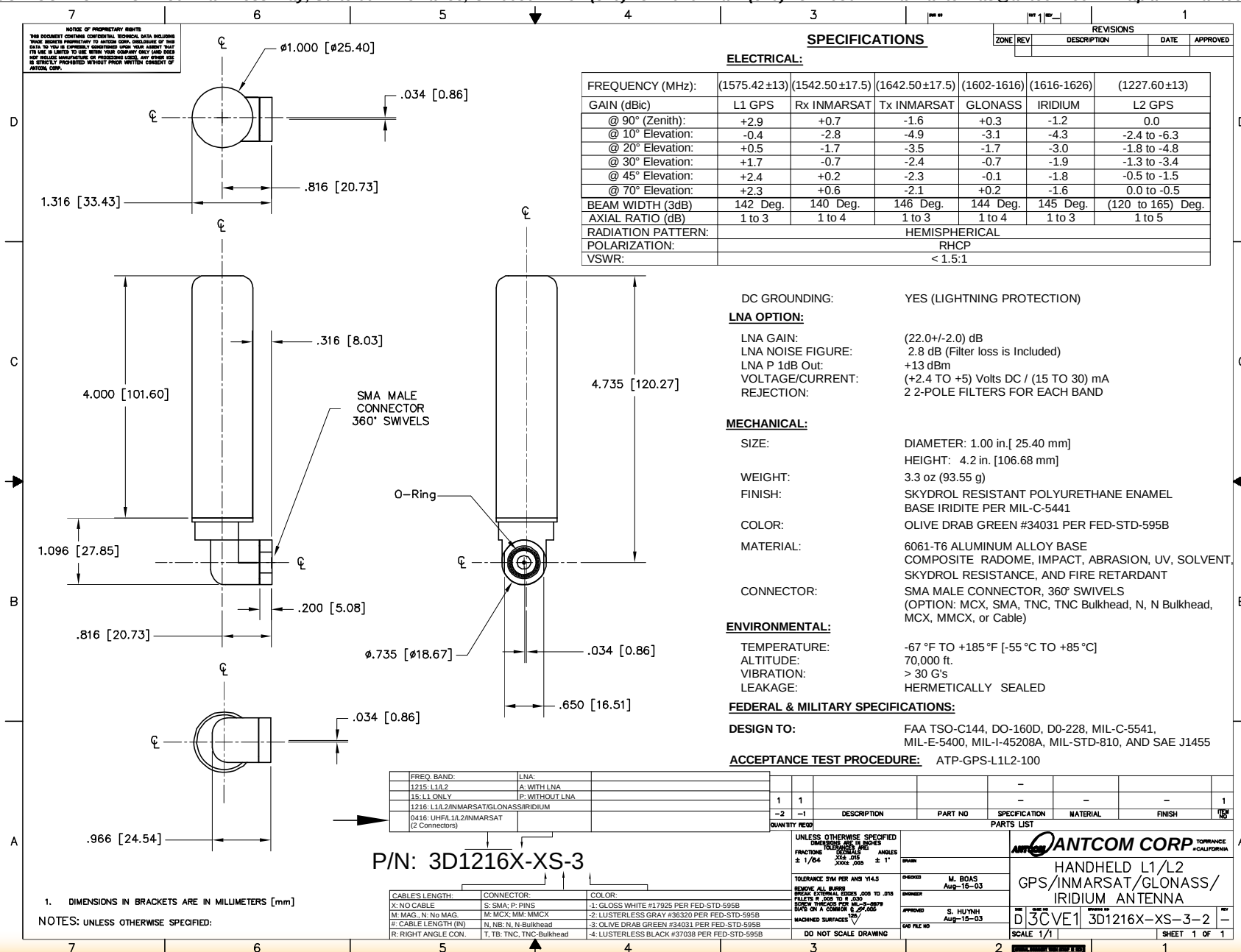


L1 or L1/L2 GPS & Iridium/Inmarsat/Glonass Antennas, P/N: 3D1216P-XS-X-2:

1" Diameter x 4.2" Tall, Swivel, Side Mount (Better L2) Configurations



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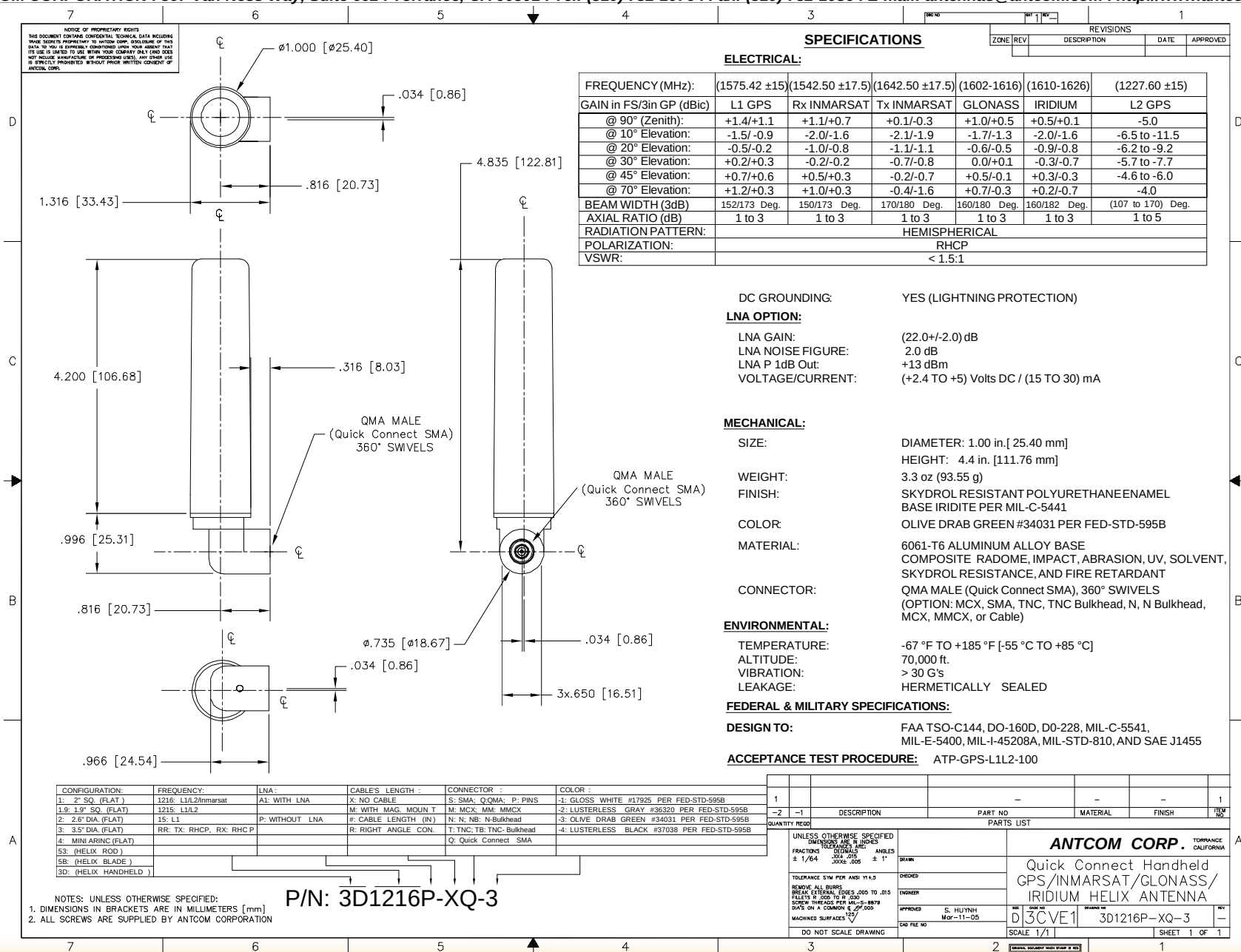


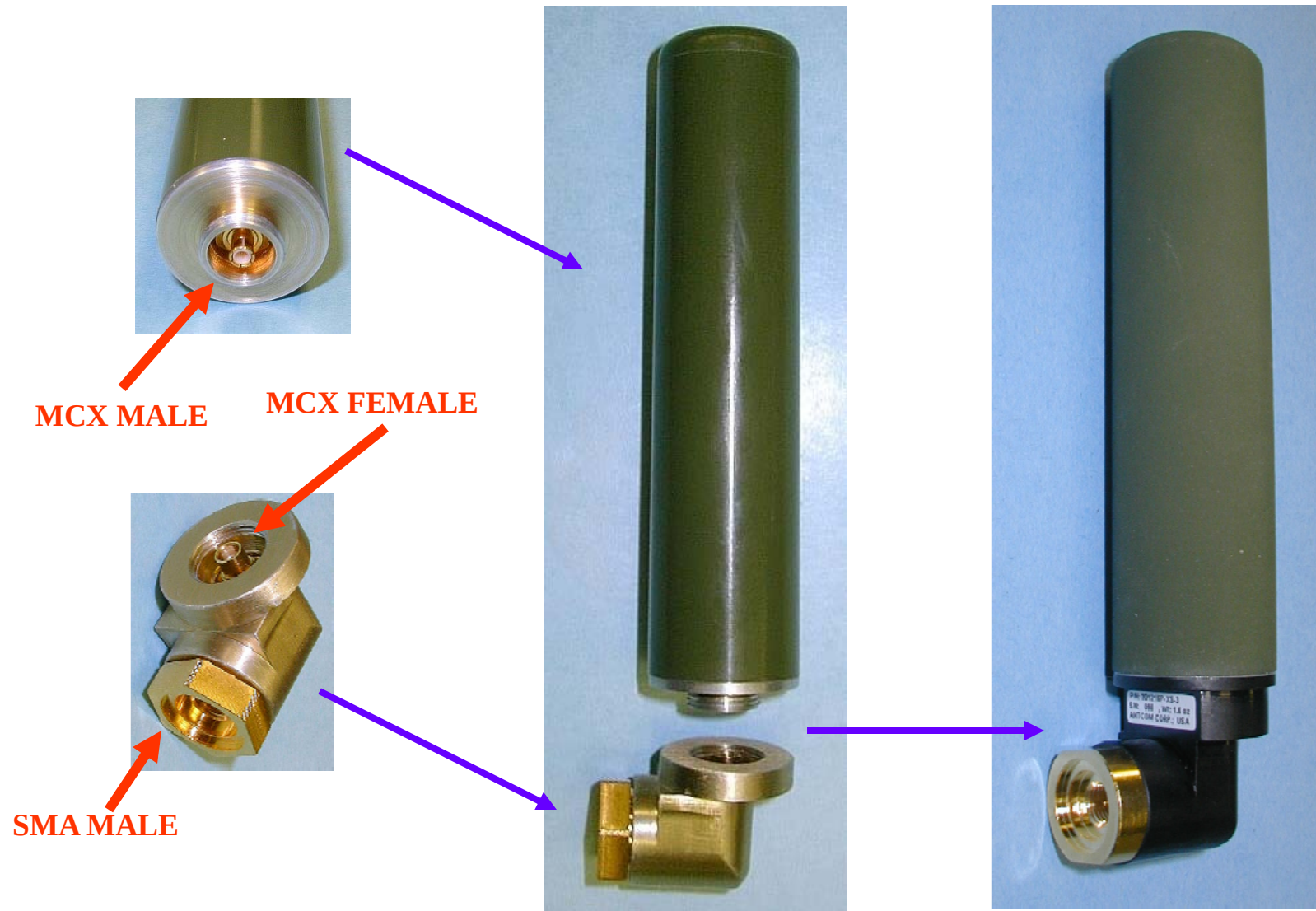
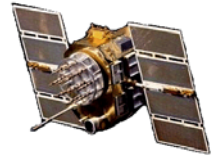


L1 or L1L2 GPS & Inmarsat/Iridium/Glonass Antennas, P/N: 3D1216P-XQ-X: 1" Diameter x 4.2" Tall, Quick Connect QMA, Swivel, Side Mount Configurations



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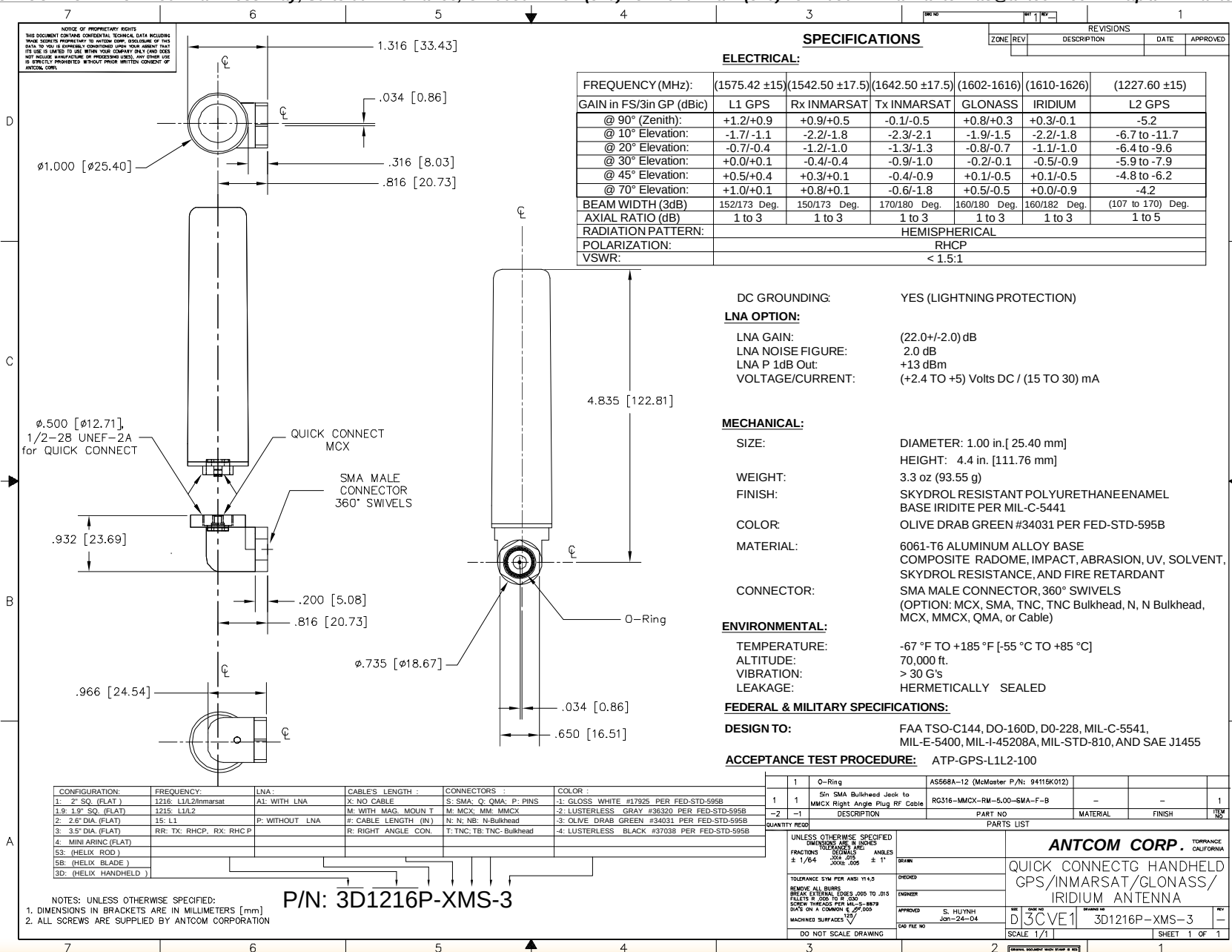


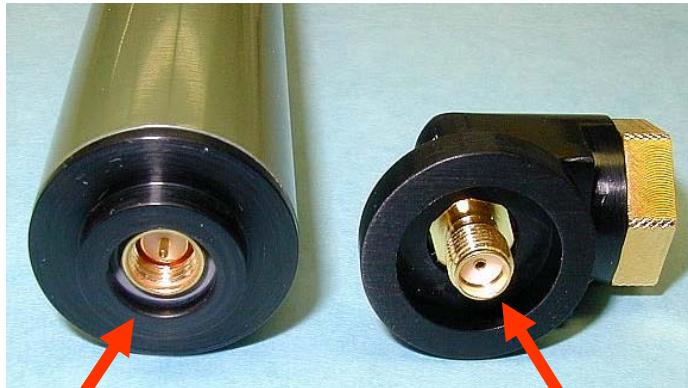
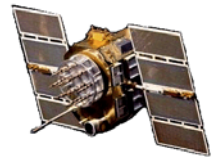


L1 or L1L2 GPS & Inmarsat/Iridium/Glonass Antennas, P/N: 3D1216P-XMS-X: 1" Diameter x 4.2" Tall, Quick Connect MCX, Swivel, Side Mount Configurations



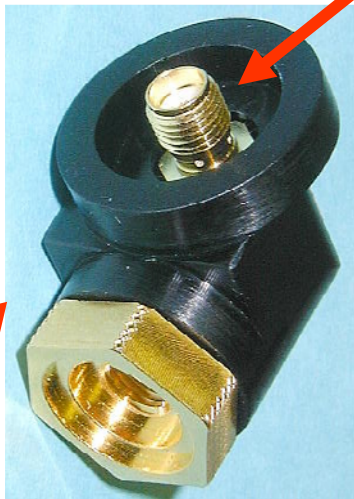
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SMA MALE

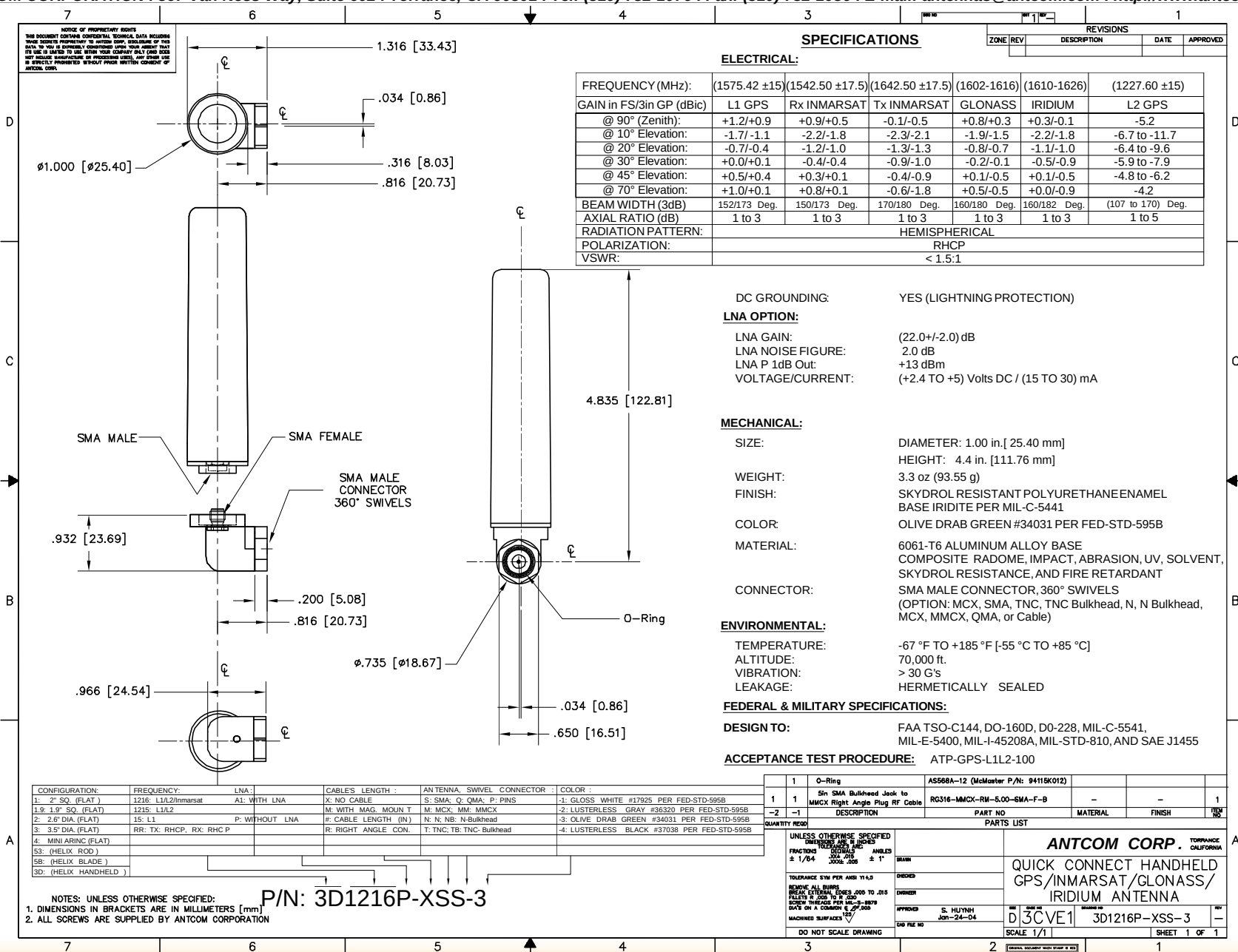
SMA FEMALE



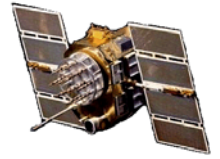
L1 or L1L2 GPS & Inmarsat/Iridium/Glonass Antennas, P/N: 3D1216P-XSS-X: 1" Diameter x 4.2" Tall, Quick Connect SMA, Swivel, Side Mount Configurations



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L1 GPS/Iridium/Tx Inmarsat Helix Antenna, 0.5" Diameter x 4.4" Tall, Threaded Bottom Mount Configuration



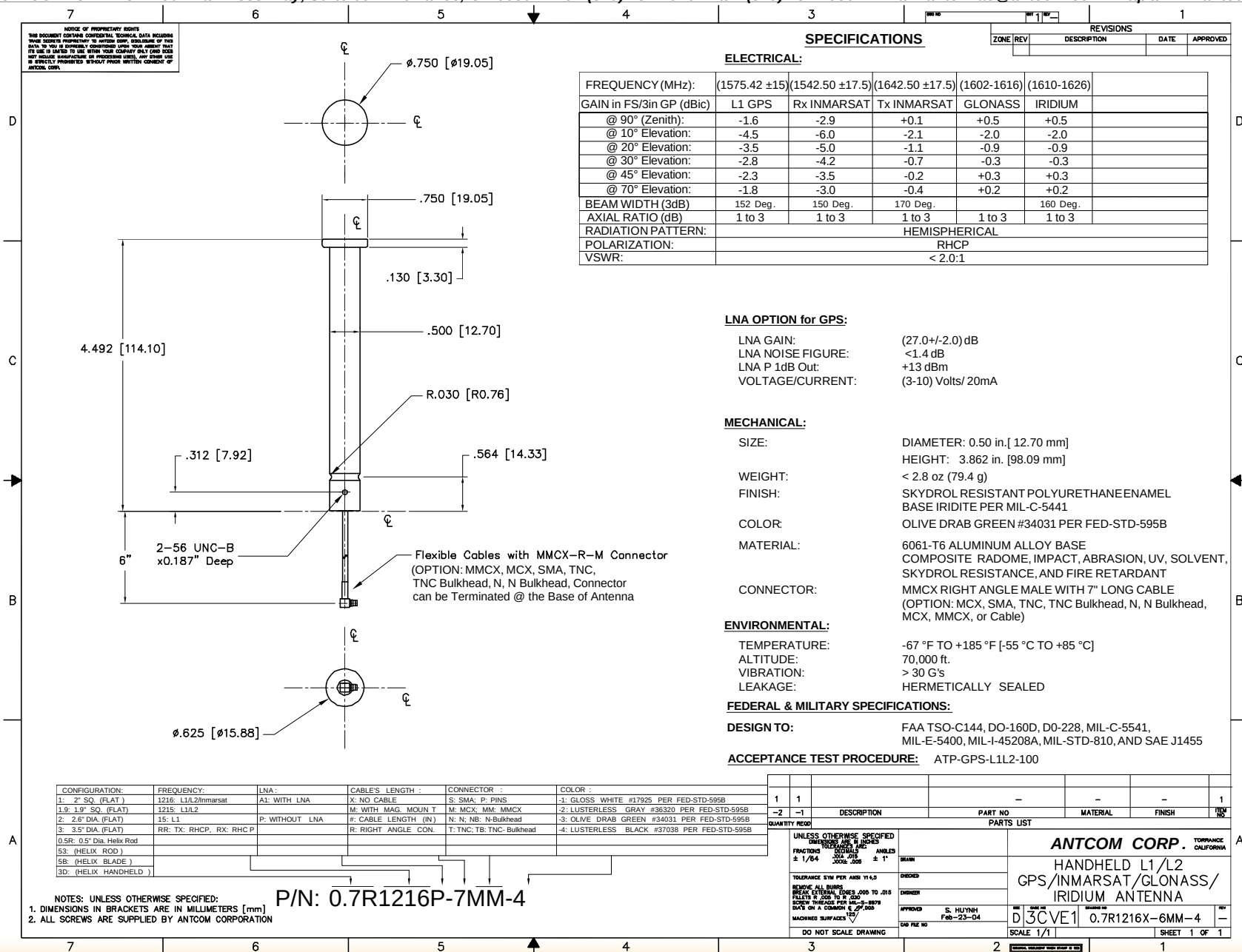
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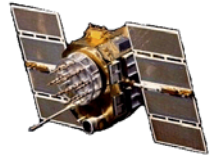


L1 GPS/Iridium/Tx Inmarsat Antenna, P/N: 0.7R1216X-6MM-4: 0.5" Diameter x 4.4" Tall, Threaded Bottom Mount Configuration



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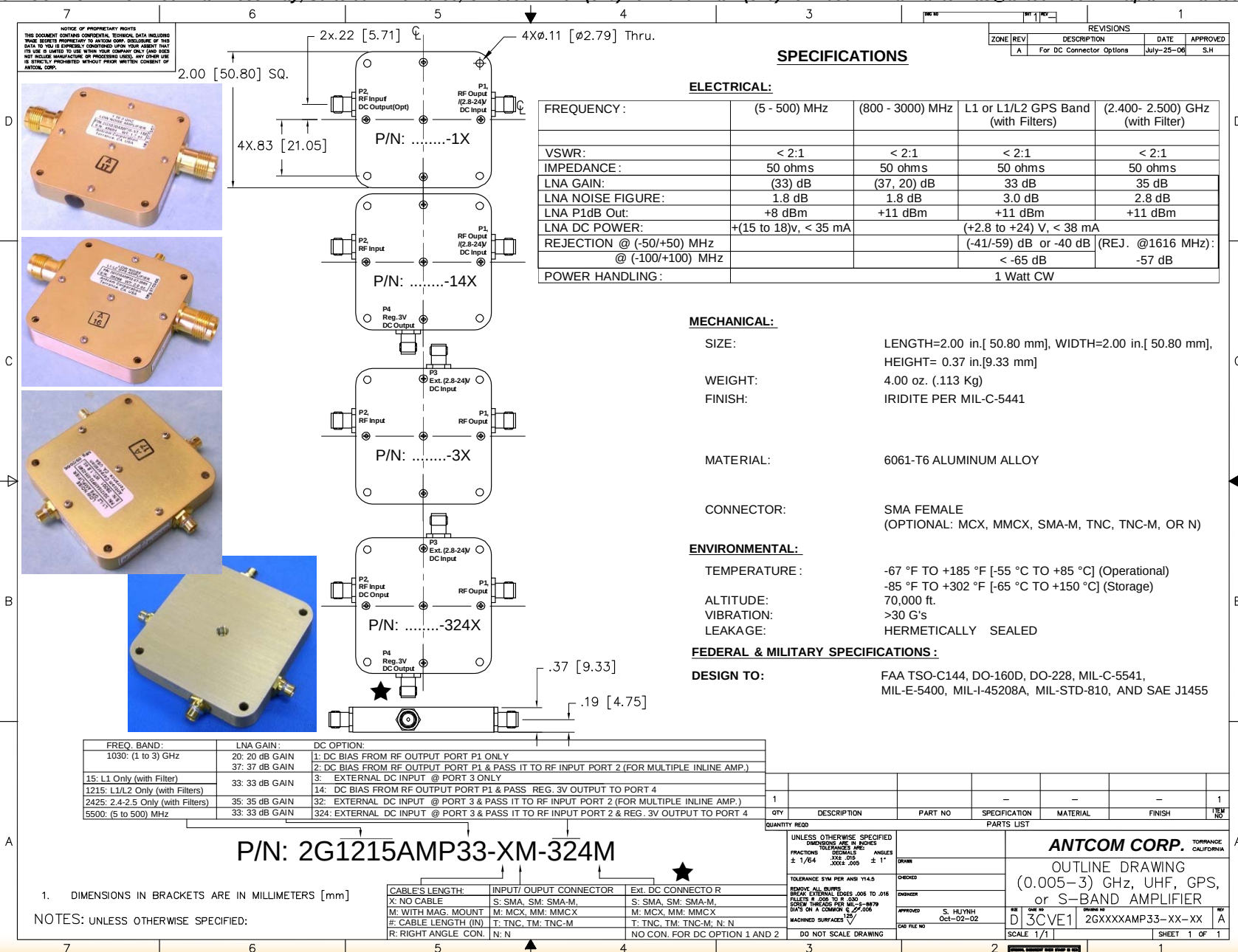




Amplifier, Power Divider/Combiner

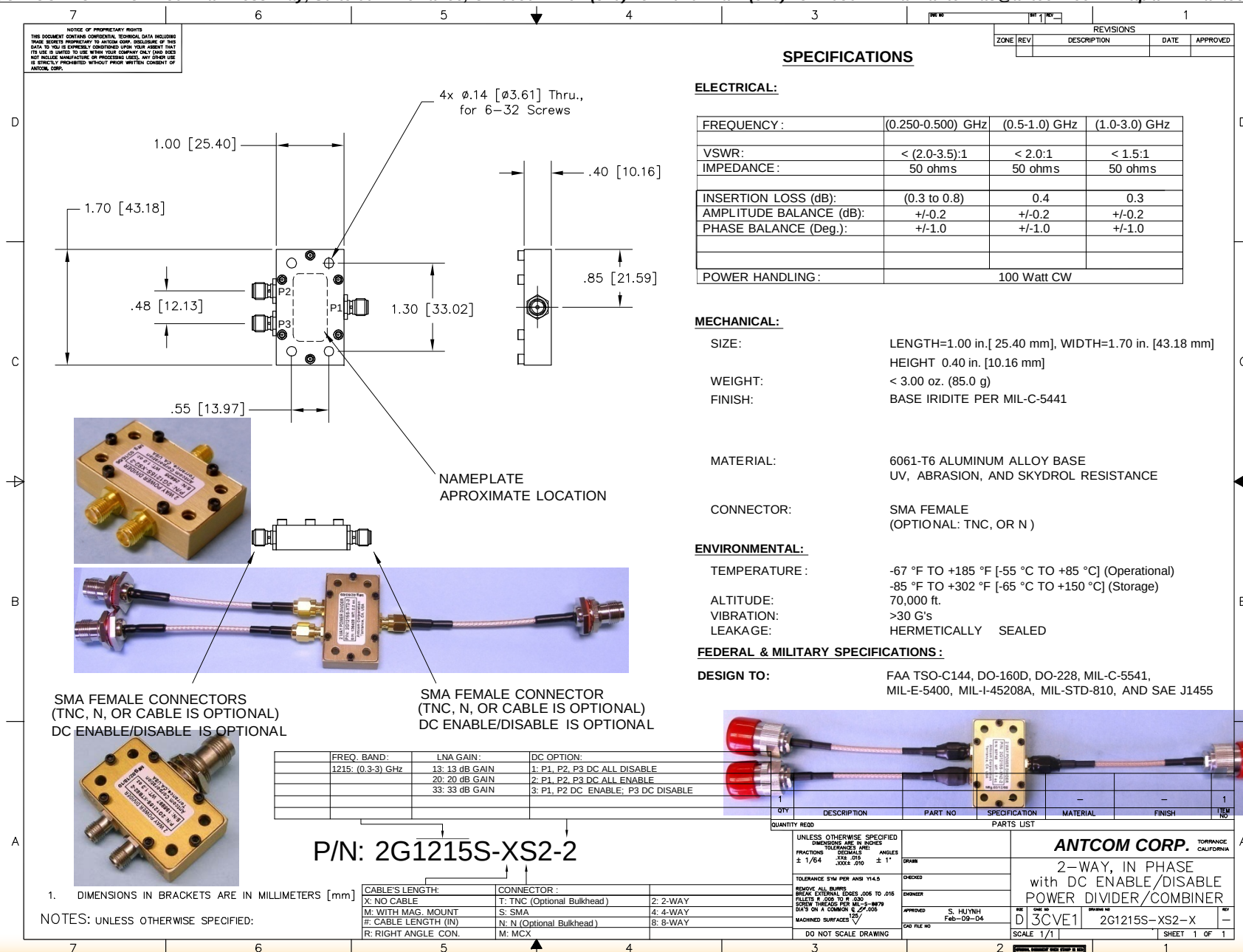


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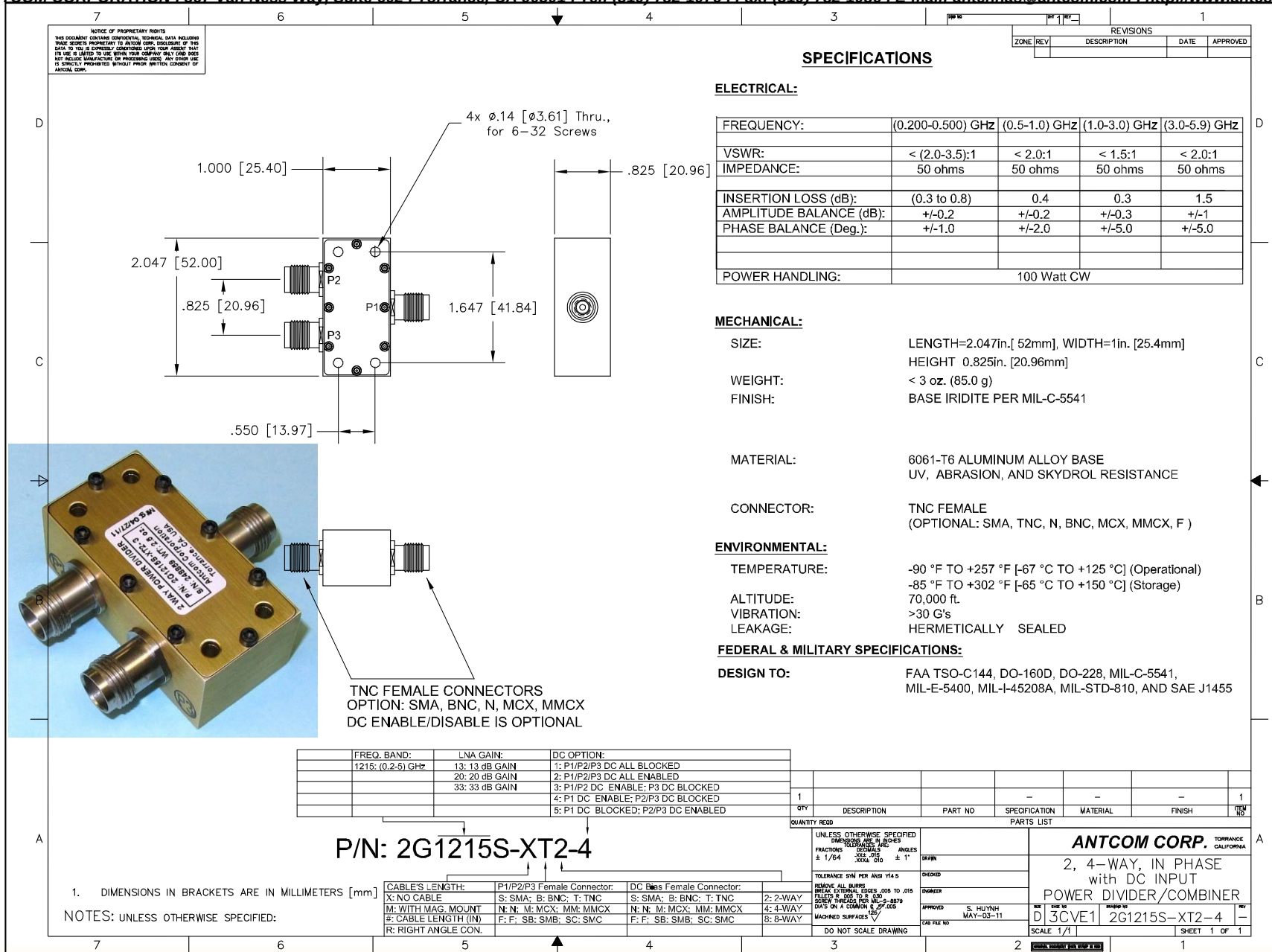


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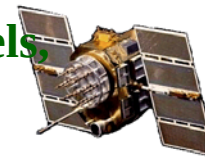




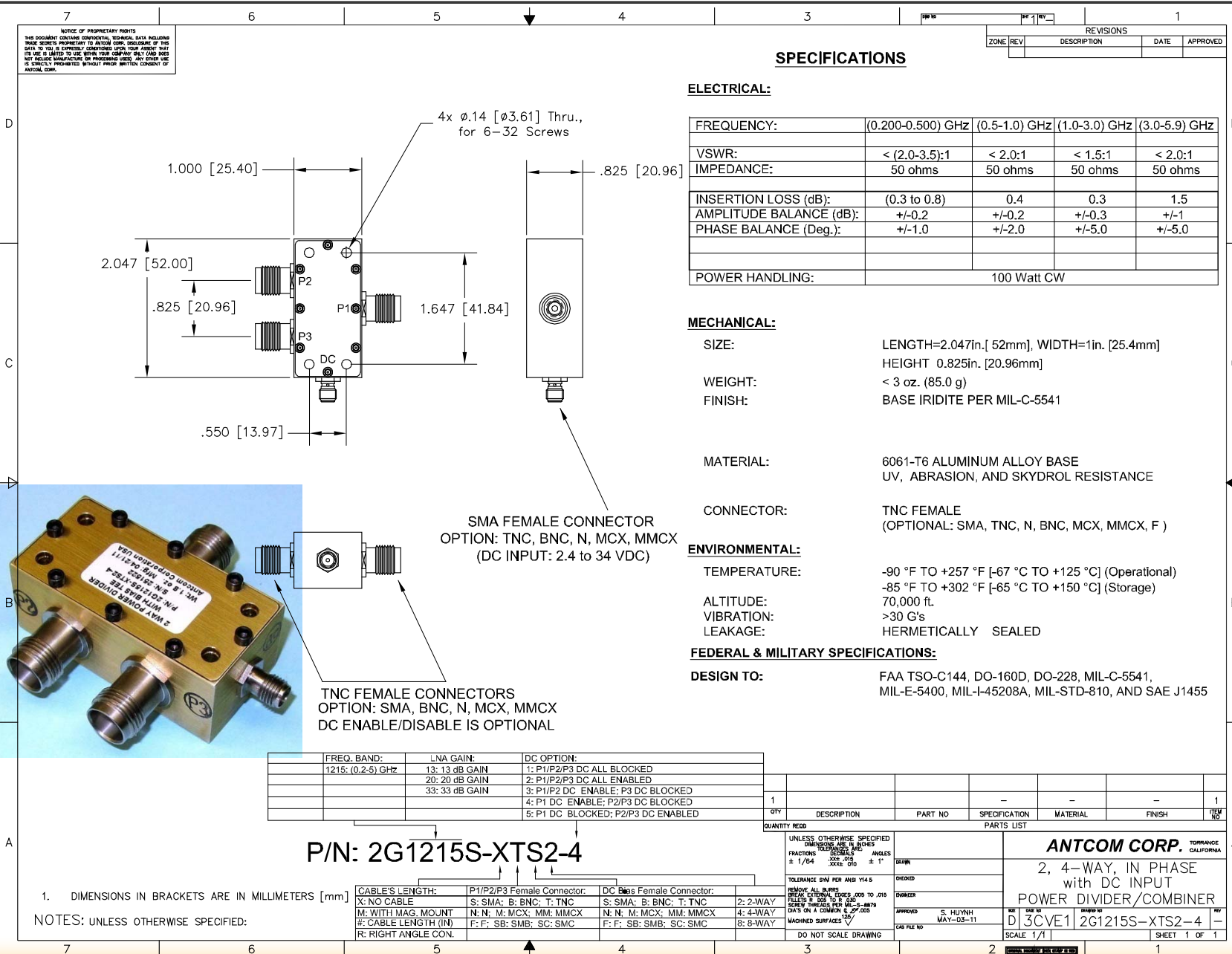
ISO9001

2-Way Power Divider/Combiner with DC Input for Multiple Channels

P/N: 2G1215S-XTS2-X



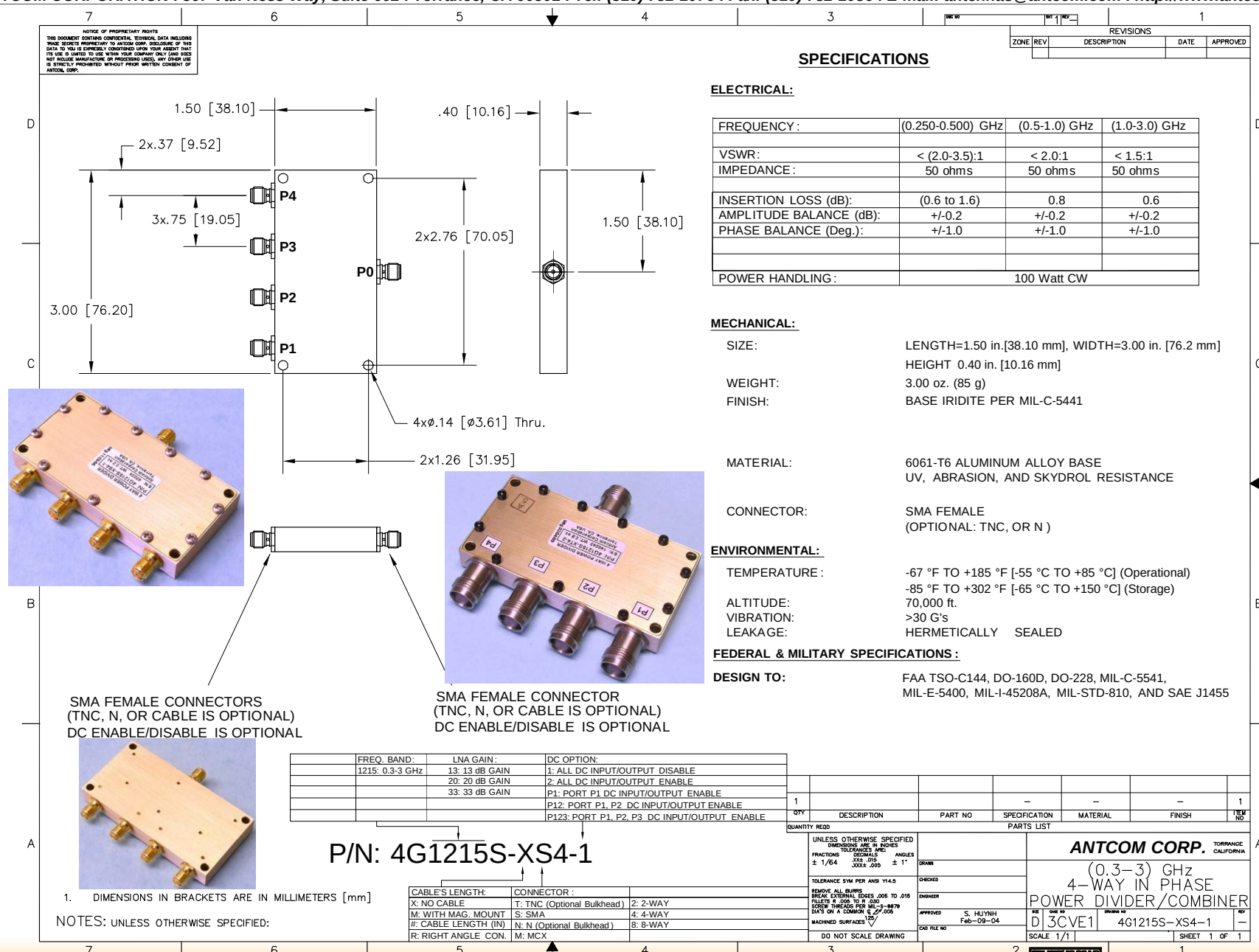
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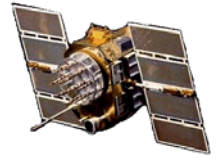


4-Way Power Divider/Combiner for Multiple Channels, (P/N: 4G1215S-XS4-X)



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Combined (**Iridium**/**GPS**/**XM**, **SIRIUS**, or WSI)

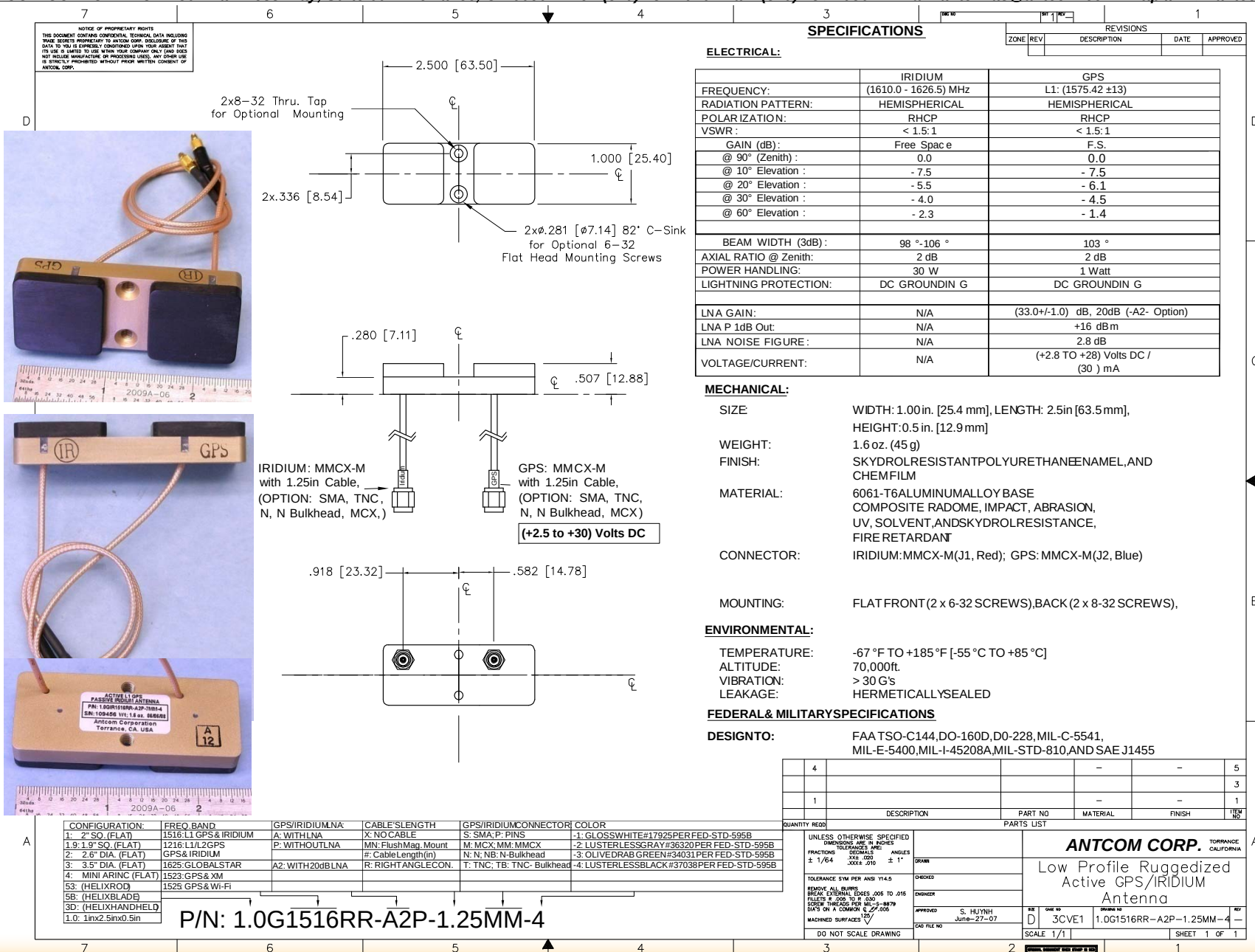
Antennas:

Pictures, Outline Drawings, Specifications

Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
P/N: 1.0GIR1516RR-A2P-1.25MM-4
(1.0"x 2.5"x 0.5"), Front, or Back Mount with Bottom Cable



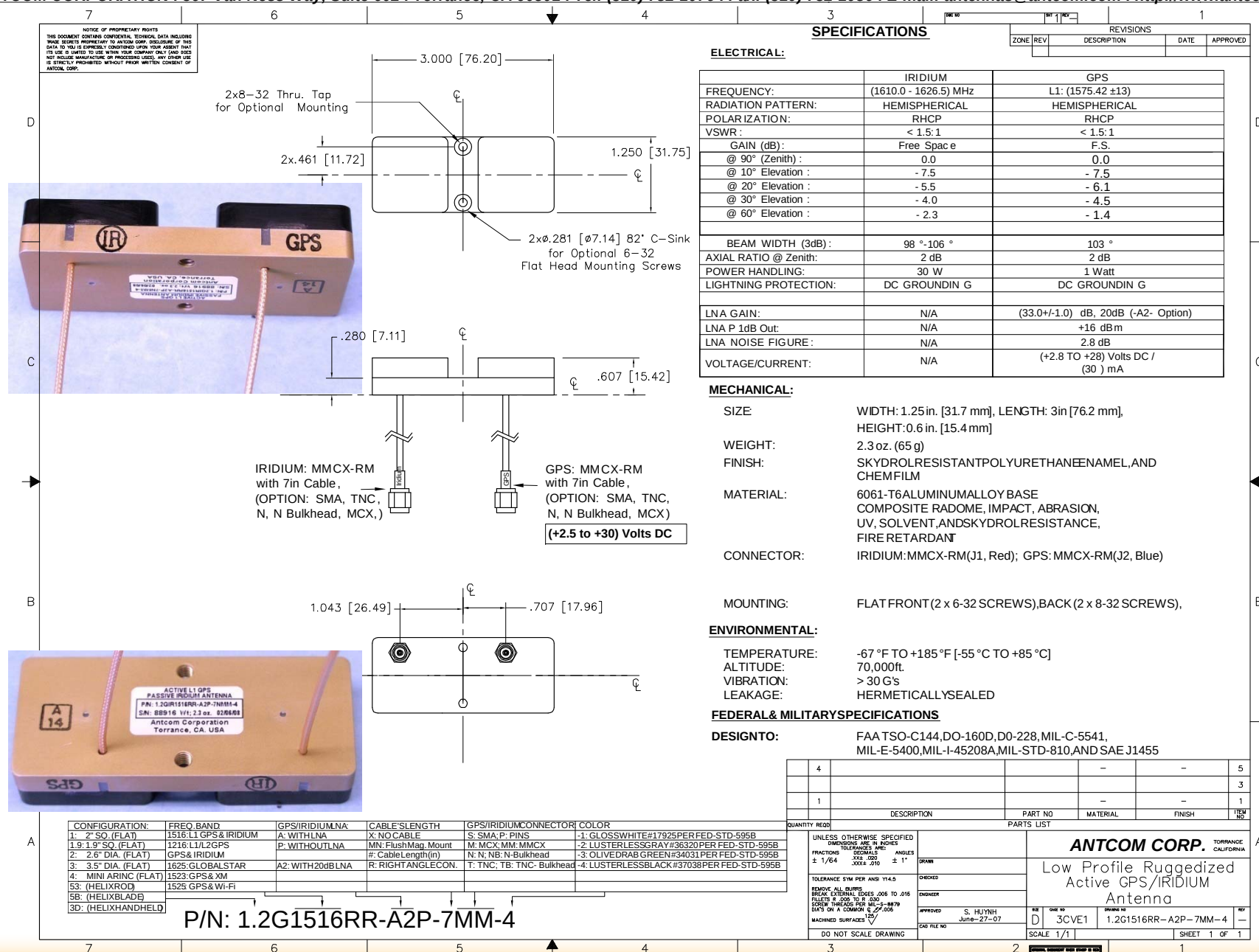
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Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
P/N: 1.2GIR1516RR-A2P-7MM-4
(1.2"x 3.0"x 0.6"), Front, or Back Mount with Bottom Cable



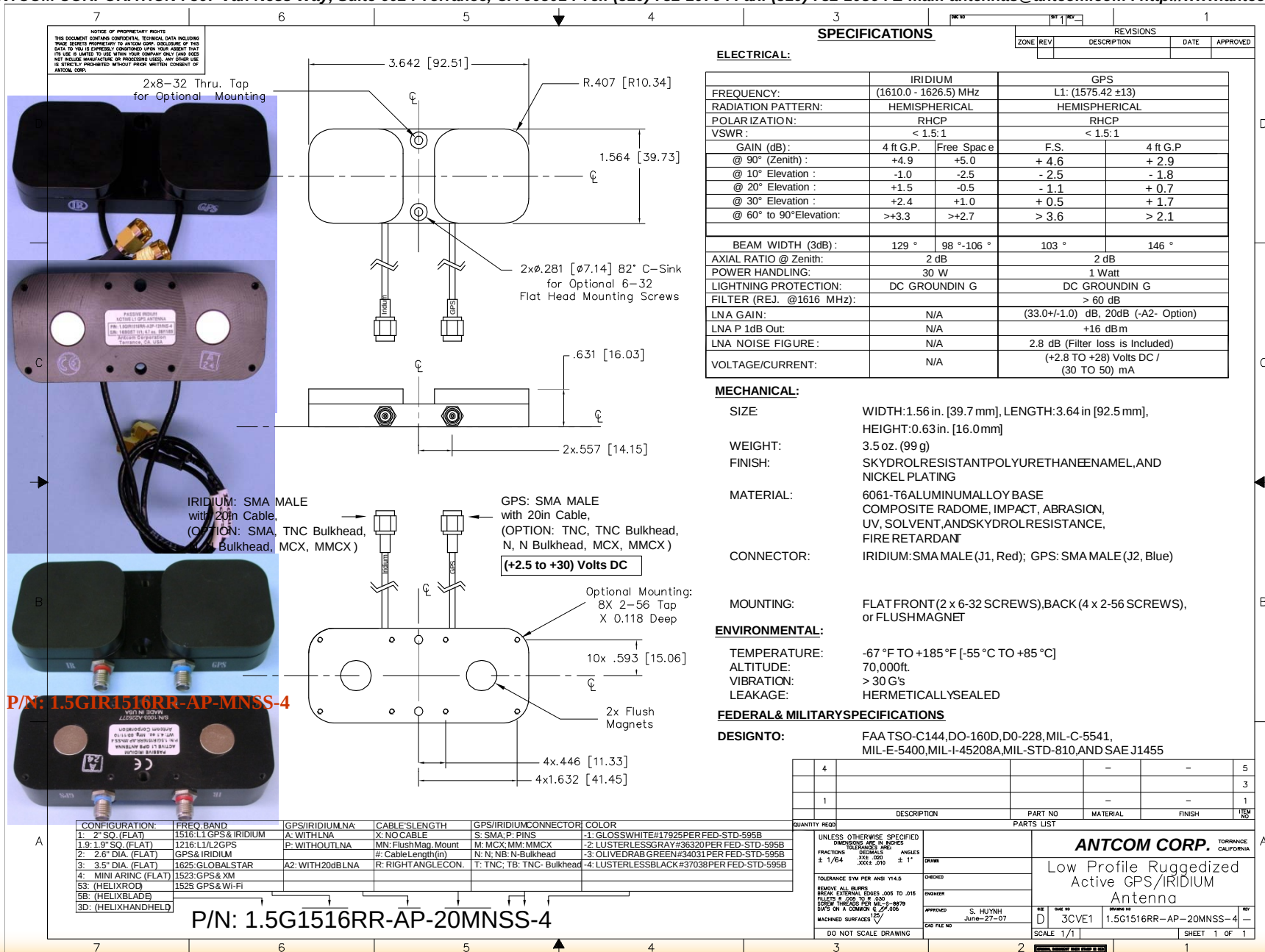
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Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
P/N: 1.5GIR1516RR-AP-20MNSS-4
(3.6"x 1.5"x 0.6"), Front, Back or Magnetic Mount with Cable



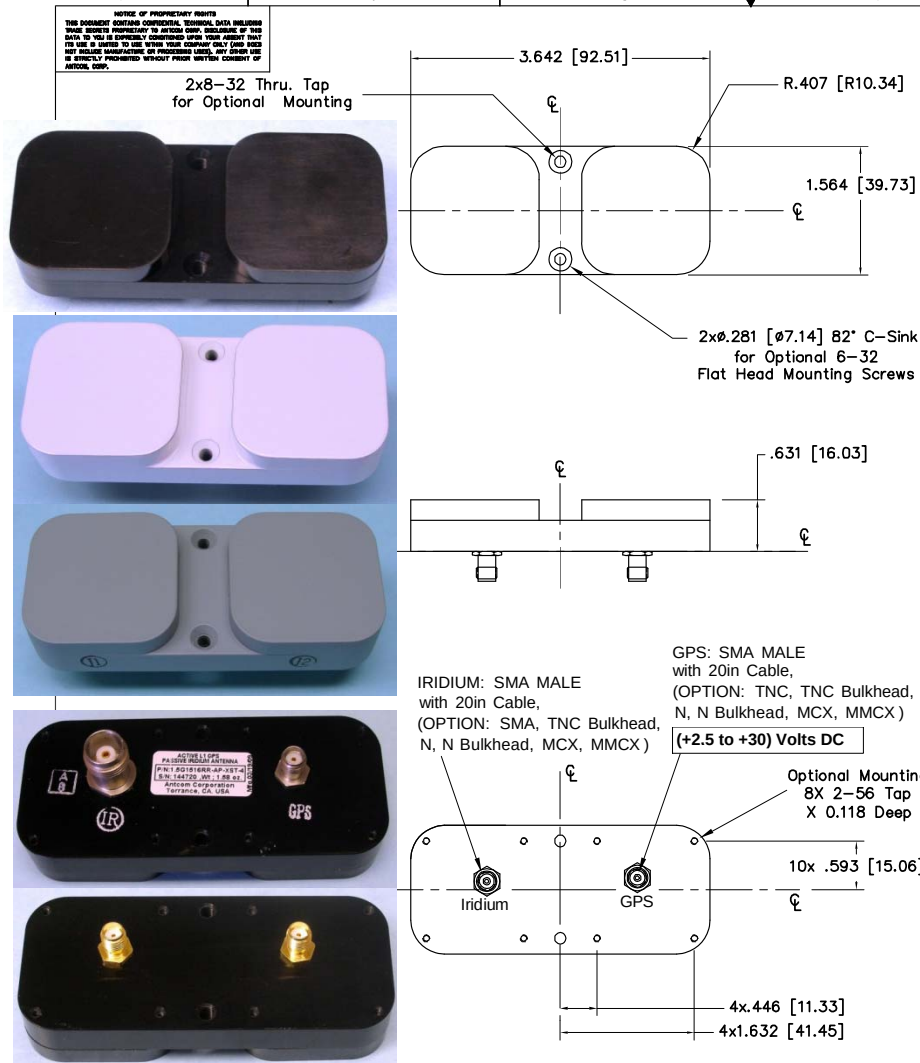
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Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
P/N: 1.5GIR1516RR-AP-XSS-4, (3.6"x 1.5"x 0.6"), Front/Back
With BNC, TNC, SMA, N Connector Options.



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SPECIFICATIONS

ELECTRICAL:

	IRIDIUM	GPS
FREQUENCY:	(1610.0 - 1626.5) MHz	L1: (1575.42 ±13)
RADIATION PATTERN:	HEMISPHERICAL	HEMISPHERICAL
POLARIZATION:	RHCP	RHCP
VSWR:	< 1.5:1	< 1.5:1
GAIN (dB):	4 ft G.P. Free Space	F.S.
@ 90° (Zenith):	+4.9	+4.6
@ 10° Elevation:	-1.0	-2.5
@ 20° Elevation:	+1.5	-1.1
@ 30° Elevation:	+2.4	+0.5
@ 60° to 90° Elevation:	>+3.3	> 3.6
BEAM WIDTH (3dB):	129 ° 98 °-106 °	103 ° 146 °
AXIAL RATIO @ Zenith:	2 dB	2 dB
POWER HANDLING:	30 W	1 Watt
LIGHTNING PROTECTION:	DC GROUNDING	DC GROUNDING
FILTER (REJ. @1616 MHz):		> 60 dB
LNA GAIN:	N/A	(33.0±1.0) dB, 20dB (-A2- Option)
LNA P 1dB Out:	N/A	+16 dBm
LNA NOISE FIGURE:	N/A	2.8 dB (Filter loss is included)
VOLTAGE/CURRENT:	N/A	(+2.8 TO +28) Volts DC / (30 TO 50) mA

MECHANICAL:

SIZE: WIDTH:1.56 in. [39.7 mm], LENGTH:3.64 in [92.5 mm], HEIGHT:0.63 in. [16.0 mm]

WEIGHT: 3.5 oz. (99 g)

FINISH: SKYDROLRESISTANTPOLYURETHANENAMEL, AND NICKEL PLATING

MATERIAL: 6061-T6ALUMINUMALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,ANDSKYDROLRESISTANCE, FIRERETARDANT

CONNECTOR: IRIDIUM:SMA MALE (J1, Red); GPS: SMA MALE (J2, Blue)

MOUNTING: FLAT FRONT (2 x 6-32 SCREWS),BACK (4 x 2-56 SCREWS), or FLUSHMAGNET

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]

ALTITUDE: 70,000ft.

VIBRATION: > 30 G's

LEAKAGE: HERMETICALLYSEALED

FEDERAL & MILITARY SPECIFICATIONS

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

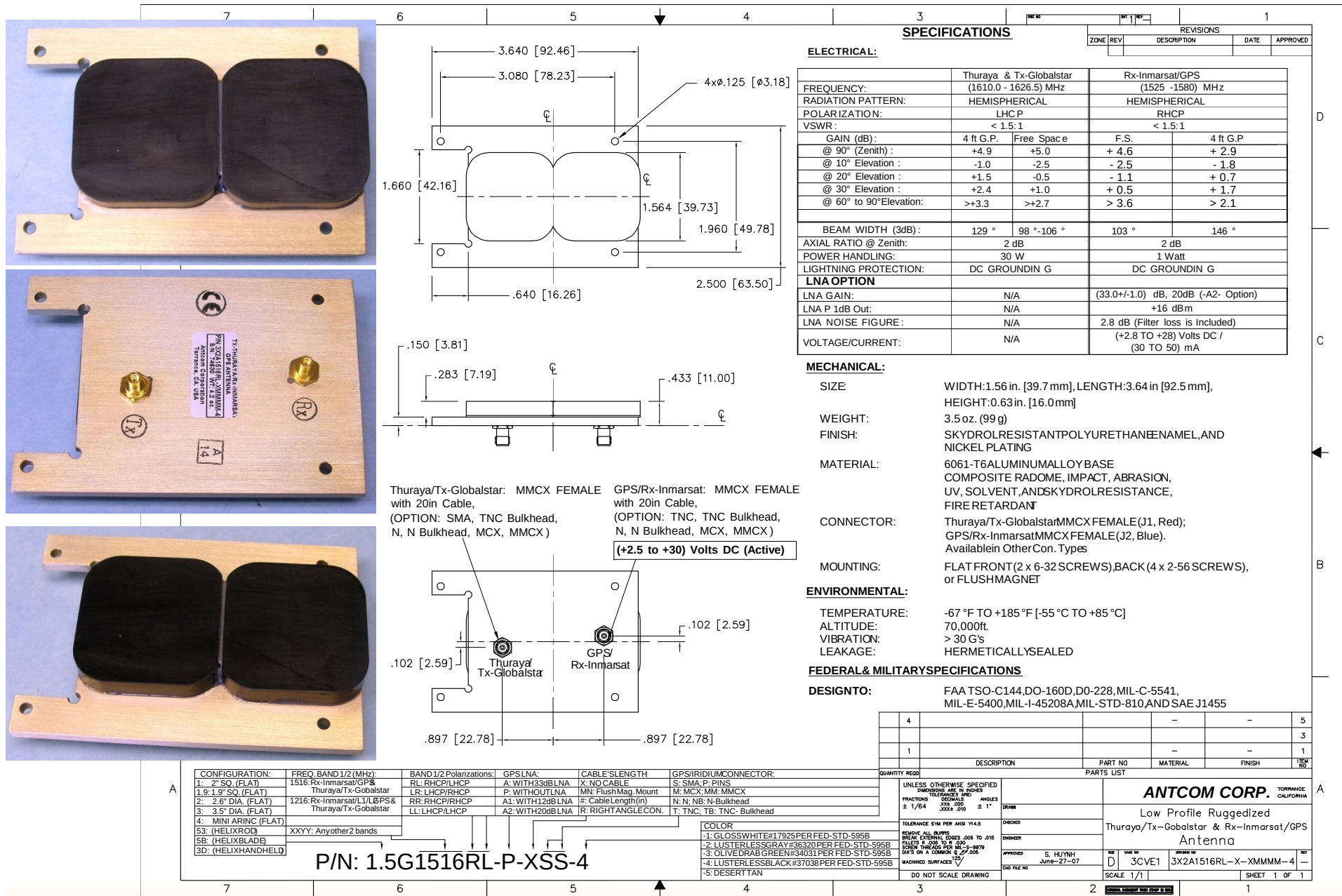
4					5
					3
1					1
DESCRIPTION		PART NO	MATERIAL	FINISH	REVISION
QUANTITY REQD					
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 ± .005 ± .01		DRAWN CHECKED DESIGNED APPROVED S. HUYHN DATE 2006-27-07			
TOLERANCE SYM PER ANSI Y14.5 REMOVE ALL RUFFS REMOVE EXTERNAL EDGES .006 TO .016 FILLET R .006 TO .016 BORE THROUGHS PER MIL-C-8839 DATE ON A COMB OF 175 MACHINED SURFACE DO NOT SCALE DRAWING		ANTCOM CORP. TORRANCE, CALIFORNIA Low Profile Ruggedized Active GPS/IRIDIUM Antenna SCALE 1/1 D 3C3VE1 1.5G1516RR-AP-XSS-4 SHEET 1 OF 1			



ISO9001

RHCP RX-Inmarsat/GPS & LHCP Thuraya/TX-Globalstar Antenna:**P/N: 3x2G1516RL-P-XMMM-4****(3.64"x 2.50"x 0.43"), Front Mount (Other Configurations are Available)**

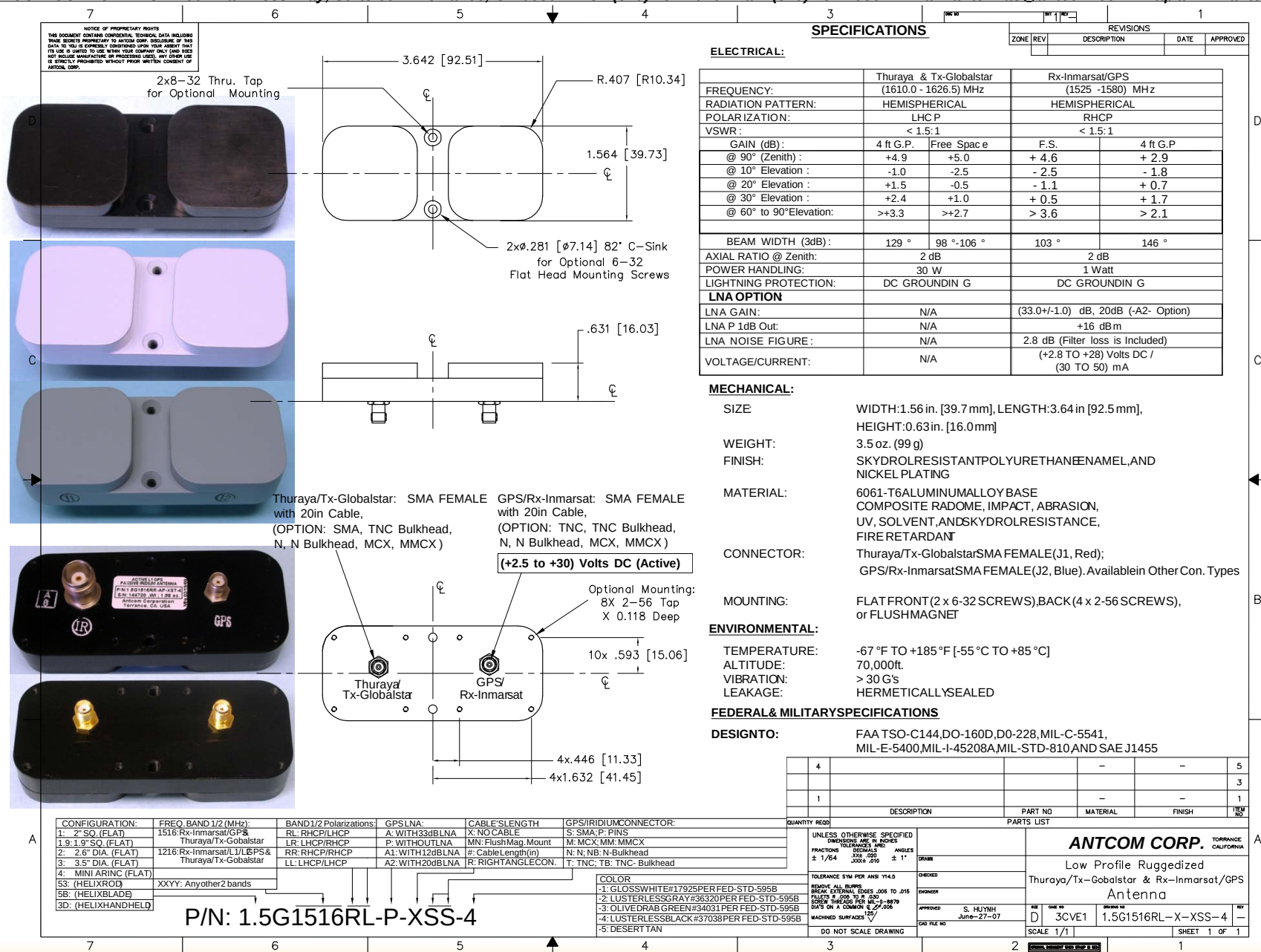
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RHCP RX-Inmarsat/GPS & LHCP Thuraya/TX-Globalstar Antenna: P/N: 1.5G1516RL-P-XSS-4 (3.6"x 1.5"x 0.6"), Front Mount (Other Configurations are Available)

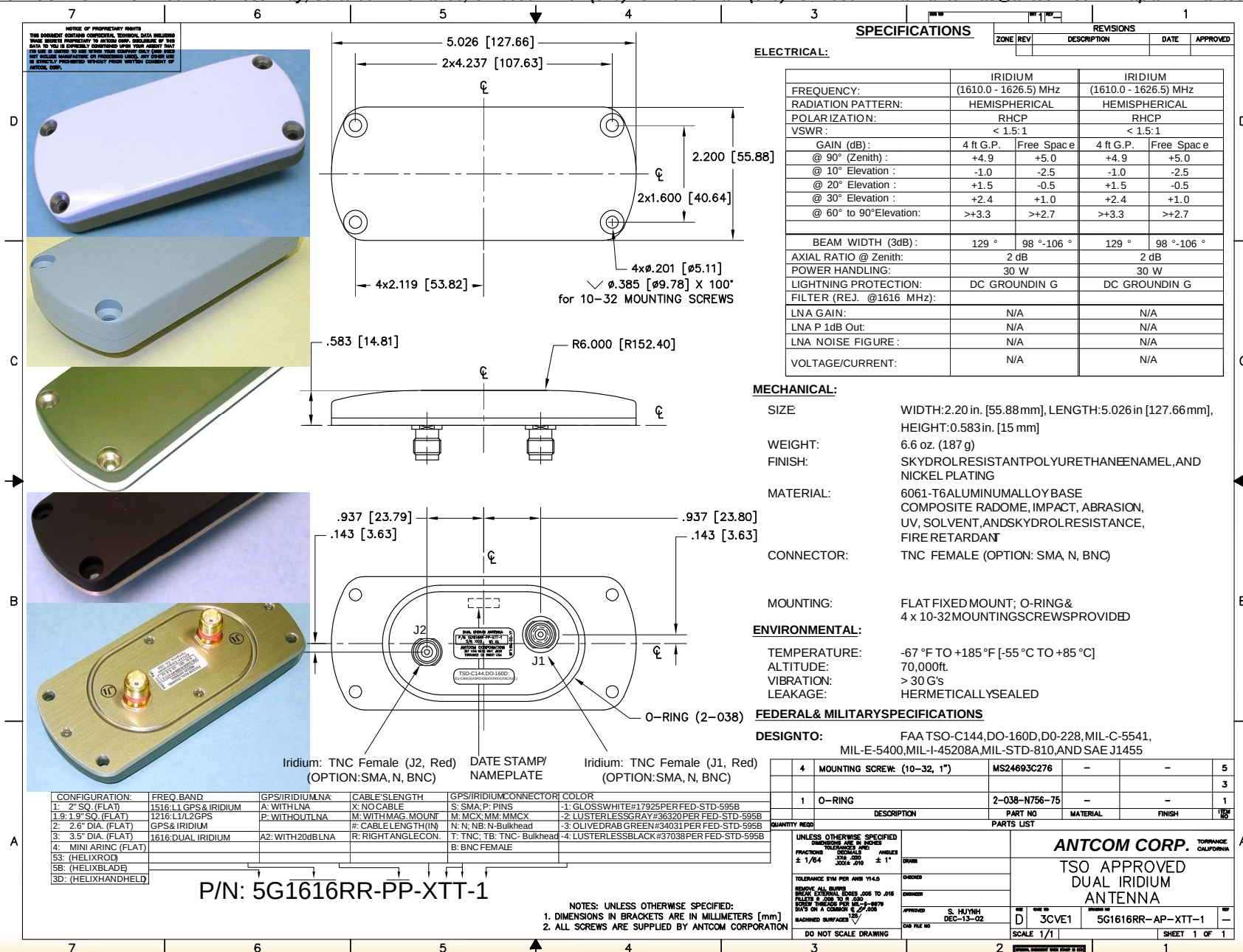


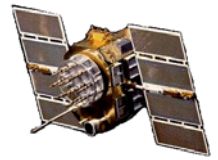
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S5GIR1X16RR-AP-XXX-1 (White)



S5GIR1X16RR-AP-XXX-3 (Green)



S5GIR1X16RR-AP-XXX-4 (Black)

Hermetically Sealed, Designed for Harsh Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)



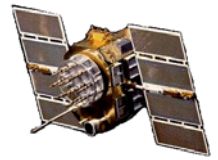
S5GIR1X16RR-AP-XTT-X (TNC Con.)



S5GIR1X16RR-AP-XNN-X (N Con.)



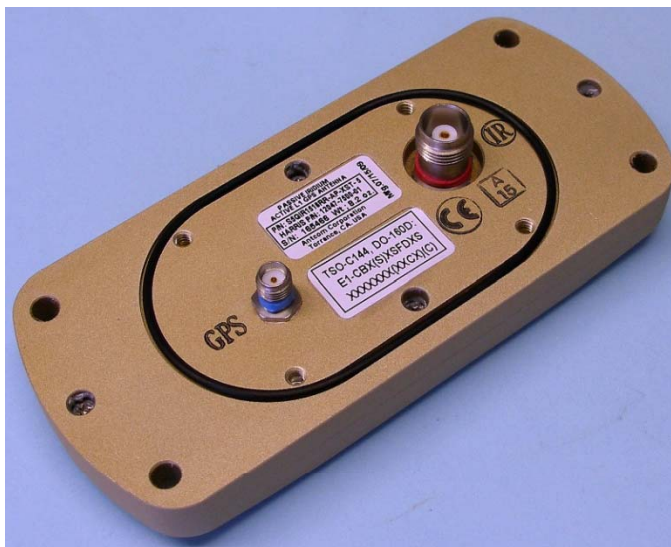
S5GIR1X16RR-AP-XST-X (SMA/TNC Con.)



S5GIR1X16RR-AP-XST-5 (Desert Sand)



S5GIR1X16RR-AP-XST-2 (Gray)



S5GIR1X16RR-AP-XST-2 (Gray)

Hermetically Sealed, Designed for Harsh Environment Applications.

Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)



7 6 5 4 3 2 1

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7 6 5 4 3 2 1

REVISIONS
DATE APPROVED

ZONE REV DESCRIPTION

5.026 [127.66]
4X.800 [20.32]
2.200 [55.88]
4X2.119 [53.82]
4X.201 [Ø5.11]
Ø.385 [Ø9.78] X 100°
for 10-32 MOUNTING SCREWS
R6.000 [R152.40]
.721 [18.31]
.406 [10.31]
.784 [19.91]
.148 [3.77]
.937 [23.80]
.143 [3.63]
O-RING (2-038)

GPS: SMA Female (Blue)
(OPTION: SMA, N, MCX)
(+2.5 to +30) Volts DC

DATE STAMP/
NAMEPLATE

Iridium TNC Female (Red)
(OPTION: SMA, N, MCX)

1. 2" SQ. (FLAT)
1.9: 1.9" SQ. (FLAT)
2. 2.6" DIA. (FLAT)
3. 3.5" DIA. (FLAT)
4. MINI ARINC (FLAT)
53. (HELIX ROD)
5B. (HELIX BLADE)
3D. (HELIX HANDHELD)

CONFIGURATION: FREQ. BAND: GPS/IRIDIUM LNA: CABLE'S LENGTH: GPS/IRIDIUM CONNECTOR: COLOR:

1516: L1 GPS & IRIDIUM
1216: L1/L2 GPS
GPS & IRIDIUM

X: NO CABLE
M: WITH MAG. MOUNT
#: CABLE LENGTH (IN)
R: RIGHT ANGLE CON.

S: SMA; P: PINS
M: MCX; MM: MMCX
N: N; NB: N-Bulkhead
T: TNC; TB: 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

UNLESS OTHERWISE SPECIFIED:
FRACTIONS: 1/64
TOLERANCE: ± 1/64
TOLERANCE: .010 PER AND .015
REWORK: ALL SURFACES
MATERIAL: ALUMINUM 6061-T6
FINISH: MIL-C-144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

DESIGN TO:

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

4 MOUNTING SCREW: (10-32, 1") MS24693C276 - - - 3

1 D-RING 2-038-N756-75 - - - 1

QUANTITY REQD DESCRIPTION PART NO MATERIAL FINISH

UNLESS OTHERWISE SPECIFIED: DIMENSIONS: DECIMALS: ANGLES: ± 1/64 ± 1°
TOLERANCE: .010 PER AND .015
REWORK: ALL SURFACES
MATERIAL: ALUMINUM 6061-T6
FINISH: MIL-C-144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

DESIGN TO:

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

ANTCOM CORP. TOLSON, CALIFORNIA
FLAT FIXED MOUNT
ACTIVE IRIDIUM/GPS
ANTENNA

1. 2" SQ. (FLAT)
1.9: 1.9" SQ. (FLAT)
2. 2.6" DIA. (FLAT)
3. 3.5" DIA. (FLAT)
4. MINI ARINC (FLAT)
53. (HELIX ROD)
5B. (HELIX BLADE)
3D. (HELIX HANDHELD)

CONFIGURATION: FREQ. BAND: GPS/IRIDIUM LNA: CABLE'S LENGTH: GPS/IRIDIUM CONNECTOR: COLOR:

1516: L1 GPS & IRIDIUM
1216: L1/L2 GPS
GPS & IRIDIUM

X: NO CABLE
M: WITH MAG. MOUNT
#: CABLE LENGTH (IN)
R: RIGHT ANGLE CON.

S: SMA; P: PINS
M: MCX; MM: MMCX
N: N; NB: N-Bulkhead
T: TNC; TB: 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

UNLESS OTHERWISE SPECIFIED:
FRACTIONS: 1/64
TOLERANCE: ± 1/64
TOLERANCE: .010 PER AND .015
REWORK: ALL SURFACES
MATERIAL: ALUMINUM 6061-T6
FINISH: MIL-C-144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

DESIGN TO:

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

4 MOUNTING SCREW: (10-32, 1") MS24693C276 - - - 3

1 D-RING 2-038-N756-75 - - - 1

QUANTITY REQD DESCRIPTION PART NO MATERIAL FINISH

UNLESS OTHERWISE SPECIFIED: DIMENSIONS: DECIMALS: ANGLES: ± 1/64 ± 1°
TOLERANCE: .010 PER AND .015
REWORK: ALL SURFACES
MATERIAL: ALUMINUM 6061-T6
FINISH: MIL-C-144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

DESIGN TO:

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

ANTCOM CORP. TOLSON, CALIFORNIA
FLAT FIXED MOUNT
ACTIVE IRIDIUM/GPS
ANTENNA

1. 2" SQ. (FLAT)
1.9: 1.9" SQ. (FLAT)
2. 2.6" DIA. (FLAT)
3. 3.5" DIA. (FLAT)
4. MINI ARINC (FLAT)
53. (HELIX ROD)
5B. (HELIX BLADE)
3D. (HELIX HANDHELD)

CONFIGURATION: FREQ. BAND: GPS/IRIDIUM LNA: CABLE'S LENGTH: GPS/IRIDIUM CONNECTOR: COLOR:

1516: L1 GPS & IRIDIUM
1216: L1/L2 GPS
GPS & IRIDIUM

X: NO CABLE
M: WITH MAG. MOUNT
#: CABLE LENGTH (IN)
R: RIGHT ANGLE CON.

S: SMA; P: PINS
M: MCX; MM: MMCX
N: N; NB: N-Bulkhead
T: TNC; TB: 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

UNLESS OTHERWISE SPECIFIED:
FRACTIONS: 1/64
TOLERANCE: ± 1/64
TOLERANCE: .010 PER AND .015
REWORK: ALL SURFACES
MATERIAL: ALUMINUM 6061-T6
FINISH: MIL-C-144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

DESIGN TO:

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

4 MOUNTING SCREW: (10-32, 1") MS24693C276 - - - 3

1 D-RING 2-038-N756-75 - - - 1

QUANTITY REQD DESCRIPTION PART NO MATERIAL FINISH

UNLESS OTHERWISE SPECIFIED: DIMENSIONS: DECIMALS: ANGLES: ± 1/64 ± 1°
TOLERANCE: .010 PER AND .015
REWORK: ALL SURFACES
MATERIAL: ALUMINUM 6061-T6
FINISH: MIL-C-144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

DESIGN TO:

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

ANTCOM CORP. TOLSON, CALIFORNIA
FLAT FIXED MOUNT
ACTIVE IRIDIUM/GPS
ANTENNA

1. 2" SQ. (FLAT)
1.9: 1.9" SQ. (FLAT)
2. 2.6" DIA. (FLAT)
3. 3.5" DIA. (FLAT)
4. MINI ARINC (FLAT)
53. (HELIX ROD)
5B. (HELIX BLADE)
3D. (HELIX HANDHELD)

CONFIGURATION: FREQ. BAND: GPS/IRIDIUM LNA: CABLE'S LENGTH: GPS/IRIDIUM CONNECTOR: COLOR:

1516: L1 GPS & IRIDIUM
1216: L1/L2 GPS
GPS & IRIDIUM

X: NO CABLE
M: WITH MAG. MOUNT
#: CABLE LENGTH (IN)
R: RIGHT ANGLE CON.

S: SMA; P: PINS
M: MCX; MM: MMCX
N: N; NB: N-Bulkhead
T: TNC; TB: 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

UNLESS OTHERWISE SPECIFIED:
FRACTIONS: 1/64
TOLERANCE: ± 1/64
TOLERANCE: .010 PER AND .015
REWORK: ALL SURFACES
MATERIAL: ALUMINUM 6061-T6
FINISH: MIL-C-144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

DESIGN TO:

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

4 MOUNTING SCREW: (10-32, 1") MS24693C276 - - - 3

1 D-RING 2-038-N756-75 - - - 1

QUANTITY REQD DESCRIPTION PART NO MATERIAL FINISH

UNLESS OTHERWISE SPECIFIED: DIMENSIONS: DECIMALS: ANGLES: ± 1/64 ± 1°
TOLERANCE: .010 PER AND .015
REWORK: ALL SURFACES
MATERIAL: ALUMINUM 6061-T6
FINISH: MIL-C-144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

DESIGN TO:

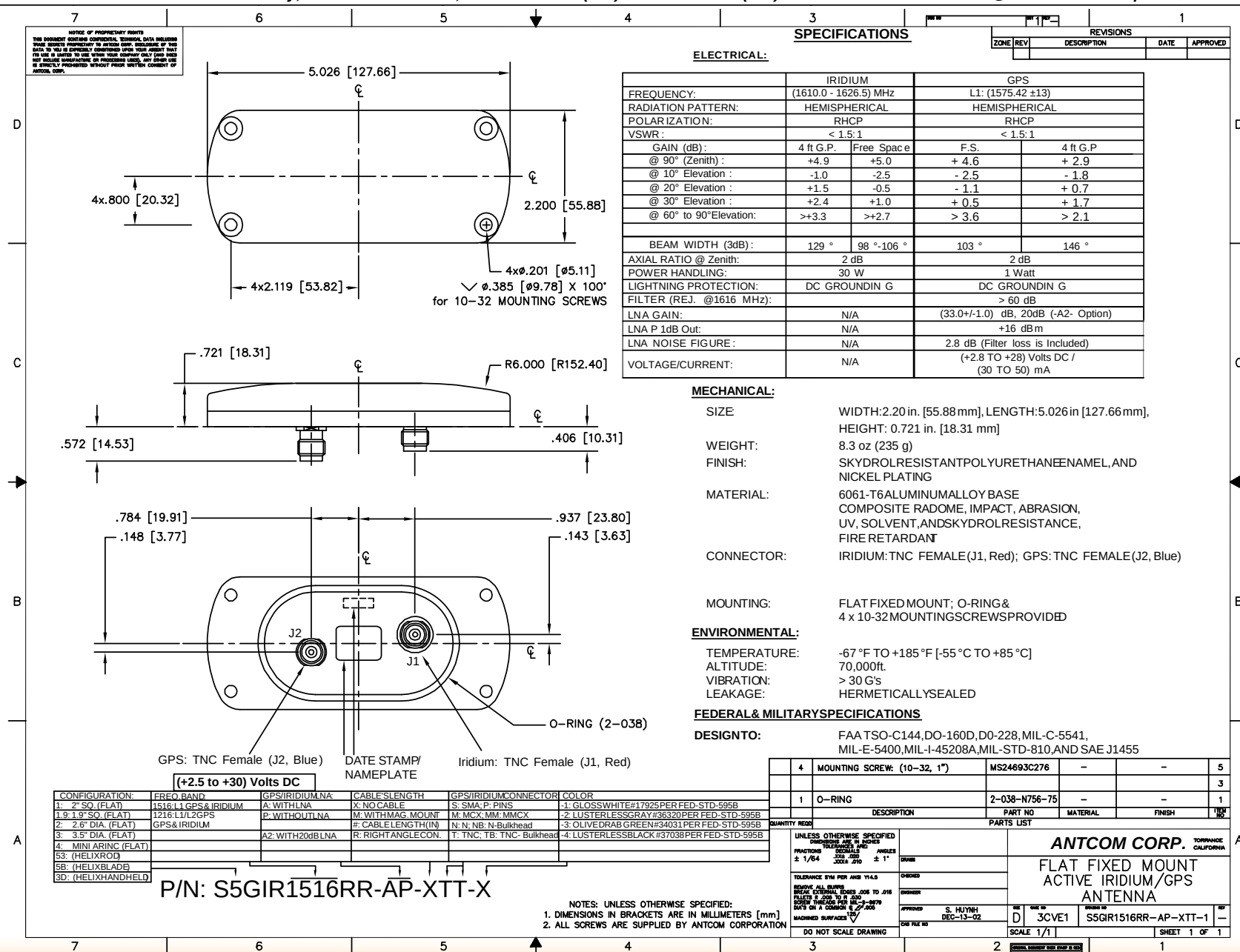
FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ANTCOM

Active L1 GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
(5.03"x2.08"x0.69"), Flat/Pipe mount, P/N: S5GIR1516RR-AP-XTT-X
With BNC, TNC, SMA, N Connector Options.



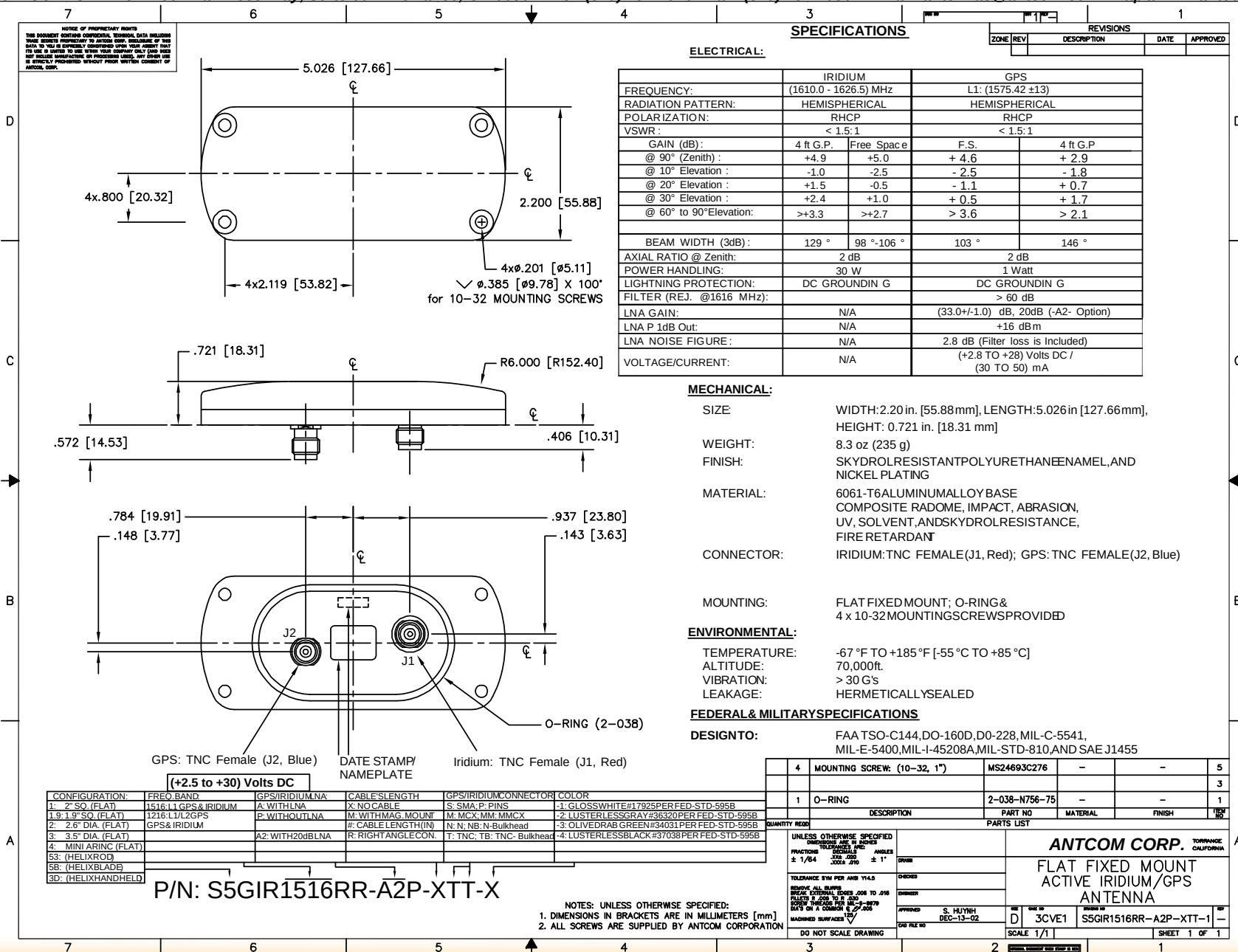
ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . http://www.antcom.com



Active L1 GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
(5.03"x2.08"x0.69"), Flat/Pipe mount, P/N: S5GIR1516RR-A2P-XTT-X
With BNC, TNC, SMA, N Connector Options.



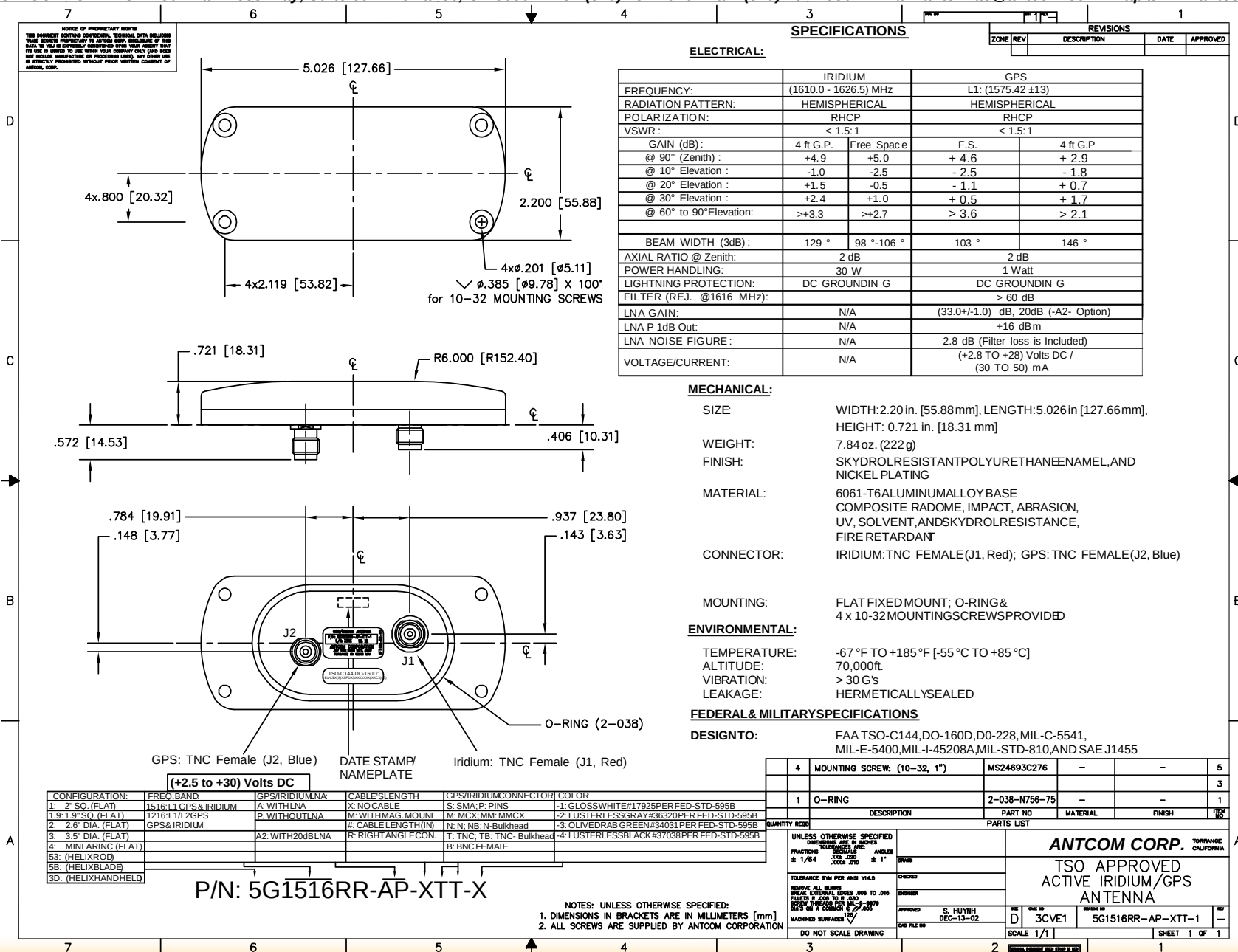
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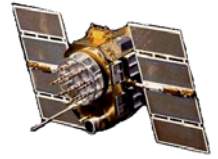
Active L1 GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
(5.03"x2.08"x0.69"), Flat/Pipe mount, P/N: 5G1516RR-AP-XTT-X
With BNC, TNC, SMA, N Connector Options.



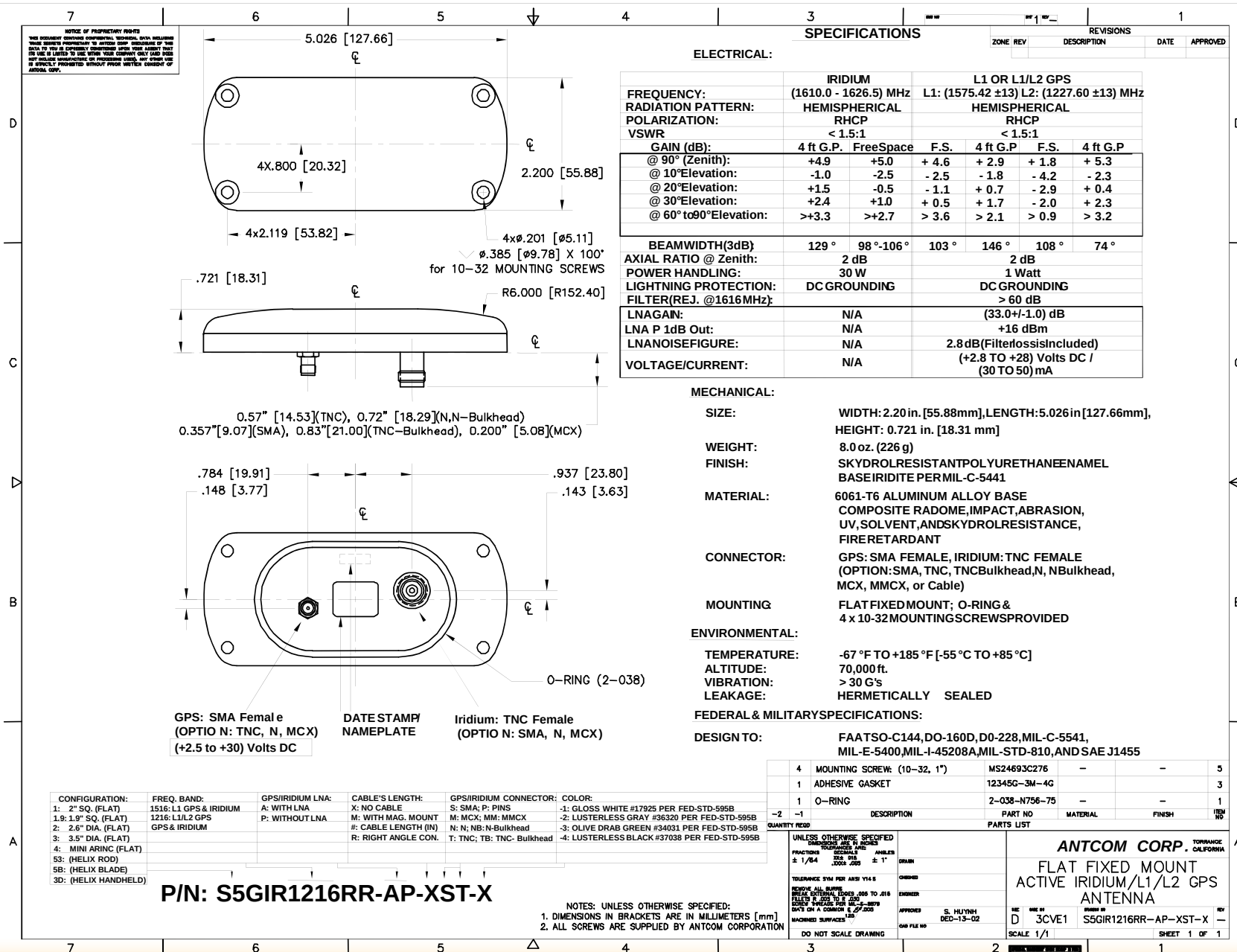
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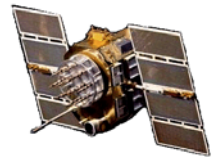
Active L1/L2 GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
(5.03"x2.08"x0.69"), Flat/Pipe mount, P/N: S5GIR1216RR-AP-XST-X
With BNC, TNC, SMA, N Connector Options.



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Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna: (5.03"x2.08"x0.69"), Removable Magnetic Mount, Side Connectors or Cables



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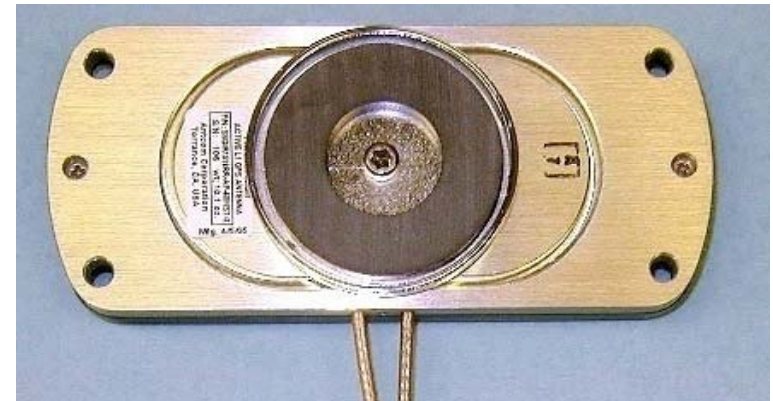
**P/N: S5GIR1516RR-AP-60MST-3,
Green**



**P/N: S5GIR1516RR-AP-MTT-3,
Green**



P/N: S5GIR1516RR-AP-MST-4, Black



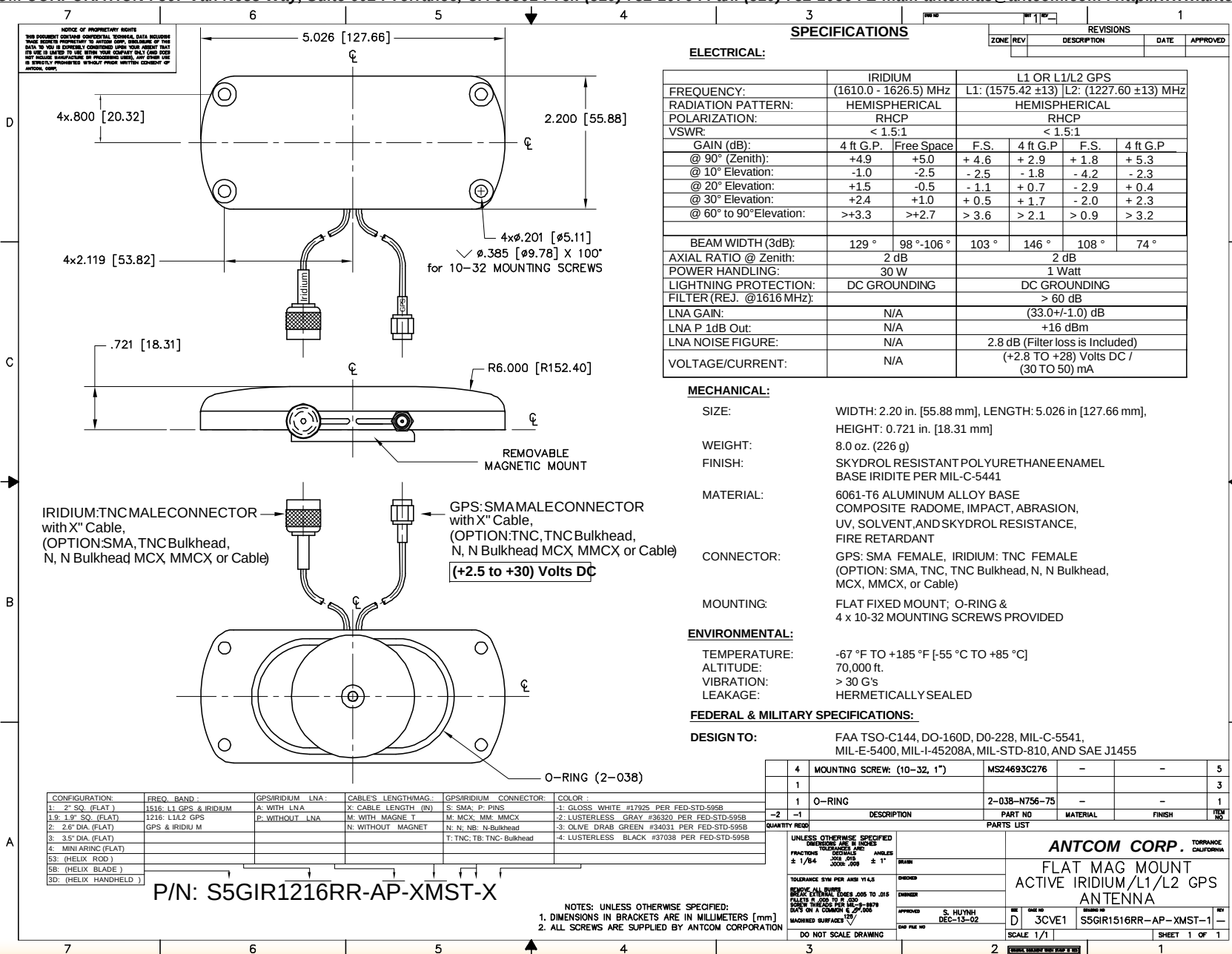


ISO9001

Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
(5.03"x2.08"x0.69"), Magnetic Mount, Cable, P/N: S5GIR1516RR-AP-XMST-X
With BNC, TNC, SMA, N Connector Options.



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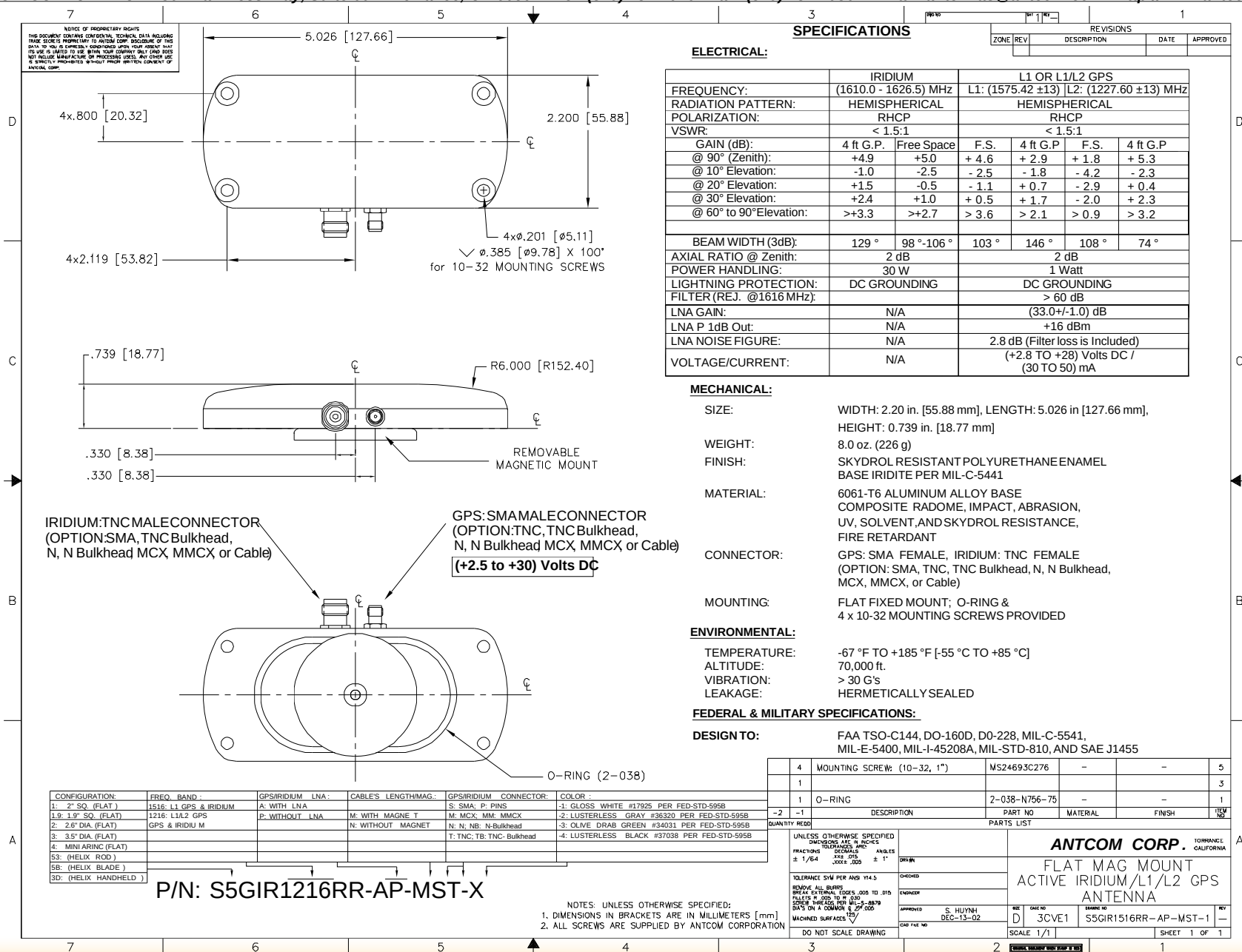




Active GPS & (IRIDIUM /Inmarsat or Thuraya) Antenna:
(5.03"x2.08"x0.69"), Magnetic Mount, Side Connector, P/N: S5GIR1516RR-AP-MST-X
With BNC, TNC, SMA, N Connector Options.



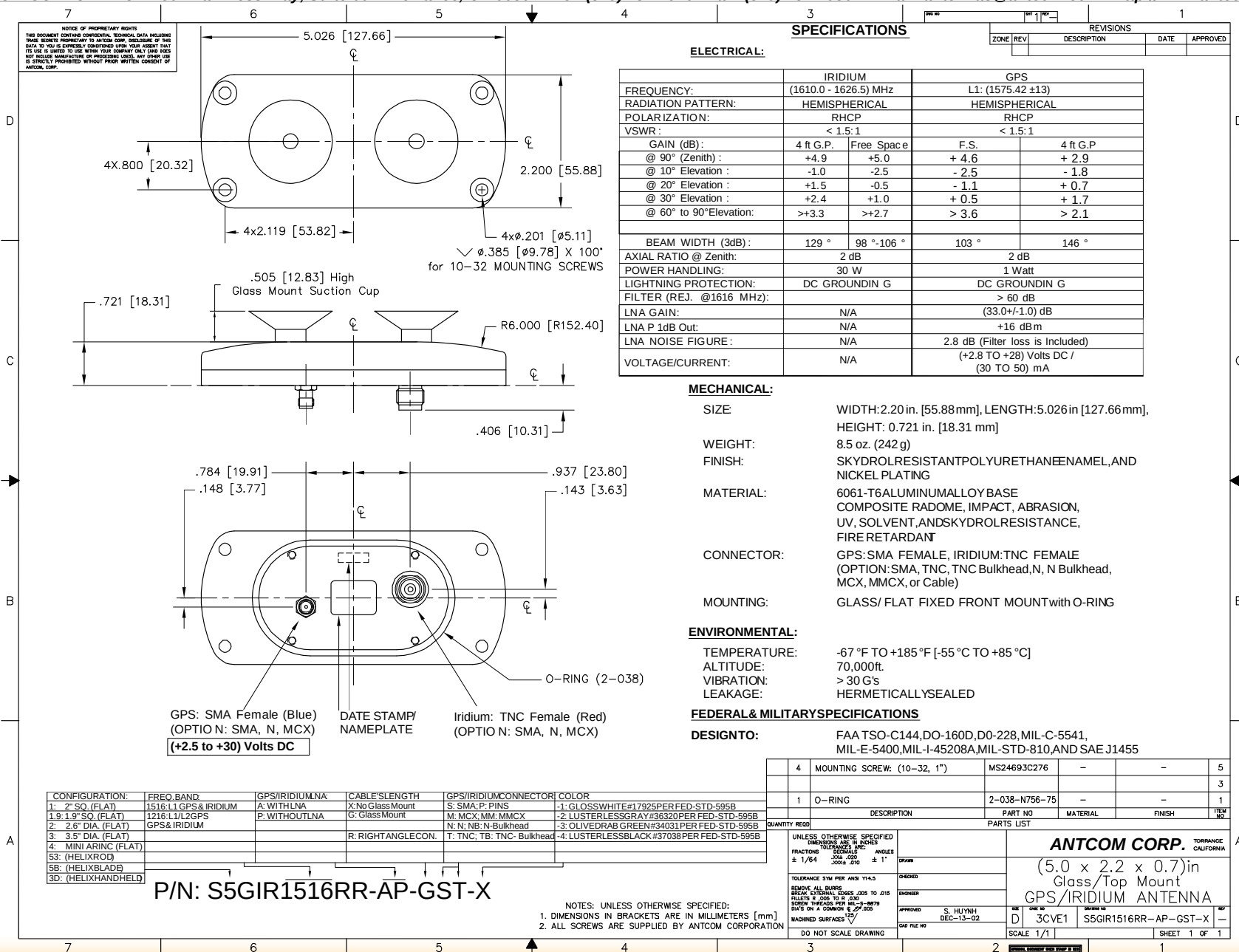
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Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
(5.0"x2.2"x0.7"), Glass/Top Mount, P/N: S5GIR1516RR-AP-GST-X
With BNC, TNC, SMA, N Connector Options.



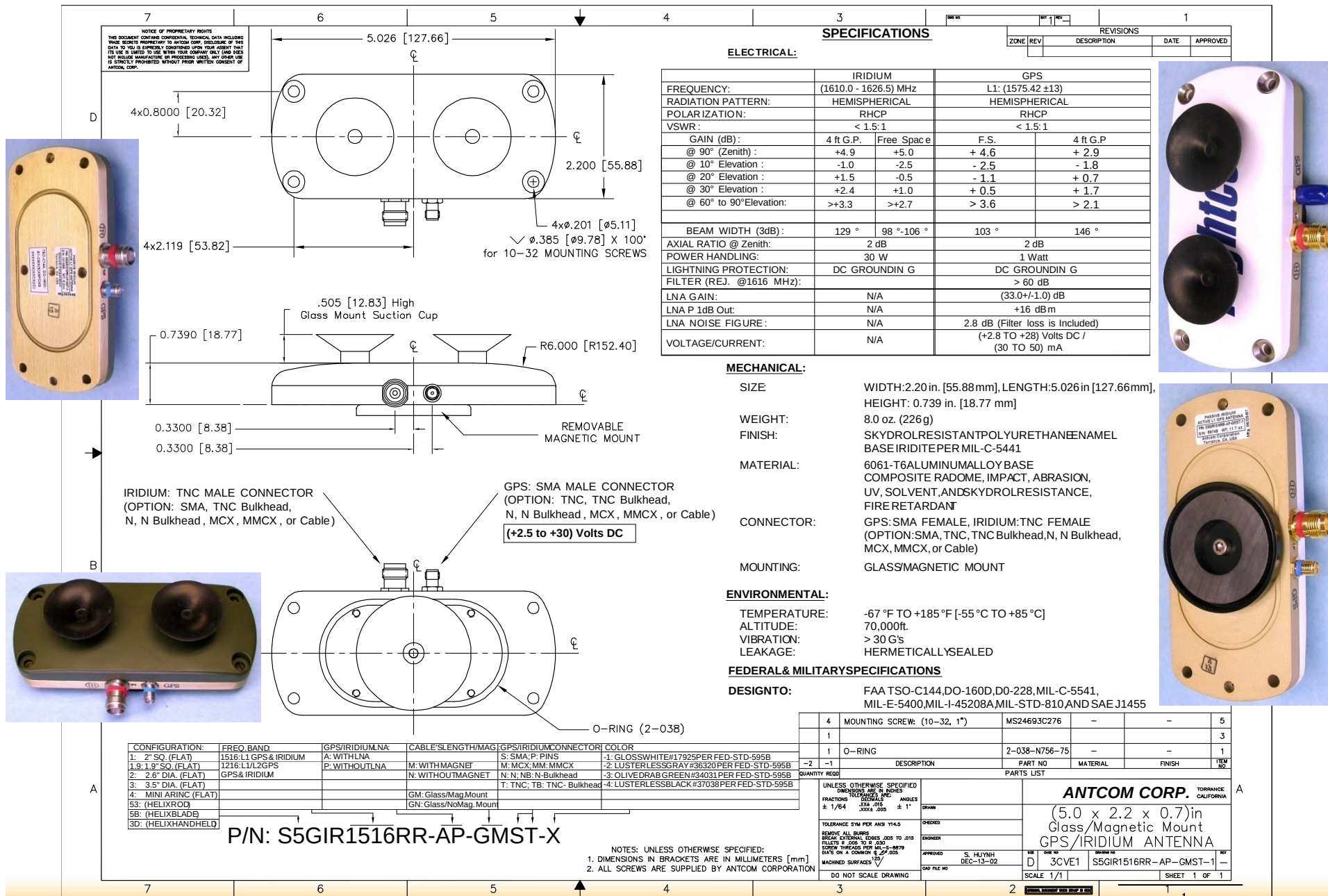
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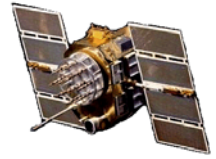
Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
(5.0"x2.2"x0.7"), Glass/Magnetic Mount, P/N: S5GIR1516RR-AP-GMST-X
With BNC, TNC, SMA, N Connector Options.



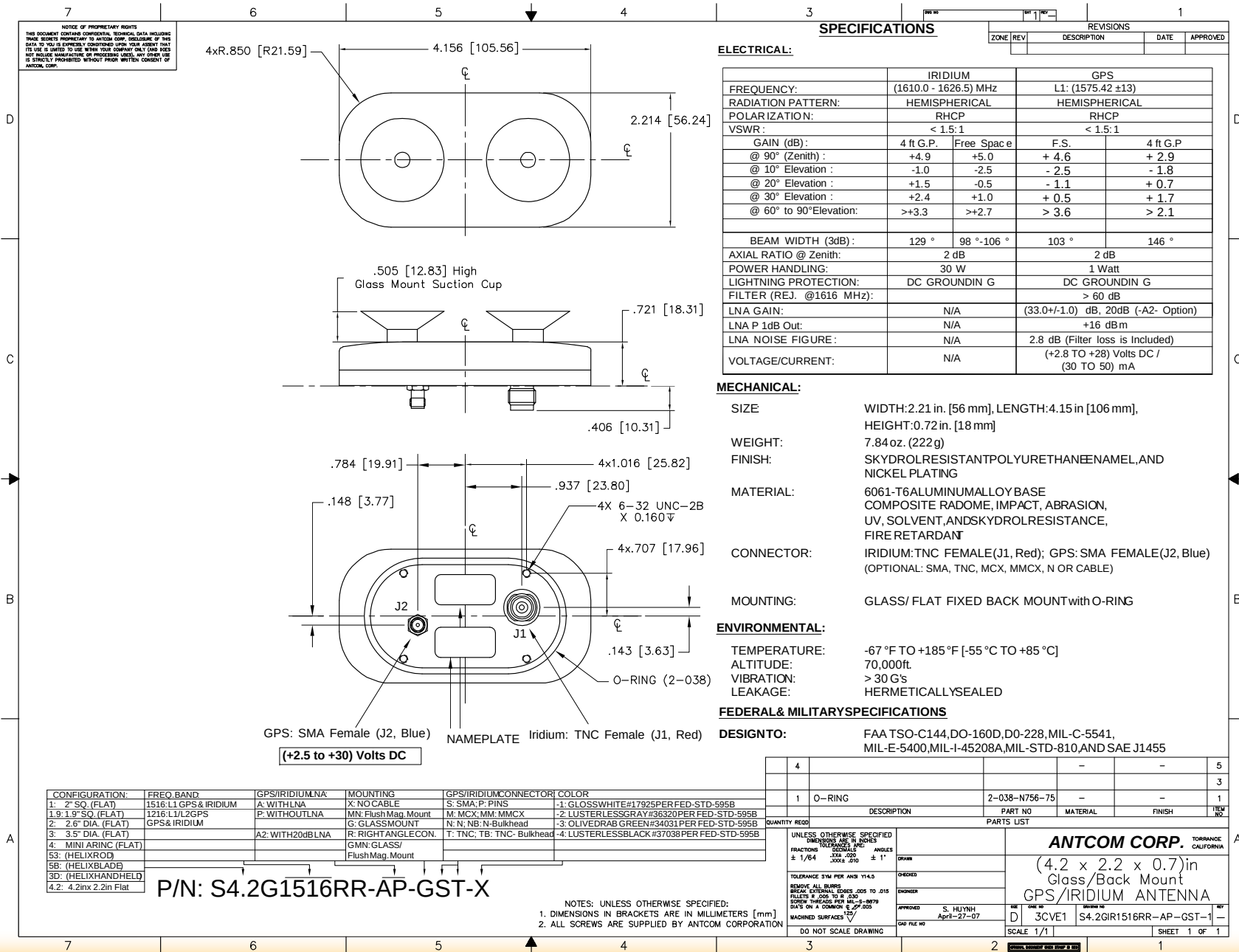
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Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
(4.2"x2.2"x0.7"), Glass/Back Mount, P/N: S4.2GIR1516RR-AP-GST-X



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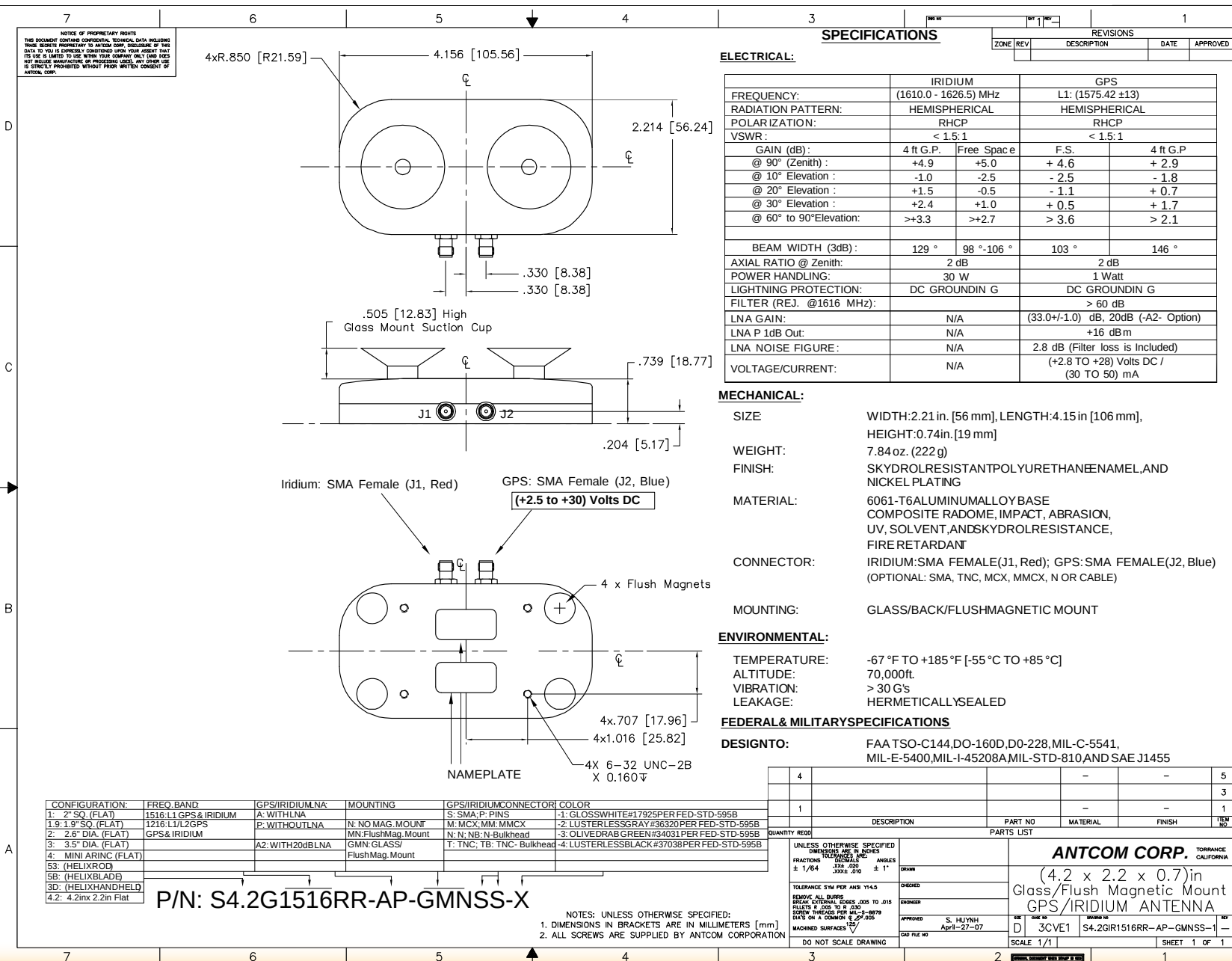
Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:

(4.2"x2.2"x0.7"), Glass/Flush Magnetic Mount, P/N: S4.2GIR1516RR-AP-GMNSS-X

ISO9001



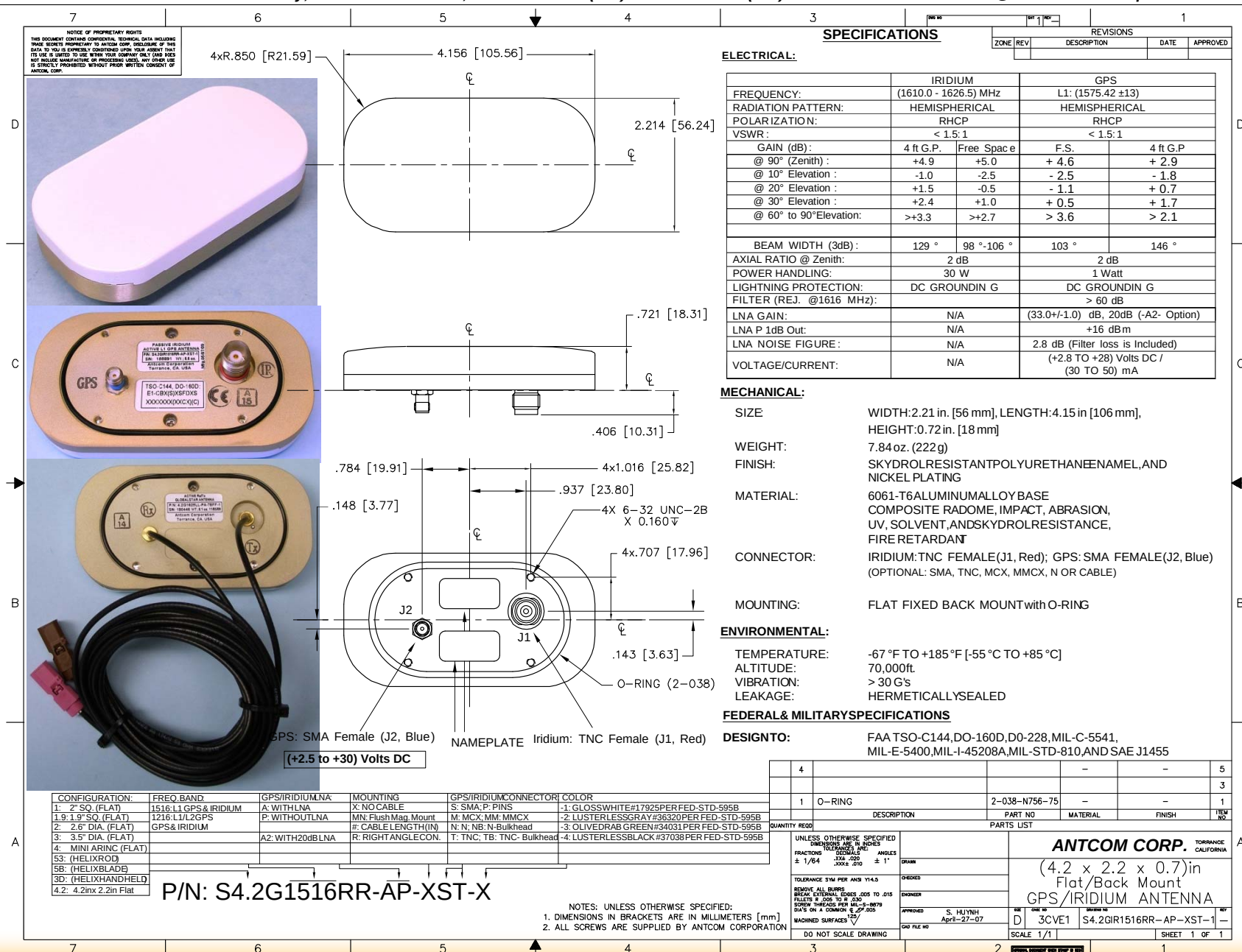
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Active GPS & (IRIDIUM/Inmarsat or Thuraya) Antenna:
(4.2"x2.2"x0.7"), Back Mount, P/N: S4.2GIR1516RR-AP-XST-X



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SPECIFICATIONS	
1. Material	304 Stainless Steel
2. Dimensions	12" x 12" x 12"
3. Weight	15 lbs
4. Color	Brushed Nickel
5. Finish	Polished
6. Mounting	Wall Mount
7. Warranty	5 Years
8. Price	\$1200
9. Lead Time	4 Weeks
10. Shipping	Free
11. Return Policy	30 Days
12. Installation	DIY
13. Maintenance	Easy
14. Features	Adjustable
15. Accessories	Optional
16. Certifications	CE, RoHS
17. Country of Origin	USA
18. Manufacturer	ABC Corp
19. Distributor	XYZ Inc
20. Contact Info	1-800-123-4567

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROV

	IRIDIUM		GPS	
FREQUENCY:	(1610.0 - 1626.5) MHz		L1: (1575.42 ±13)	
RADIATION PATTERN:	HEMISPHERICAL		HEMISPHERICAL	
POLARIZATION:	RHCP		RHCP	
VSWR:	< 1.5:1		< 1.5:1	
GAIN (dB):	4 ft G.P.	Free Space	F.S.	4 ft G.P
@ 90° (Zenith) :	+4.9	+5.0	+ 4.6	+ 2.9
@ 10° Elevation :	-1.0	-2.5	- 2.5	- 1.8
@ 20° Elevation :	+1.5	-0.5	- 1.1	+ 0.7
@ 30° Elevation :	+2.4	+1.0	+ 0.5	+ 1.7
@ 60° to 90°Elevation:	>+3.3	>+2.7	> 3.6	> 2.1
BEAM WIDTH (3dB):	129 °	98 ~106 °	103 °	146 °
AXIAL RATIO @ Zenith:	2 dB		2 dB	
POWER HANDLING:	30 W		1 Watt	
LIGHTNING PROTECTION:	DC GROUNDING		DC GROUNDING	
FILTER (REJ. @1616 MHZ):			> 60 dB	
LNA GAIN:	N/A		(33.0+/-1.0) dB, 20dB (-A2- Option)	
LNA P 1dB Out:	N/A		+16 dBm	
LNA NOISE FIGURE:	N/A		2.8 dB (Filter loss is Included)	
VOLTAGE/CURRENT:	N/A		(+2.8 To +28) Volts DC / (30 To 50) mA	

SIZE	WIDTH:2.21 in. [56 mm], LENGTH:4.15 in [106 mm], HEIGHT:0.74in.[19 mm]
WEIGHT:	7.84oz. (222g)
FINISH:	SKYDROLRESISTANTPOLYURETHANEENAMEL,AND NICKEL PLATING
MATERIAL:	6061-T6ALUMINUMALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT,ANDSKYDROLRESISTANCE, FIRE RETARDANT
CONNECTOR:	IRIDIUM:SMA FEMALE(J1, Red); GPS:SMA FEMALE(J2, Blue) (OPTIONAL: SMA, TNC, MCX, MMCX, N OR CABLE)

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
 ALTITUDE: 70,000ft.
 VIBRATION: > 30 G's
 LEAKAGE: HERMETICALLY SEALED

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

	4				—	—	
	1				—	—	
		DESCRIPTION	PART NO	MATERIAL	FINISH		

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		PARTS LIST	
FRACTION 1/64	ANGLE ± 1°	DRILL	ANTCOM CORP. (4.2 x 2.2 x 0.7) in Back/Flush Magnetic Mount GPS/IRIDIUM ANTENNA TORRANCE CALIFORNIA
TOLERANCE .010 MAX INCHES	FINISH RA .000	ENGINEER	
REMOVE ALL BURRS	DRILL .015	DESIGNED	
BRASS INTERNAL FORMS .005 ± .015	FINISH RA .000 TO .005	APPROVED	
DATE OF WORK ORDER DATE ON A DRAWING OF .005	DATE April-27-07	DATE 3/31/07	
MACHINED SURFACES		SCALE 1/1 SHEET 1 OF	

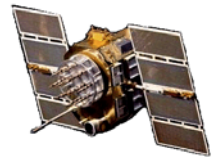
CONFIGURATION:	FREQ. BAND	GPS/IRIDIUM/NA	MOUNTING	GPS/IRIDIUM/CONNECTOR	COLOR
1: 2° SQ. (FLAT)	1516.1 L/GPS & IRIDIUM	A: WITH LNA		S: SMA; P: PINS	1: - GLOS
1.9: 1.9° SQ. (FLAT)	1216.1 L/GPS	P: WITHOUT LNA	N: NO MAG. MOUNT	M: MCX; MM: MMCX	2: - LUST
2: 2° DIAM. (FLAT)	GPS & IRIDIUM		MIN: FlushMag. Mount	N: N; NB: N-Bulkhead	3: - OLIVE
3: 3.5° DIA. (FLAT)		A2: WITH20dB LNA		T: TNC; TB: TNC Bulkhead	4: - LUST
4: MINI ARINC (FLAT)					
53: (HELIKROD)					
58: (HELIKROD)					
30: (HELIKROD) HELD					
42: 42X20.22IN FLAT					

P/N: S4 2G1516PB-AP-MNSSX

P/N: S4.2G1516RR-AP-MNSS-X

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

Active L1/L2 GPS, Iridium, & Wi-Fi Blade Antennas 4.6" Tall Blade Configurations



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Active L1/L2 GPS Helix Antenna,
P/N: 5B1215A-XT-3:



L-Band Boeing Foot Print
Hermetically Sealed, Designed for
Harsh Environment Applications.

Connector is Available in SMA,
MCX, MMCX, TNC, TNC-B, N, or
N-Bulkhead (See Drawing)



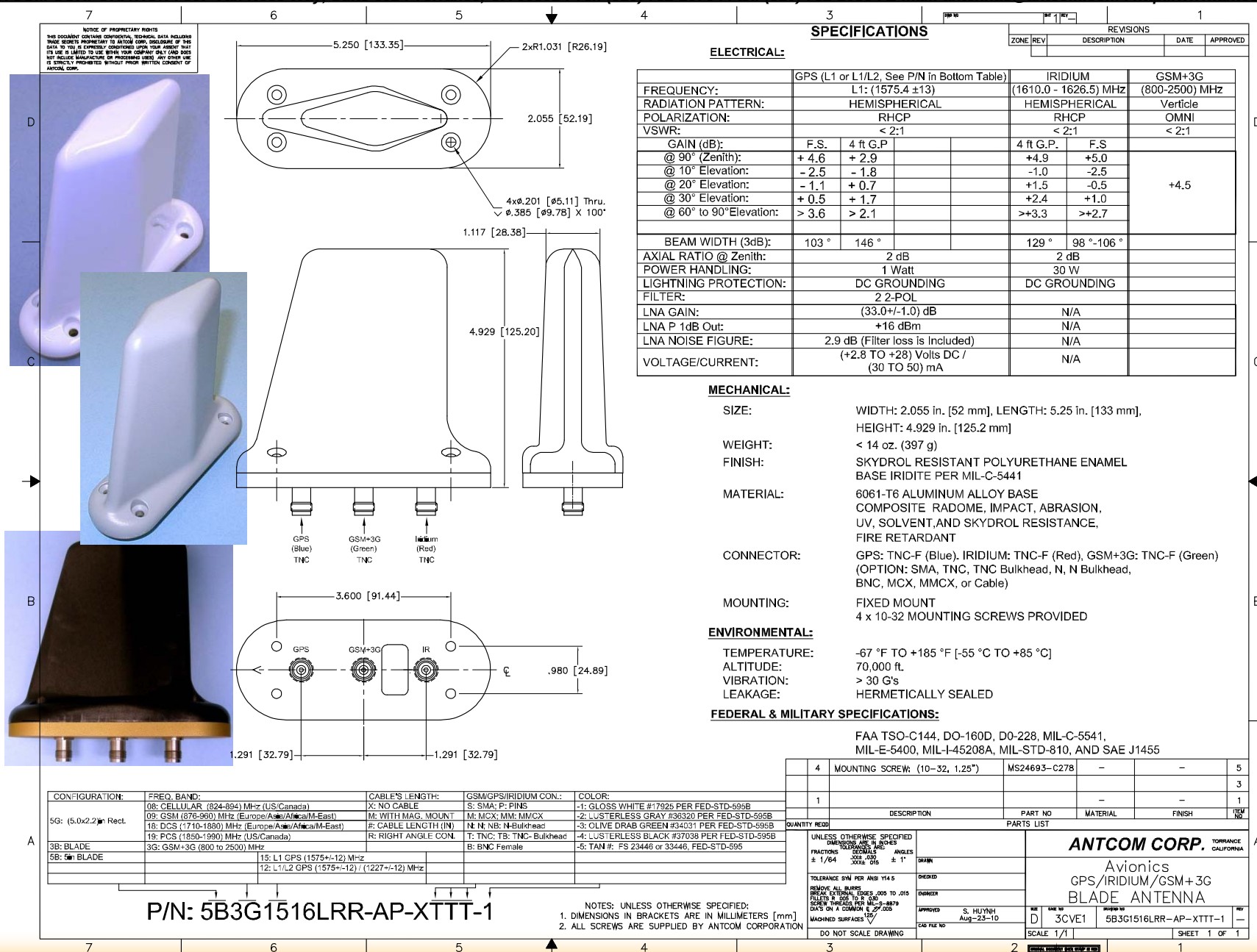
Active L1/L2 GPS and
Iridium Helix Antenna,
P/N: 5B1216RR-AP-XT-3:



Active L1/L2 GPS and
Iridium Helix Antenna,
Wi-Fi
P/N: 5B121625RRV-AP-XT-3:



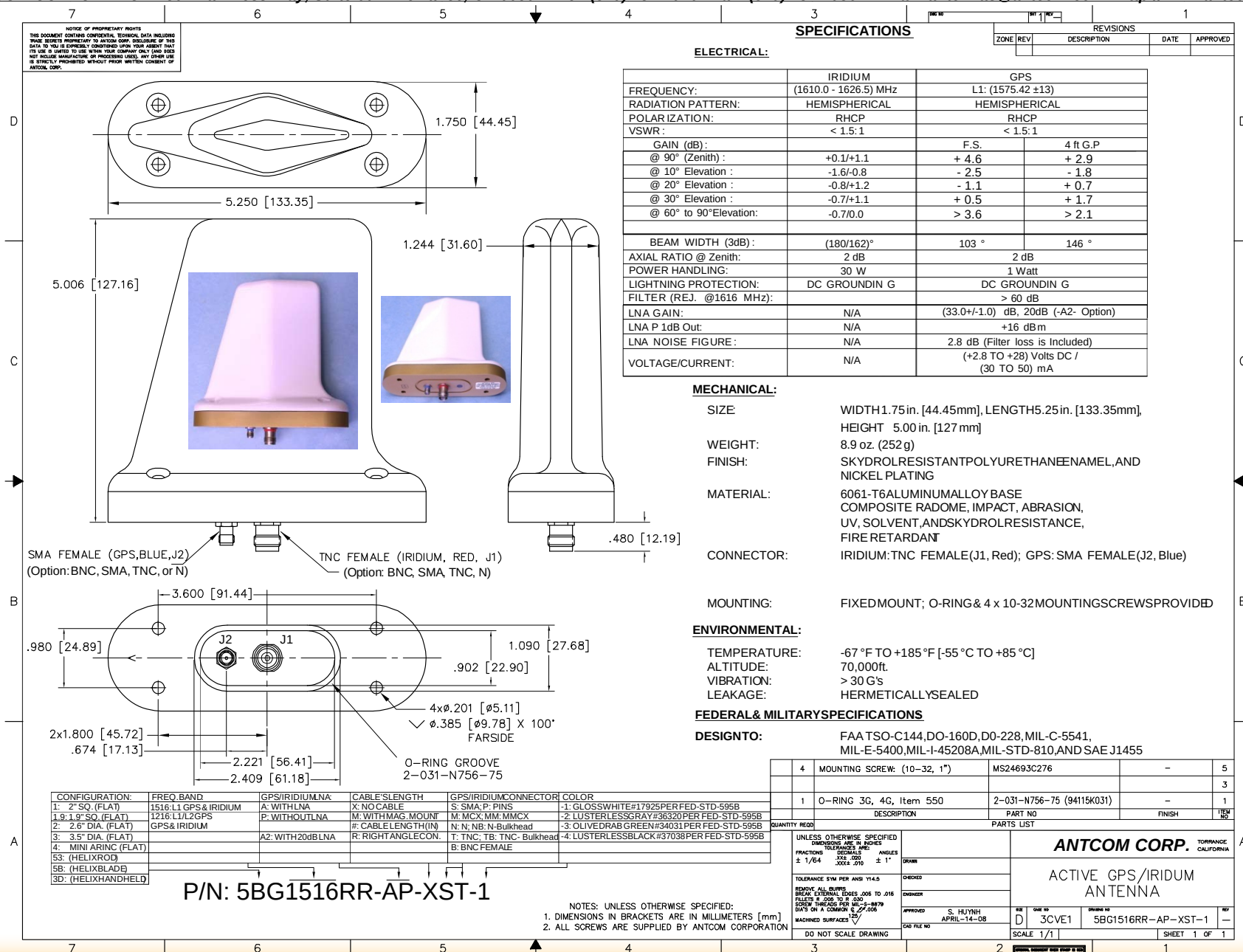
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Active L1 GPS & (IRIDIUM/Inmarsat) Antenna:
4.6in Tall, Blade Configuration, Top Mount, P/N: 5BG1516RR-AP-XTT-X,
With BNC, TNC, SMA, N Connector Options.



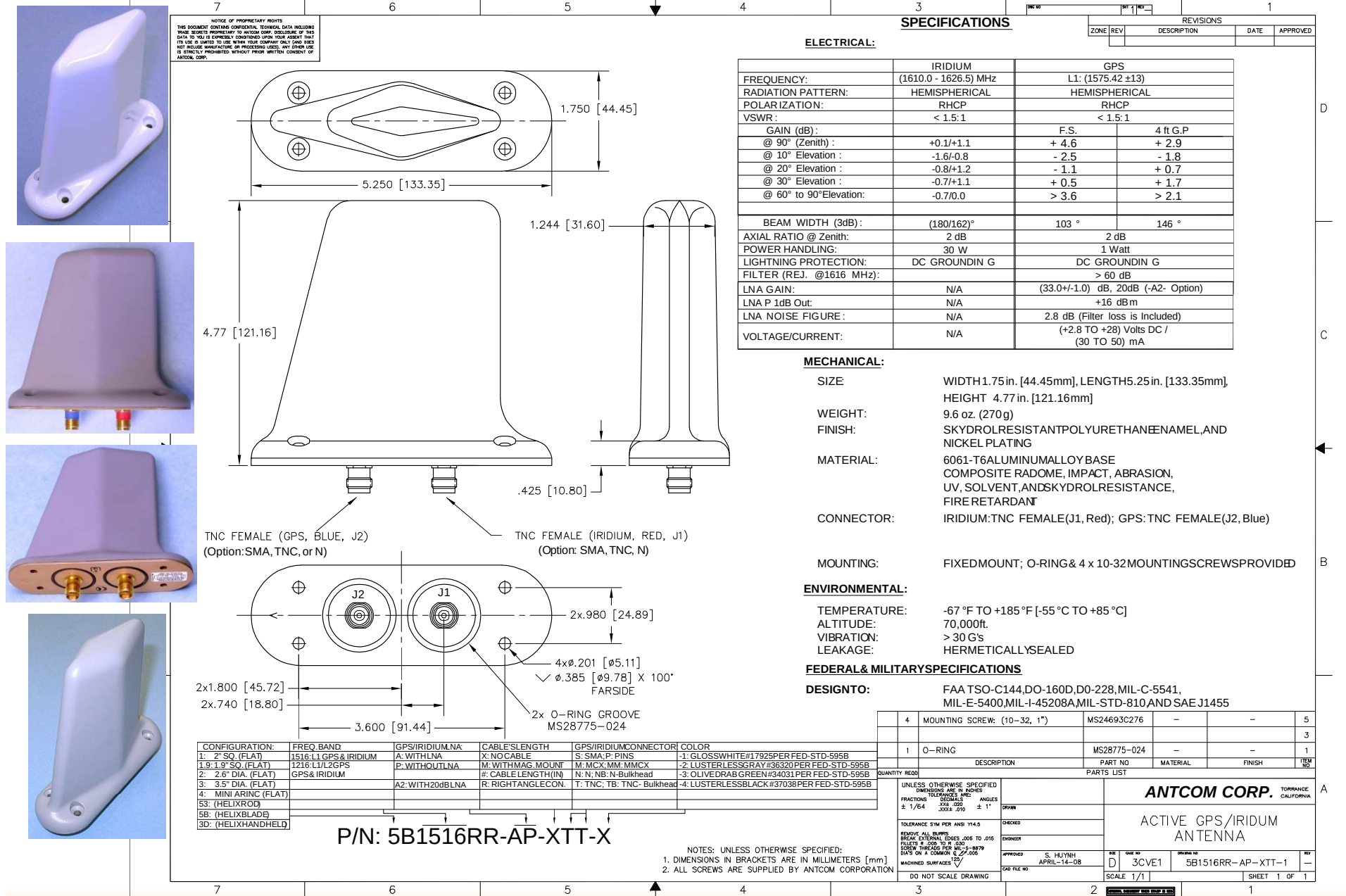
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Active L1 GPS & (IRIDIUM/Inmarsat) Antenna: 4.6in Tall, Blade Configuration, Top Mount, P/N: 5B1516RR-AP-XTT-X



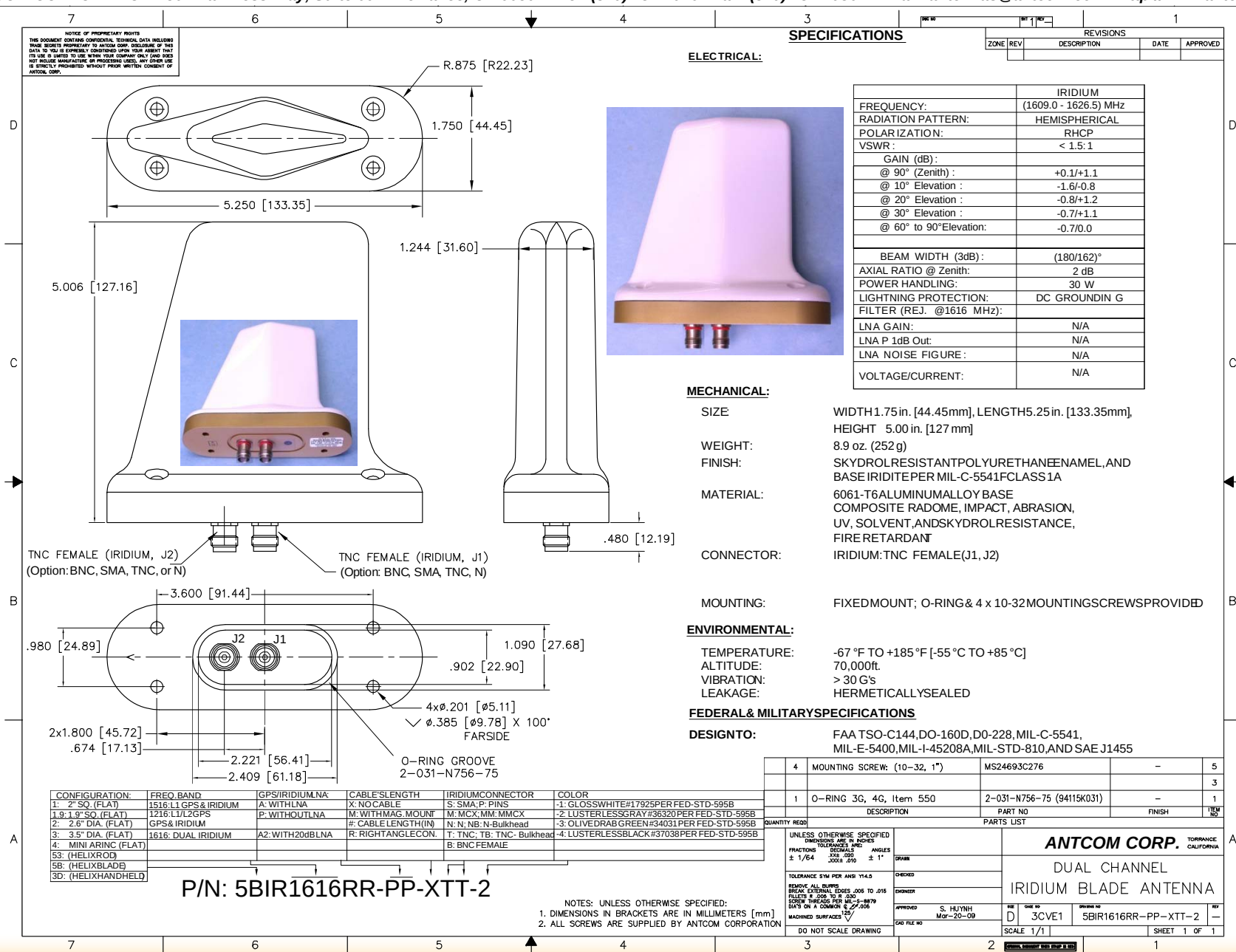
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Dual Channel IRIDIUM/Inmarsat Antenna: 5in Tall, Blade Configuration, Top Mount, P/N: 5BIR1616RR-PP-XTT-X, With BNC, TNC, SMA, N Connector Options.



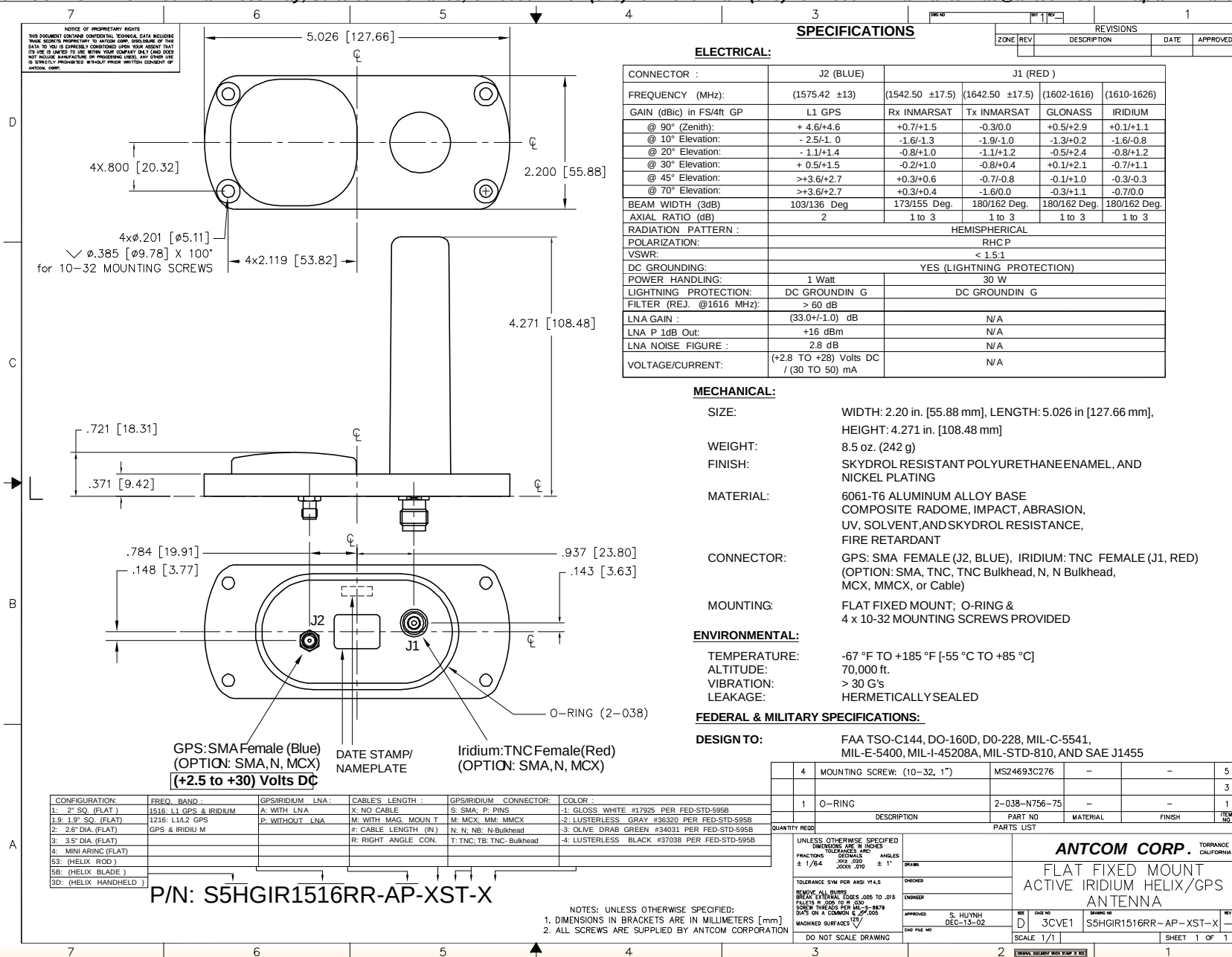
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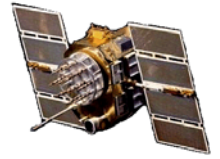




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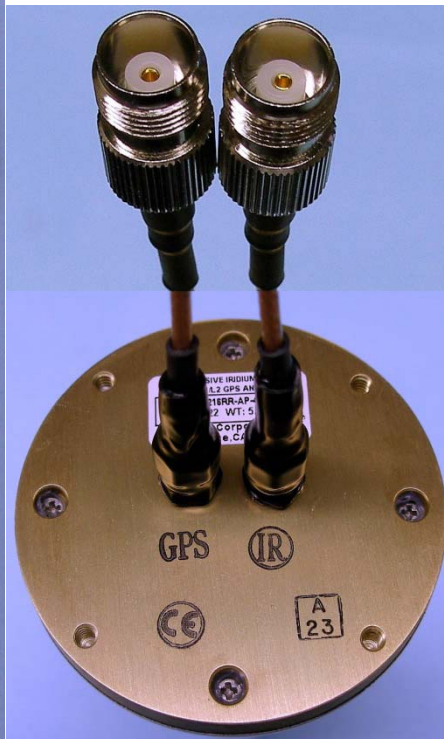
**Iridium Helix / Active GPS Antenna,
2.6" Diameter x 4.8" Tall, Pipe/Flat Mount Configuration**



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**Iridium Helix /
Active L1/L2 GPS Antenna,
P/N: 52G1216RR-AP-4TT-1:
2.6" Diameter x 4.8" Tall,
Pipe/Flat Mount Configuration**



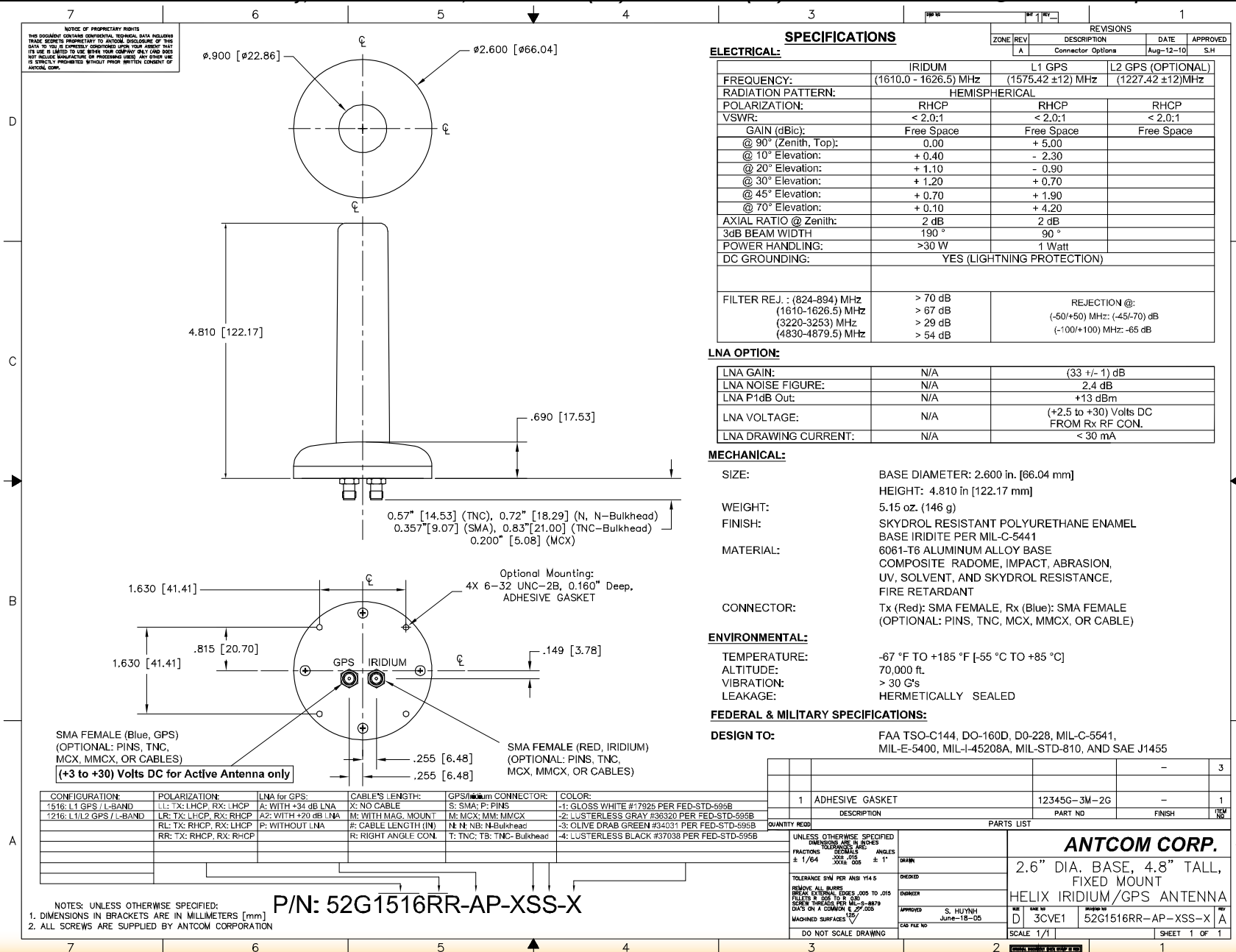
**Iridium Helix / Active L1 GPS Antenna,
P/N: 52G1516RR-A-XS-1:
2.6" Diameter x 4.8" Tall,
Pipe/Flat Mount Configuration**

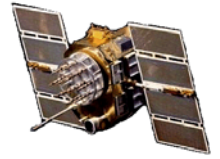
**Hermetically Sealed, Designed for Harsh
Environment Applications.**

**Connector is Available in SMA, MCX, MMCX,
TNC, TNC-B, N, or N-Bulkhead (See Drawing)**



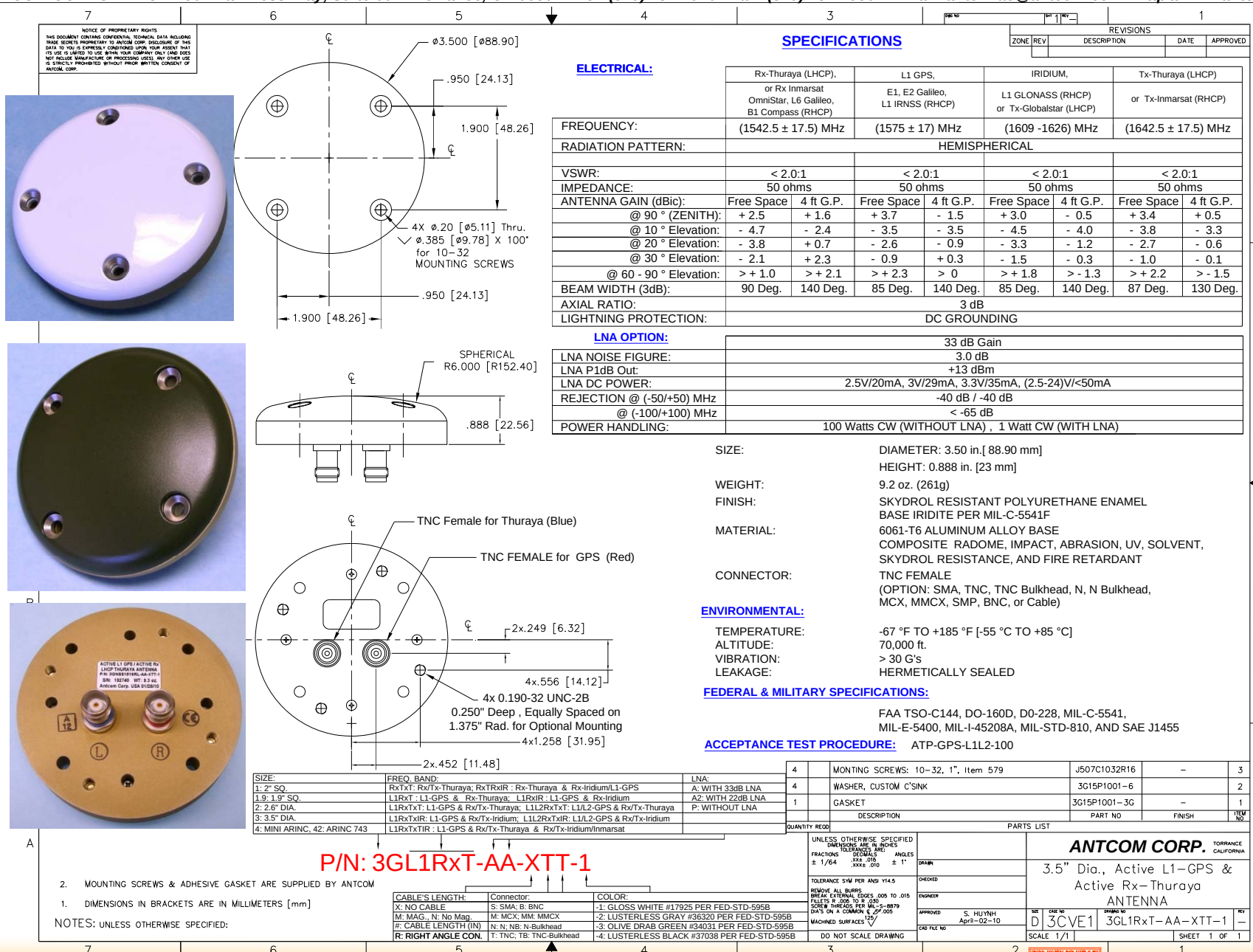
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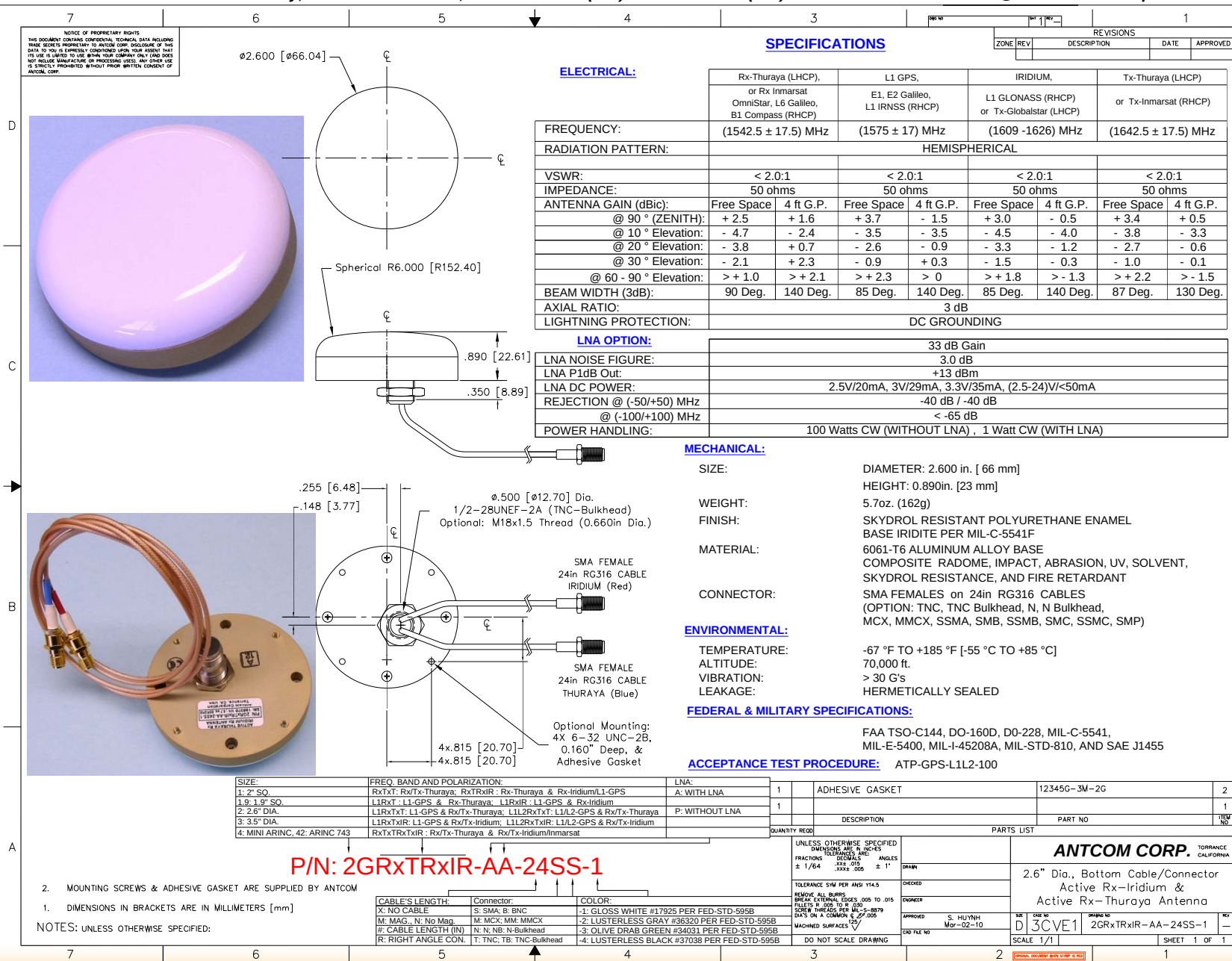
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Environment Applications.**

**Connector is Available in SMA, MCX, MMCX,
TNC, TNC-B, N, or N-Bulkhead (See Drawing)**



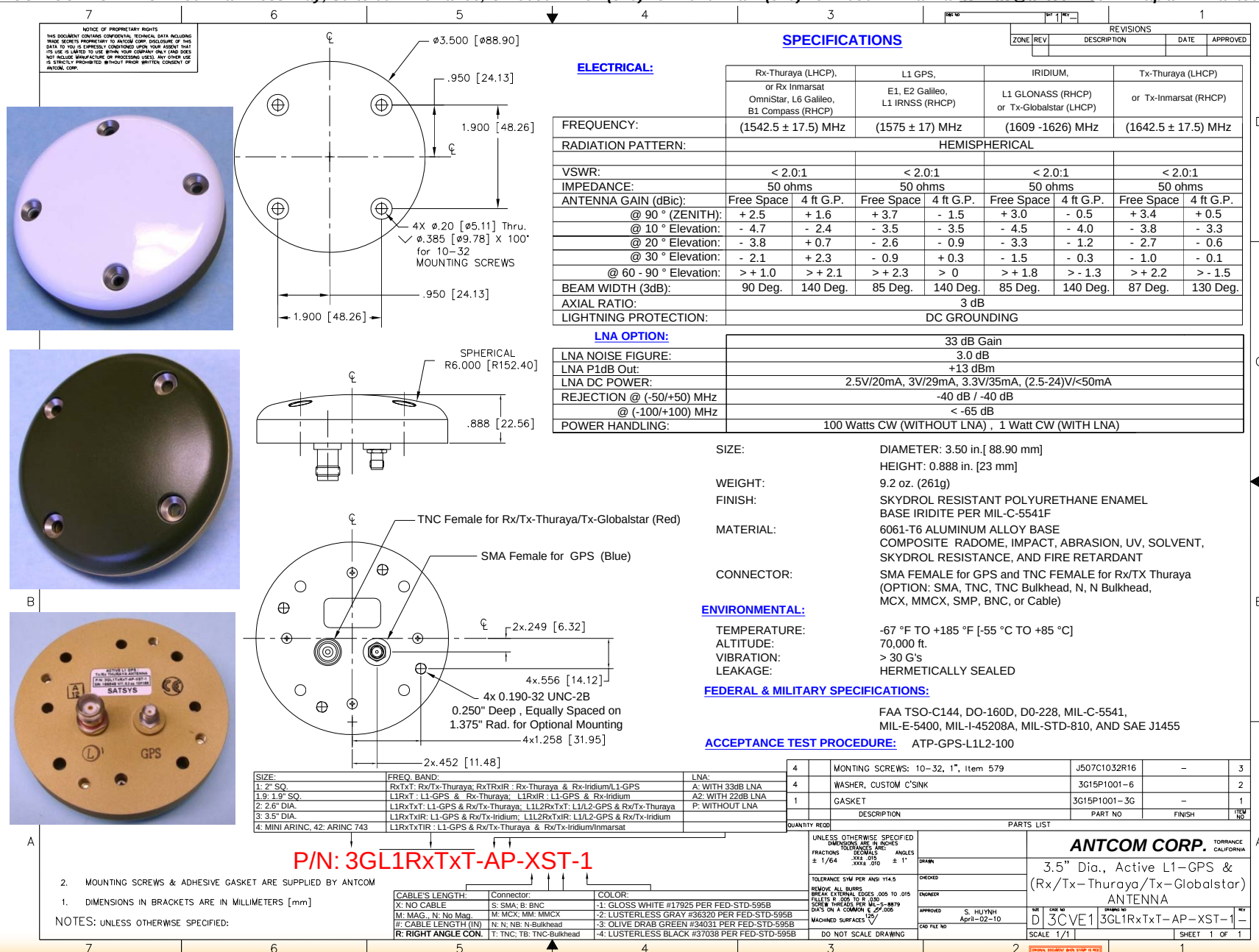
New 2-Port (Active Rx-Thuraya) & (Active Rx-Iridium/GPS) Antenna,
P/N: 2GRxTRxIR-AA-24SS-1,
2.6" Diameter, Flat, Back Mount, Bottom Cables Configuration
3.5in Dia, Mini-Arinc, & Arinc-743 Versions are also available

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New 2-Port (Active L1 GPS) & (Rx/Tx-Thuraya) Antenna,
P/N: 3GL1RxTxT-AP-XST-1
3.5" Diameter, Flat, Back Mount, Bottom Connector Configuration
2.6in Dia., Mini-Arinc, & Arinc-743 Versions are also available

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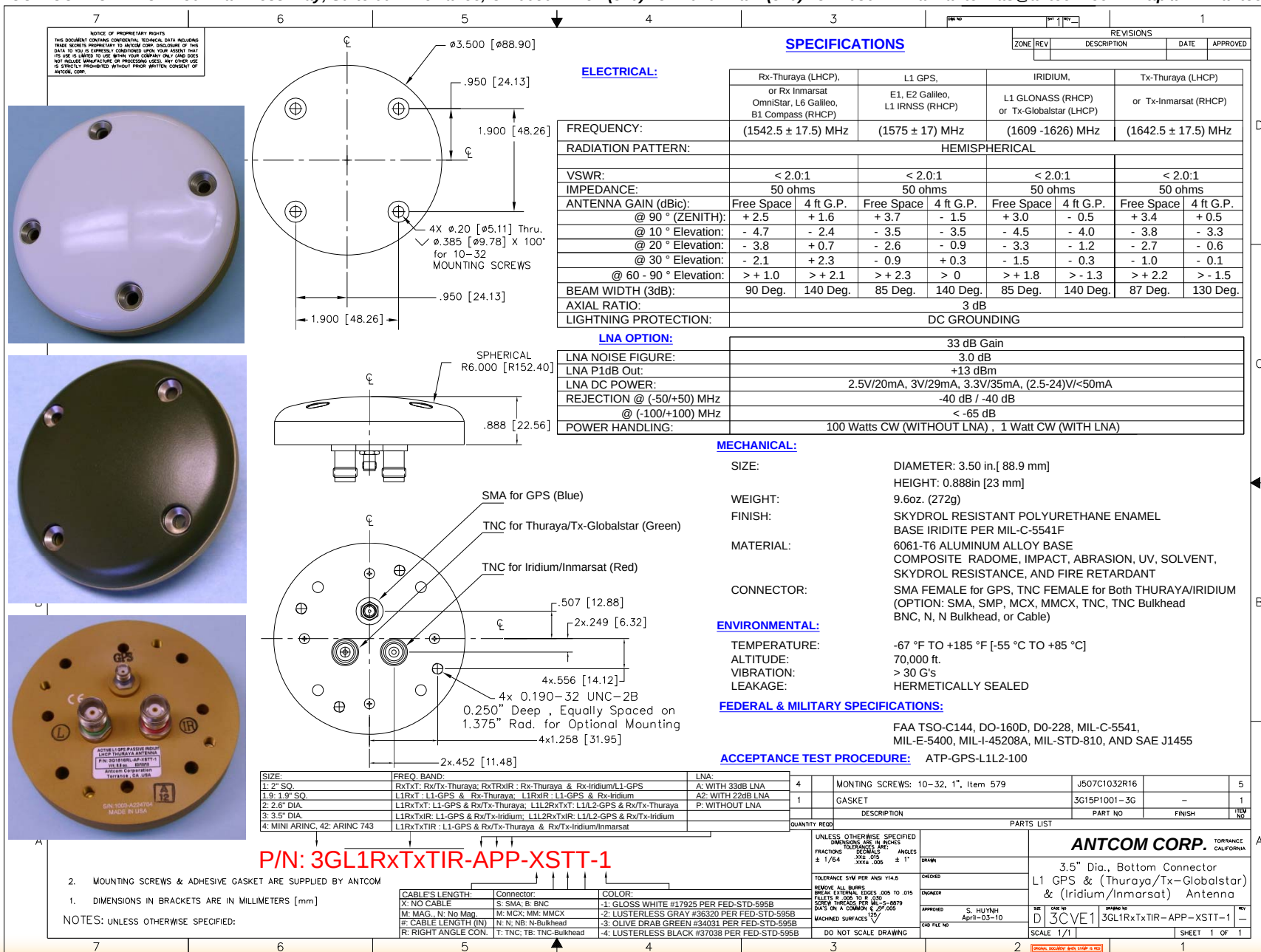




New 3-Port (Active L1-GPS) & (Rx/Tx-Thuraya/Tx-Globalstar) & (Rx/Tx-Iridium/Inmarsat) Antenna,
P/N: 3GL1RxTxTIR-APP-XSTT-X,
3.5" Diameter, Flat, Back Mount, Bottom Connector Configuration
2.6in Dia., Mini-Arinc, & Arinc-743 Versions are also available

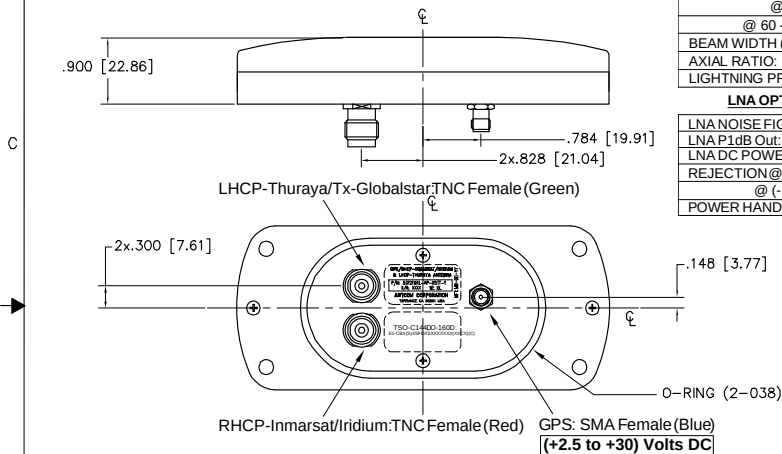
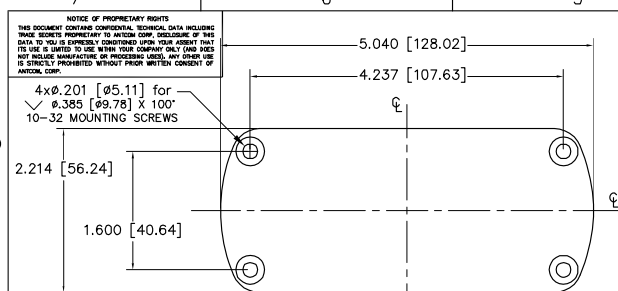


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New 3-Ports (Active L1/L2 GPS), (RHCP-Inmarsat/Iridium) & (LHCP-Thuraya/Tx-Globalstar) Antenna, P/N: 5G1516RL-AP-XSTT-1 (5.04"x2.2"x0.9"), Flat, Top/Pipe Mount, Bottom Connector Configuration

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SPECIFICATIONS

ELECTRICAL:	L1/L2 GPS				Rx Inmarsat OmniStar, L6 Galileo, B1 Compass(RHCP)		IRIDIUM L1 GLONASS(RHCP)		Tx Inmarsat (RHCP)		
	L2	L1			& Rx-Thuraya (LHCP)		& Tx-Globalstar(LHCP)		& Tx-Thuraya (LHCP)		
FREQUENCY:	(1227.60 ±15) MHz	(1575.42 ±15) MHz			(1542.5 ± 17.5) MHz		(1609 -1626) MHz		(1642.5 ± 17.5) MHz		
RADIATION PATTERN:	HEMISPHERICAL										
VSWR:	< 2.0:1										
IMPEDANCE:	50 ohms										
ANTENNA GAIN (dBic):	Free Space	4 ft G.P.	Free Space	4 ft G.P.	Free Space	4 ft G.P.	Free Space	4 ft G.P.	Free Space	4 ft G.P.	
@ 90 ° (ZENITH):	+ 1.8	+ 5.3	+ 4.6	+ 2.9	+ 3.3	+ 0.8	+ 6.4	+ 3.9	+ 8.0	+ 4.1	
@ 10 ° Elevation:	- 4.2	- 2.3	- 2.5	- 1.8	- 3.9	- 5.0	- 0.7	- 2.3	+ 1.0	- 2.4	
@ 20 ° Elevation:	- 2.9	+ 0.4	- 1.1	+ 0.7	- 2.3	- 1.2	+ 0.7	+ 0.9	+ 2.3	+ 0.7	
@ 30 ° Elevation:	- 2.0	+ 2.3	+ 0.5	+ 1.7	- 1.1	+ 0.4	+ 1.9	+ 2.2	+ 3.4	+ 1.7	
@ 60 - 90 ° Elevation:	> + 0.9	> + 3.2	> + 3.6	> + 2.1	> + 2.4	> + 1.4	> + 5.6	> + 2.5	> + 6.9	> + 1.9	
BEAM WIDTH (3dB):	108 Deg.	120 Deg.	103 Deg.	146 Deg.	100 Deg.	135 Deg.	92 Deg.	140 Deg.	90 Deg.	130 Deg.	
AXIAL RATIO:	2.0 dB		2.0 dB			1.0 dB		1.5 dB		2.0 dB	
LIGHTNING PROTECTION:	DC GROUNDING										
LNA OPTION:											
LNA NOISE FIGURE:	33 dB Gain										
LNA P1dB Out:	3.0 dB										
LNA DC POWER:	+13 dBm										
REJECTION@ (-50/+50) MHz	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA										
@ (-100/+100)MHz	-40 dB / -40 dB										
POWER HANDLING:	< -65 dB										
	1 Watt CW (WITH LNA)					200 Watts CW					

MECHANICAL:

SIZE: WIDTH: 2.214 in. [56.24 mm], LENGTH: 5.040 in [128.02 mm], HEIGHT: 0.900 in. [22.86 mm]
WEIGHT: 10.4 oz. (295g)
FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441
MATERIAL: 6061-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, MMCX, or Cable)

ENVIRONMENTAL:

TEMPERATURE: -67 ° F TO +185 ° F [-55 ° C TO +85 ° C]
ALTITUDE: 70,000 ft
VIBRATION: > 30 G's
LEAKAGE: HERMETICALLY SEALED

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	DESCRIPTION	PART NO	FINISH	ITEM NO
4	MONTING SCREWS: 10-32, 100" Flat Head, 1"	J507C1032R16		2
1	O-RING	2-038-N756-75	-	1

CONFIGURATION:	FREQ. BAND:	GPS LNA:	CABLE'S LENGTH:	GPS/Inmarsat/Thuraya Connector:	COLOR
1: 2" SQ. (FLAT)	1516 L1 GPS-A (Inmarsat/Iridium)	A: WITH LNA	X: NO CABLE	S: SMA	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	& (Thuraya/Tx-Globalstar)	P: WITHOUT LNA	M: WITH MAG. MOUNT	M: MCX, MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)	1216 L1/L2 GPS & (Inmarsat/Iridium)		#: CABLE LENGTH (IN)	N: N; NB: N-Bulkhead	-3: OLIVED RAB GREEN #34031 PER FED-STD-595B
3: 3.5" DIA. (FLAT)	& (Thuraya/Tx-Globalstar)	A2: WITH 20dB LNA	R: RIGHT ANGLE CON.	T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)				B: BNC FEMALE	
53: (HELIX ROD)					
5B: (HELIX BLADE)					
3D: (HELIX HANDHELD)					

P/N: 5G1216RL-AP-XSTT-1

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

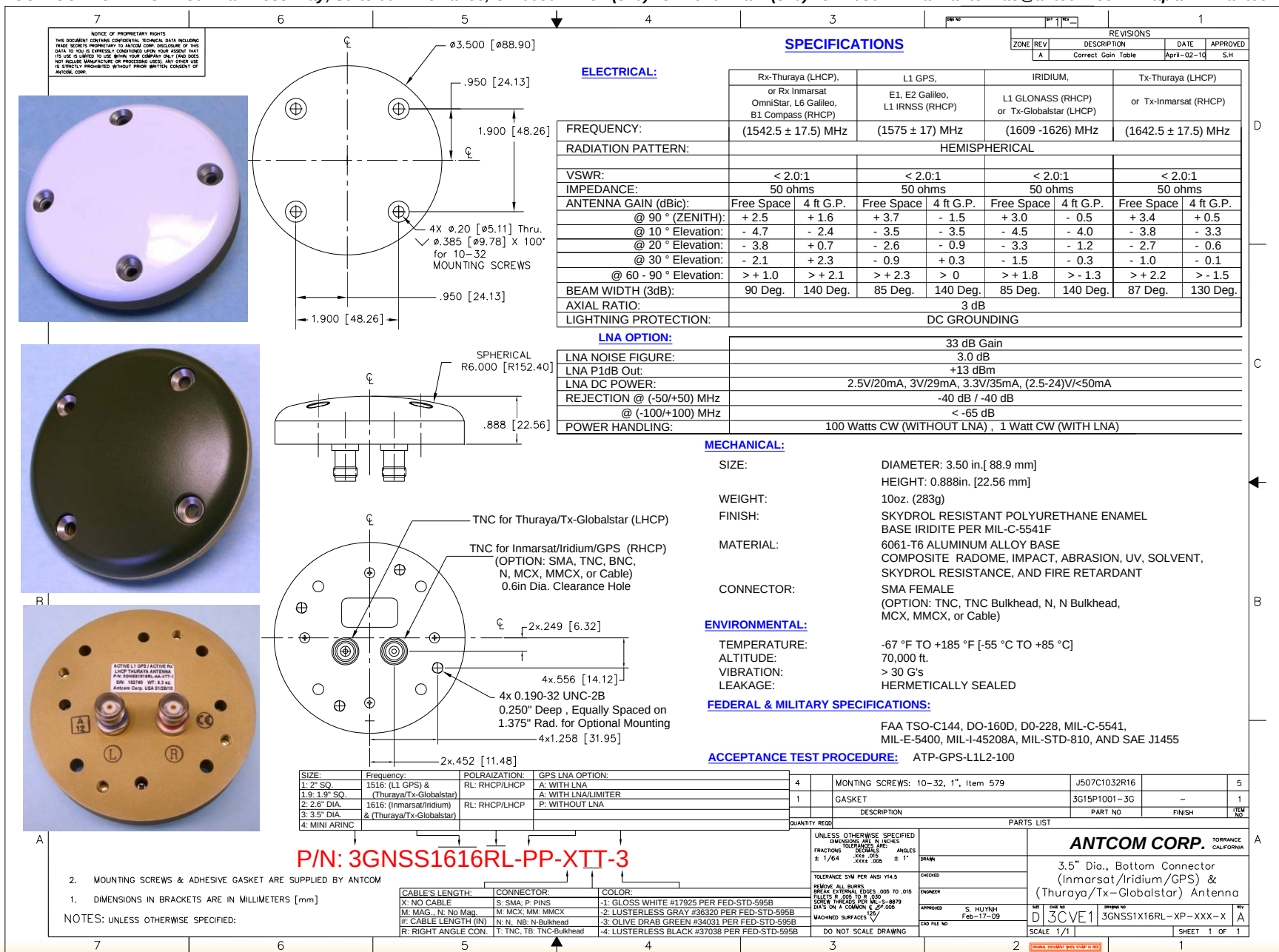
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES		TOLERANCE 31M PER ANSI Y14.5		REWORK ALL SURFACES BEFORE EXTERNAL COATS TO .015 FILL TO .005 TO .010 IN MAX SURF VARIATIONS PER MIL-S-8879 BATS ON A COMPOUND OF .005		MACHINED SURFACES TO		DO NOT SCALE DRAWING	
1/64	.006	± 1/64	± 1"	± 1/64	± 1"	± 1/64	± 1"	± 1/64	± 1"
ANTCOM CORP.		Combined Avionics		GPS & (RHCP-Inmarsat/Iridium) & (LHCP-Thuraya/Tx-Globalstar) Antenna		DATE: 5/12/2011		DRAWN BY: S. H. 5/12/2011	
3C VE1		5G1216RL-AP-XSTT-1		SCALE 1/1		SHEET 1 OF 1			



New 2-Ports, (RHCP-Inmarsat/Iridium/GPS) & (LHCP-Thuraya/Tx-Globalstar) Antenna,
P/N: 3GNSS1616RL-PP-XXX-X,
3.5" Diameter, Flat, Back Mount, Bottom Connector Configuration
2.6in Dia. & Arinc-743 Versions are also available



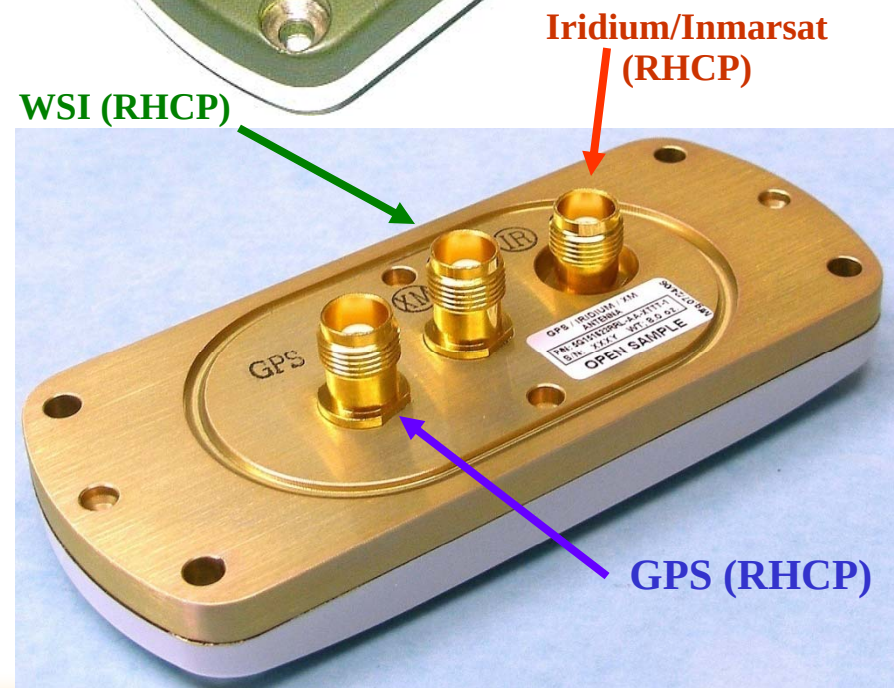
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**Hermetically Sealed, Designed for
Harsh Environment Applications.**

**Connector is Available in SMA, MCX,
MMCX, TNC, TNC-B, N, or N-
Bulkhead (See Drawing)**



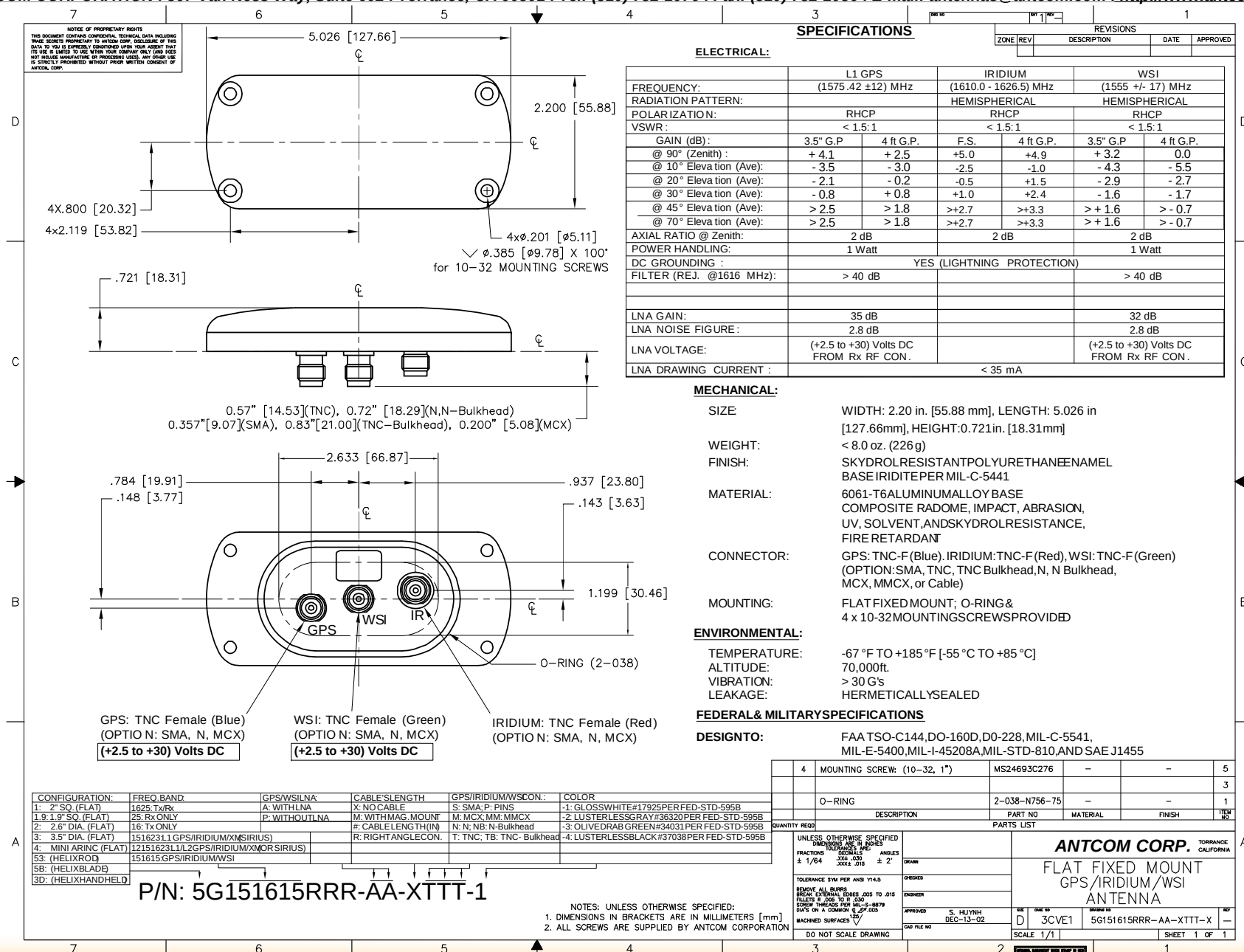


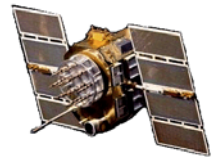
ISO9001

Iridium/GPS/WSI Antenna: (5.03"x2.08"x0.69"), Flat/Pipe mount, P/N: 5G151516RRR-AA-XTTT-X

FAA Approved
TSO Antennas

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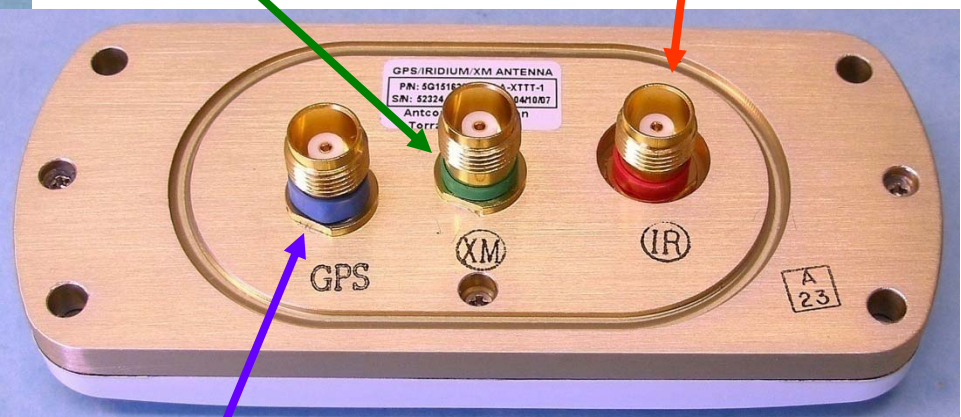
Connector is Available in SMA, MCX,
MMCX, TNC, TNC-B, N, or N-
Bulkhead (See Drawing)



**XM (LHCP), OR
SIRIUS (RHCP)**

**Iridium/Inmarsat
(RHCP)**

GPS (RHCP)





ISO9001

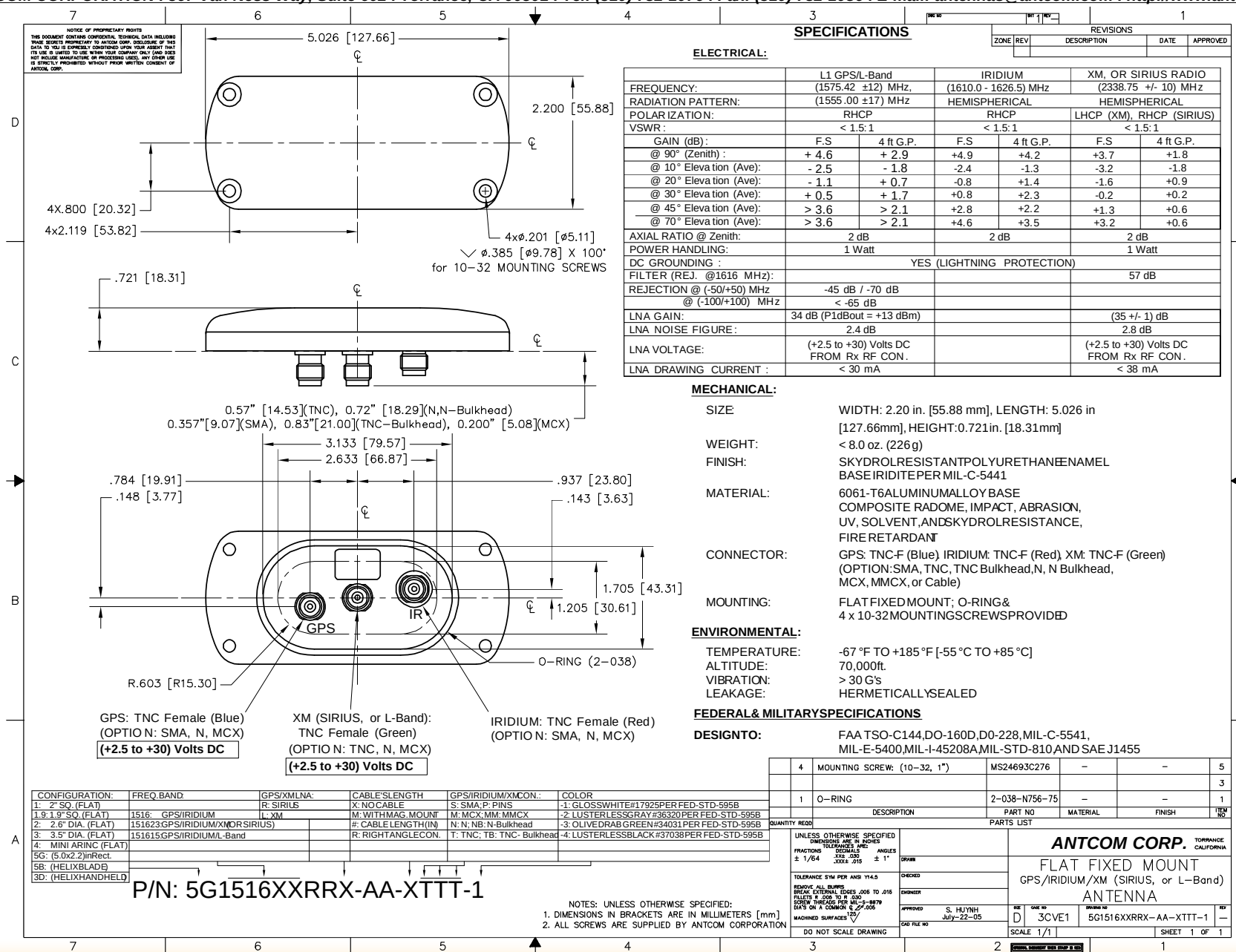
GPS/IRIDIUM/XM or SIRIUS Antenna: (5.03"x2.08"x0.69"), Flat/Pipe mount, P/N: 5G151623RRX-AA-XTTT-X



FAA Approved
TSO Antennas



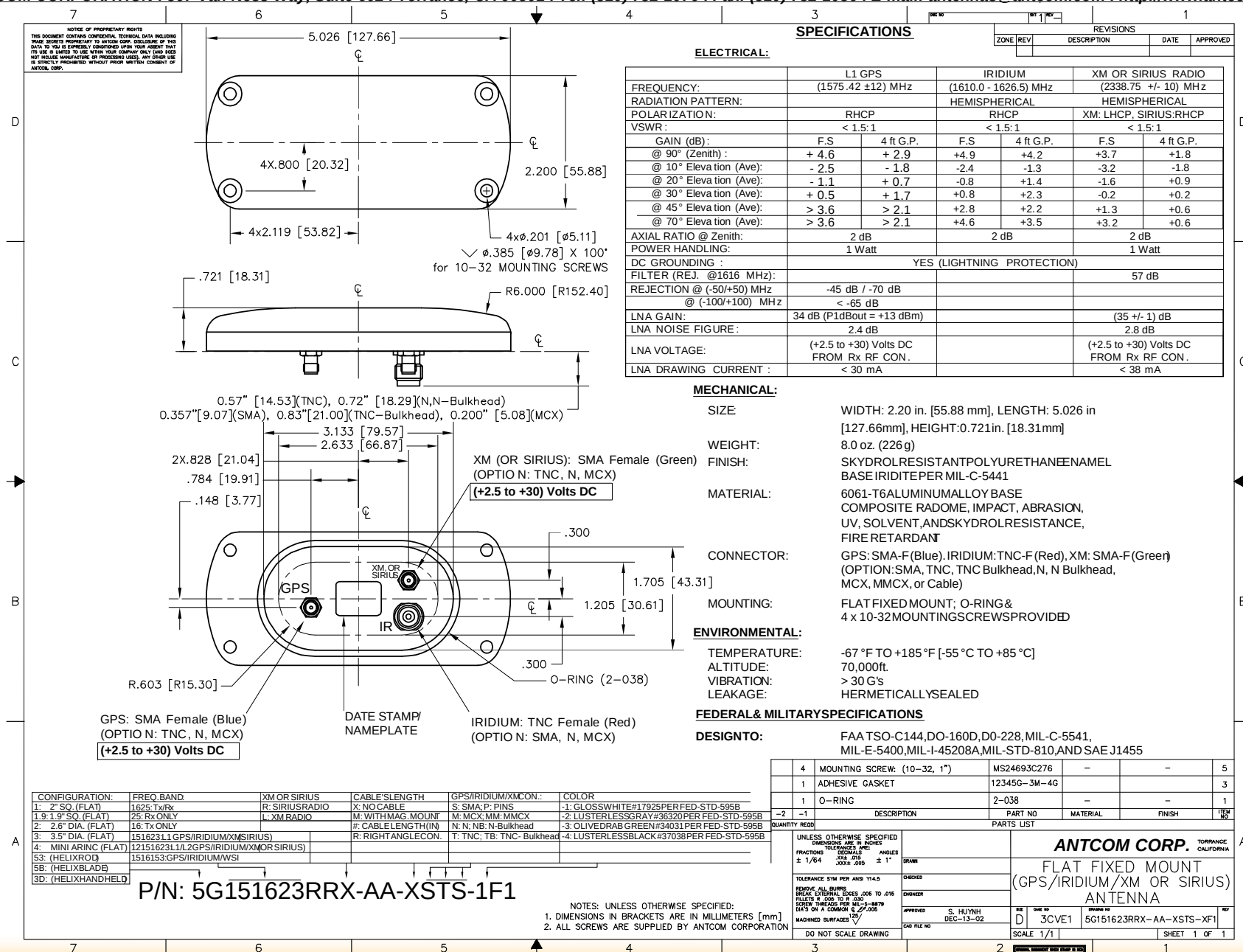
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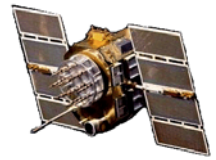


GPS/IRIDIUM/XM or SIRIUS Antenna: (5.03"x2.08"x0.69"), Flat/Top mount, P/N: 5G151623RRX-AA-XSTS-X



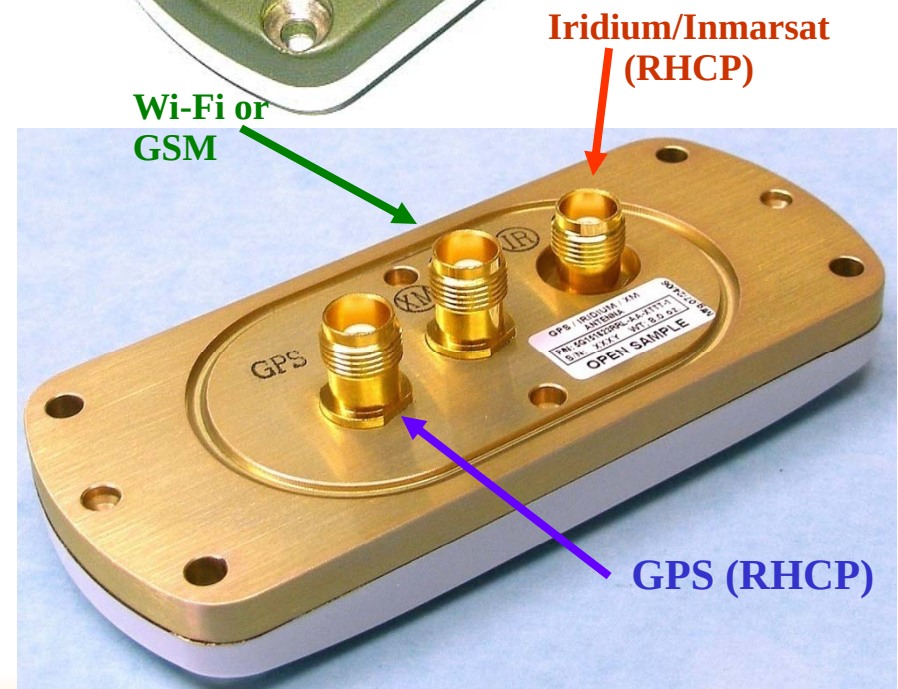
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**Hermetically Sealed, Designed for
Harsh Environment Applications.**

**Connector is Available in SMA, MCX,
MMCX, TNC, TNC-B, N, or N-
Bulkhead (See Drawing)**





ISO9001

Iridium/GPS/GSM Antenna:

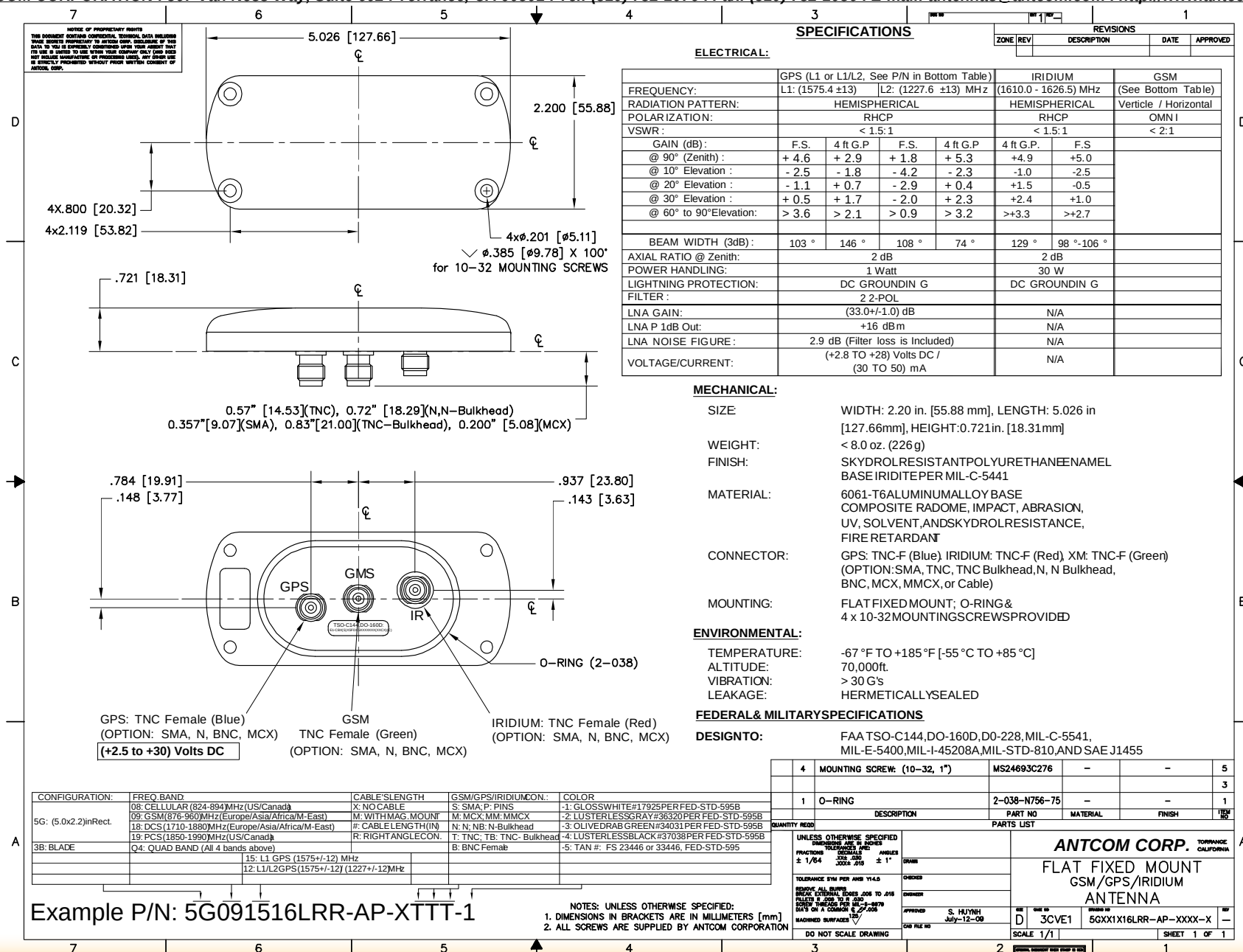
(5.03"x2.08"x0.69"), Flat/Pipe mount, P/N: 5GXX1X16LRR-AP-XXXX-X

P/N: 5G091516LRR-AP-XTT-1 (GSM/L1-GPS/Iridium with all TNC Connectors),

P/N: 5G091216LRR-AP-XTT-1 (GSM/L1/L2-GPS/Iridium with all TNC Connectors)

FAA Approved
TSO Antennas

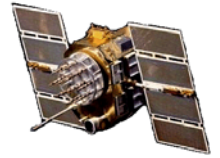
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IRIDIUM & Globalstar Antenna:

(5.03"x2.08"x0.69"), Flat/Pipe mount, P/N: 5G161625RLL-A1-XSSS-XF1



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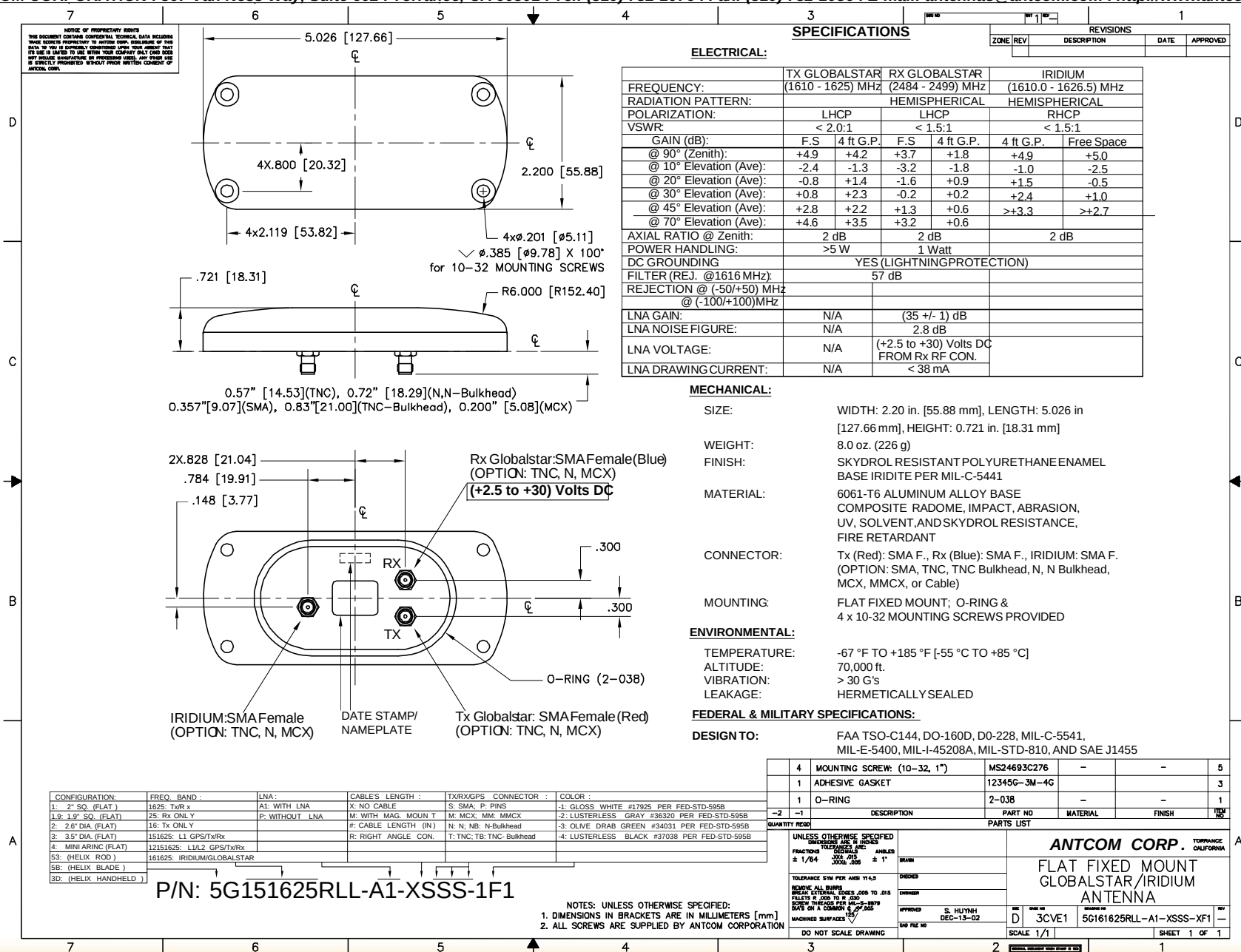
Hermetically Sealed, Designed for
Harsh Environment Applications.

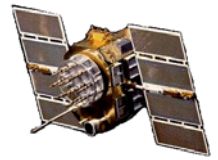
Connector is Available in SMA, MCX,
MMCX, TNC, TNC-B, N, or N-
Bulkhead (See Drawing)





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Harsh Environment Applications.

Connector is Available in SMA, MCX,
MMCX, TNC, TNC-B, N, or N-
Bulkhead (See Drawing)



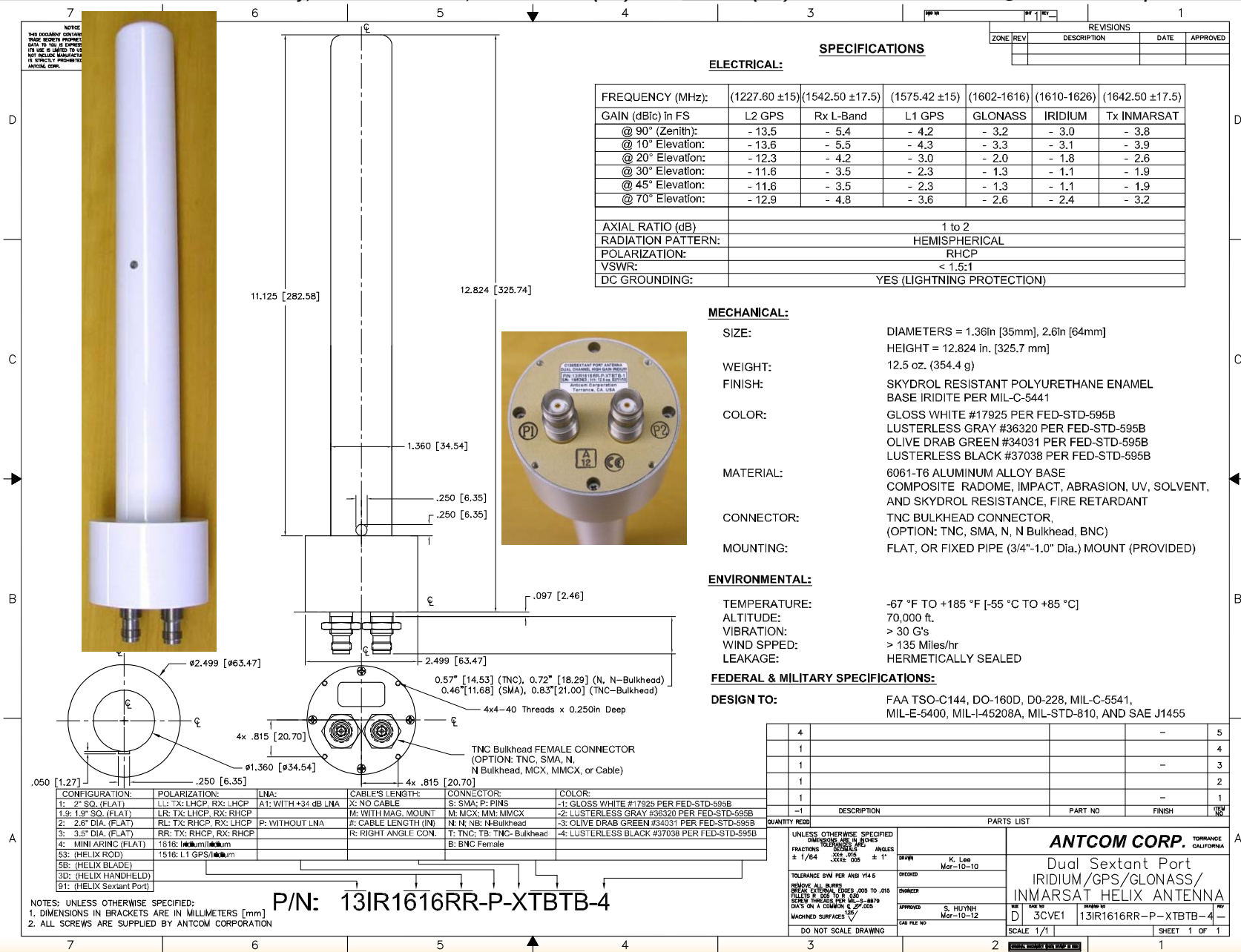


Dual IRIDIUM Antenna, P/N: 13IR1616RR-P-XTBTB-1:

1.36" Diameter x 12.8" Tall, C130/Sextant Port with 2 Lock-Pin Configuration, with BNC, TNC, SMA or N Connector Options



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**1.36" Diameter x 8.6" Tall, C130/Sextant Port with Lock-Pin Configuration,
with BNC, TNC, SMA or N Connector Options**



7	6	5	4	3	2	1
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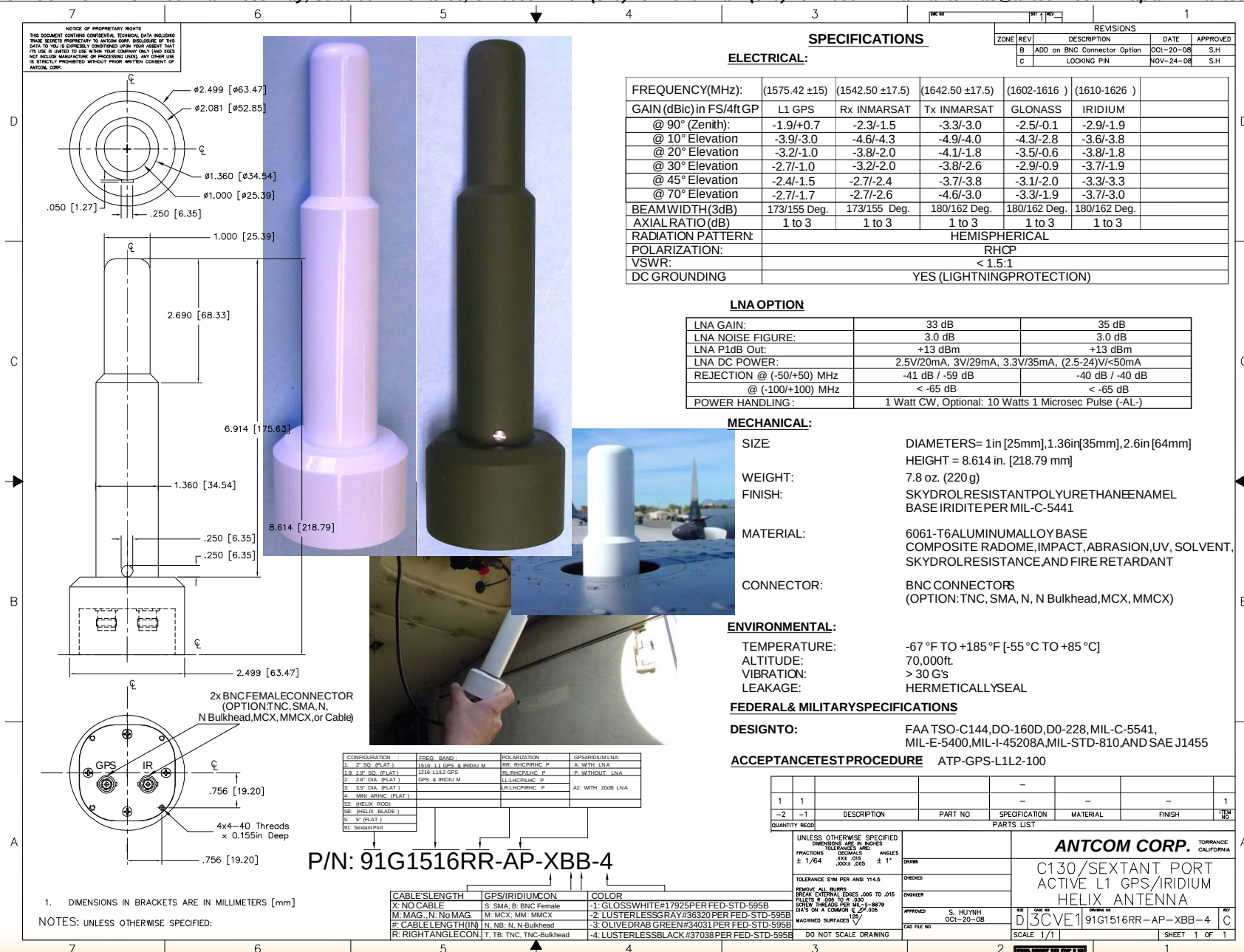
ISO9001

GPS/IRIDIUM Antenna, P/N: 91G1516RR-AP-XBB-X Rev C:

1.36" Diameter x 8.6" Tall, C130/Sextant Port with Lock-Pin Configuration, with BNC, TNC, SMA or N Connector Options



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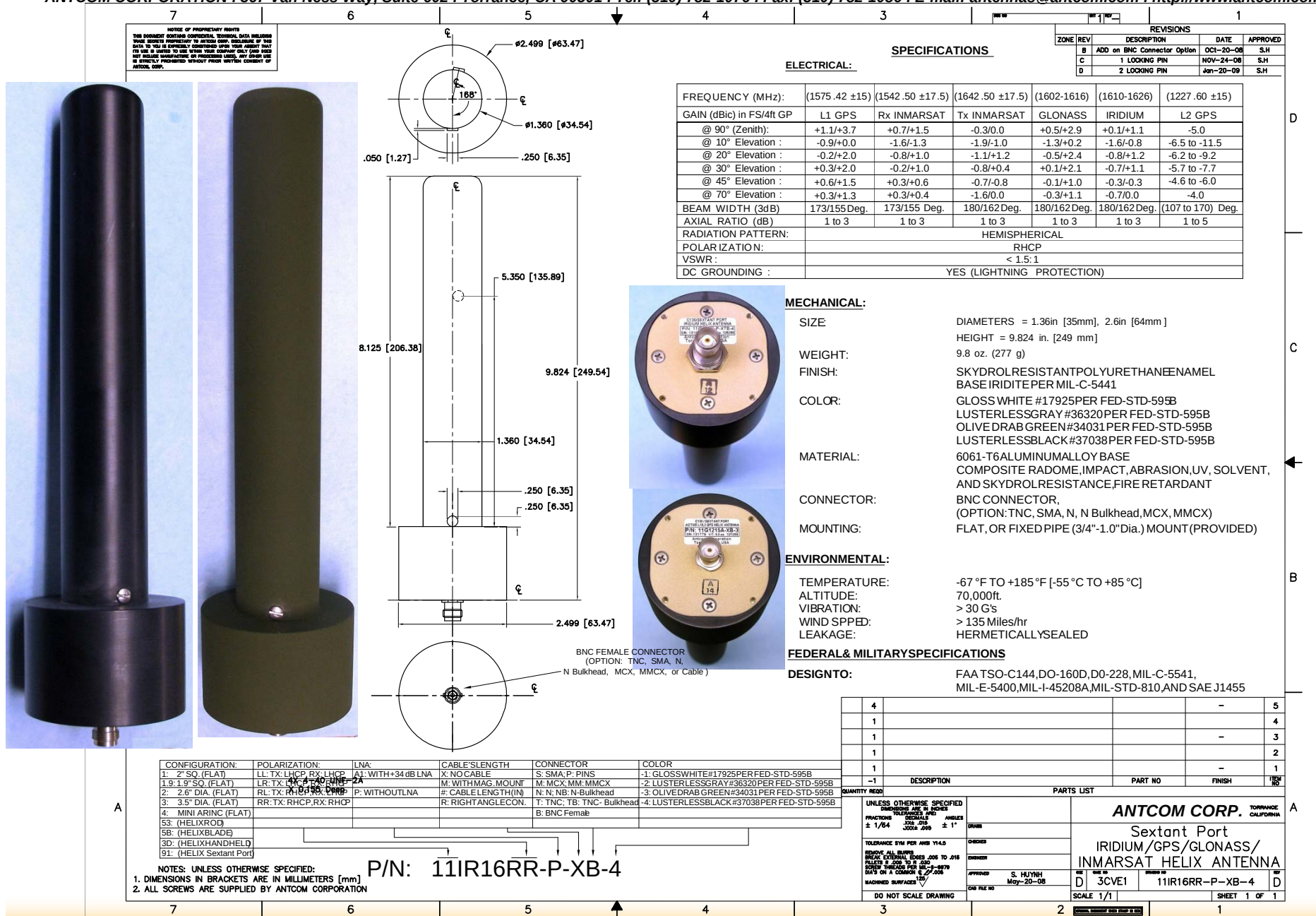
ISO9001

IRIDIUM Antenna, P/N: 11IR16RR-P-XB-X Rev D:

1.36" Diameter x 9.8" Tall, C130/Sextant Port with 2 Lock-Pin Configuration,
with BNC, TNC, SMA or N Connector Options



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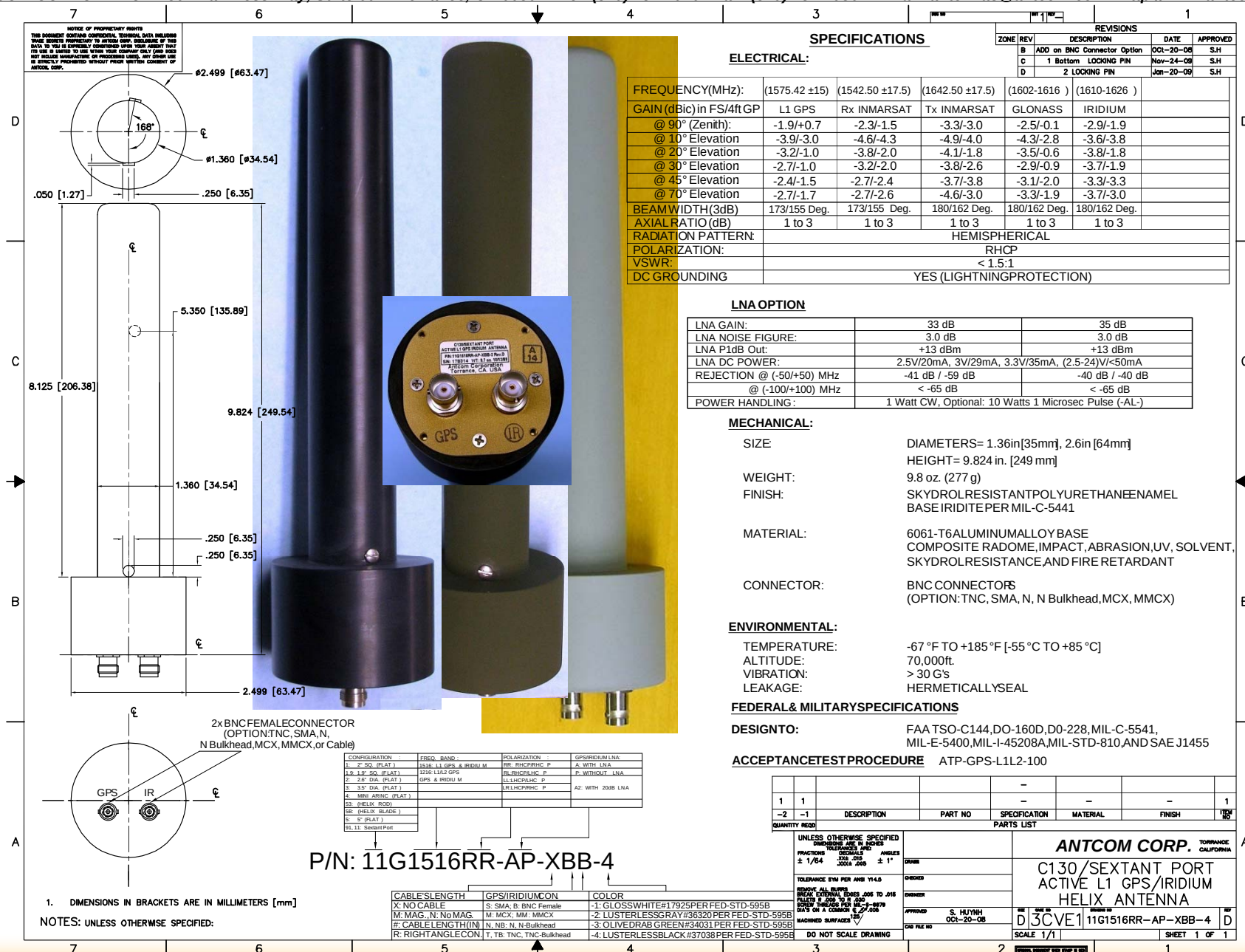


ISO9001

GPS/IRIDIUM Antenna, P/N: 11G1516RR-AP-XBB-X Rev D:

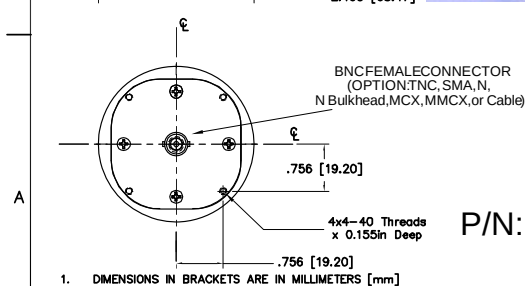
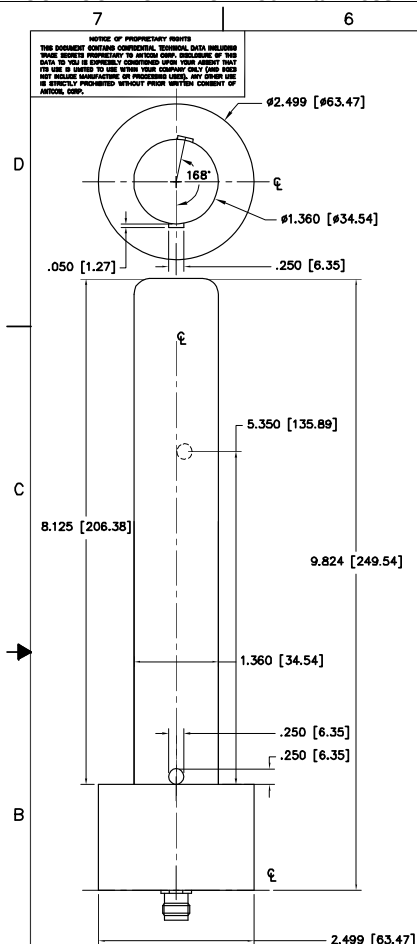
1.36" Diameter x 9.8" Tall, C130/Sextant Port with 2 Lock-Pin Configuration,
with BNC, TNC, SMA or N Connector Options

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P/N: 11G1216A-XB-4

FREQ. BAND	LNA
1215: L1/L2	A: WITH LNA
15: L1 ONLY	P: WITHOUT LNA
1216: L1/L2/INMARSAT	
0416: UHF/L1/L2/INMARSAT (2 Connectors)	

CABLE LENGTH	CONNECTOR	COLOR
X: NO CABLE	S: SMA; B: BNC Female	1: GLOSSWHITE#17925PER FED-STD-595B
M: MAG; N: No MAG	M: MCX; MM: MMCX	2: LUSTERLESSGRAY#36320PER FED-STD-595B
#: CABLE LENGTH(IN)	N: NB; N-B Bulkhead	3: OLIVE DRAB GREEN#34031PER FED-STD-595B
R: RIGHT ANGLE(CON)	T: TB; TNC; TNC-Bulkhead	4: LUSTERLESSBLACK#37038PER FED-STD-595B

SPECIFICATIONS

ELECTRICAL:

FREQUENCY:	INMARSAT Rx: (1542.50 ±17.5) MHz			GPS L2: (1227.60 ±13) MHz
	INMARSAT Tx: (1642.50 ±17.5) MHz			
	GPS L1: (1575.42 ±13) MHz			
RADIATION PATTERN:	HEMISPHERICAL			HEMISPHERICAL
POLARIZATION:	RHCP			RHCP
VSWR:	< 1.5:1	< 1.5:1	< 1.5:1	< 2.0:1
GAIN(dBi)	GPSL1	Satcom Tx	Satcom Rx	GPSL2
@ 90° Zenith:	+2.6	-4.2	-0.7	0.0
@ 10° Elevation	0.0	-6.7	-4.2	-2.4 to -6.3
@ 20° Elevation	+1.2	-5.6	-2.9	-1.8 to -4.8
@ 30° Elevation	+1.7	-4.9	-2.1	-1.3 to -3.4
@ 45° Elevation	+2.4	-4.9	-1.4	-0.5 to -1.5
@ 70° Elevation	+2.3	-5.4	+0.1	0.0 to -0.5
BEAM WIDTH(3dB)	165 Deg.	155 Deg.	142 Deg.	(120 to 165) Deg.
AXIAL RATIO(dB)	1 to 3	1 to 3	1 to 2	1 to 5

DC GROUNDING

LNA OPTION

LNA GAIN:	33 dB	35 dB
LNA NOISE FIGURE:	3.0 dB	3.0 dB
LNA P1dB Out:	+13 dBm	+13 dBm
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24V)/~50mA	
REJECTION @ (-50/+50) MHz	-41 dB / -59 dB	-40 dB / -40 dB
@ (-100/+100) MHz	< -65 dB	< -65 dB
POWER HANDLING:	1 Watt CW. Optional: 10 Watts 1 Microsec Pulse (A-L)	

MECHANICAL:

SIZE:	DIAMETERS= 1.36in[35mm], 2.6in [64mm] HEIGHT= 9.824 in. [249 mm]
WEIGHT:	9.8 oz. (277 g)
FINISH:	SKYDROLRESISTANTPOLYURETHANEENAMEL BASE IRIDITE PER MIL-C-5441
COLOR:	OLIVE DRAB GREEN#34031PER FED-STD-595B
MATERIAL:	6061-T6ALUMINUMALLOYBASE COMPOSITE RADOME,IMPACT,ABRASION,UV, SOLVENT, SKYDROLRESISTANCE,AND FIRE RETARDANT
CONNECTOR:	BNC CONNECTOR, (OPTION: TNC, SMA, N, N Bulkhead,MCX, MMCX) MCX, MMCX, or Cable)

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
 ALTITUDE: 70,000ft.
 VIBRATION: > 30 G's
 LEAKAGE: HERMETICALLYSEAL

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

				-					
1	1			-	-	-			
-2	-1	DESCRIPTION	PART NO	SPECIFICATION	MATERIAL	FINISH			
QUANTITY REQD				PARTS LIST					

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE

FRACTIONS	DECIMALS	ANGLES
$\pm 1/64$	.001-.015	$\pm 1^\circ$
	.0002-.005	

TOLERANCE SYM PER ANG Y14.5

REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILLETS R .005 TO R .030
SCREW THREADS PER MIL R-8879
DIA'S ON A COMMON S $\sqrt{.005}$

MACHINED SURFACES $\frac{125}{\nabla}$

DO NOT SCALE DRAWING

ANTCOM CORP.

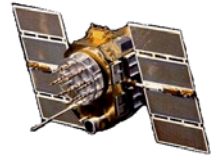
C130/Sextant Port
ACTIVE L1/L2
GPS HELIX ANTENNA

SIZE	QMS NO	STATION NO
D	3CVE1	11G1215A-XB-4
SCALE	1/1	SHEET 1 OF



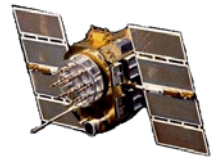
ISO9001

Links to Pdf Catalogs:
L1/L2/L5 GPS, L1/L2 Glonass, Omnistar, Galileo, Compass, GSM,
Iridium, Inmarsat, Globalstar, Thuraya, XM/Sirius, UHF, L, S, C, X, Ku-band Antennas,
Power Divider/combiner, Amplifiers, and RF Cables.



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http://www.antcom.com/documents/catalogs/Antcom_New_Ruggedized_High_Corrosion_Resistant_Buoy_Antennas.pdf
http://www.antcom.com/documents/catalogs/G5_Antennas_L1L2GLonass_Plus_L1L2GPS_Omnistar.pdf
http://www.antcom.com/documents/catalogs/G3_Antennas_L1GLonass_Plus_L1GPS_Omnistar.pdf
<http://www.antcom.com/documents/catalogs/L1GPSAntennas.pdf>
<http://www.antcom.com/documents/catalogs/L1L2GPSAntennas.pdf>
http://www.antcom.com/documents/catalogs/Combined_GPS_L1_Glonass_Omnistar_Antennas.pdf
<http://www.antcom.com/documents/catalogs/GNSSAntennas1.pdf>
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<http://www.antcom.com/documents/catalogs/UHF-BandAntennas.pdf>
<http://www.antcom.com/documents/catalogs/LSC-BandAntennas1.pdf> **(UHF, L, S, C, X, and Ku-Band Antennas)**
<http://www.antcom.com/documents/catalogs/LSC-BandAntennas2.pdf>
<http://www.antcom.com/documents/catalogs/XMorSIRIUSAntennas.pdf>
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<http://www.antcom.com/documents/catalogs/CableAssemblies1.pdf>
<http://www.antcom.com/documents/catalogs/RHCP-LHCP-V-H-L1L2GPSAntennas.pdf>
http://www.antcom.com/documents/catalogs/Antcom_L1L2_GPS_DAGR_Remote_Antennas.pdf
http://www.antcom.com/documents/catalogs/Antcom_Sextant_Port_Antennas.pdf
http://www.antcom.com/documents/catalogs/05_Antcom_CRPA_L1L2_GPS_Antenna_Array_for_E_mailing.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>

- 1) **ISO 9001-2008** : Registered through SGS
- 2) **TSO C-144**: Certified by FAA
- 3) **Environmental**: RTCA/DO-160D, TSO C144
- 4) **Lightning**: DO-160F, Direct Effects , Section 23
- 5) **Electrical**: TSO C144, RTCA/DO-228/DO-254, Mil-STD-461F
- 6) **CE**: EMC Directive 89/336/EEC (European Union) & 47CFR, Part 15, Subpart B (FCC)
- 7) **EMC/Emission**: EUROPEAN STANDARD EN 55022: 2006 / UNITED STATES STANDARD 47 CFR PART 15, SUBPART B
- 8) **Immunity**: EUROPEAN STANDARD EN 55024: 1998, Amendment A2: 2003
- 9) **Pick/Place, Soldering, Circuit Boards**: IPC JSTD-001D, IPC-A-610D, ESD-STD-20.20, JESD-625a, IPC-A-610C Class 3
- 10) **Printed Circuit Board (PCB)**: IPC-A-600G.
- 11) **Connectors/Adapters/Cables**: Mil-PRF-39012/55339, IPC-A-620A, IPC JSTD-001D
- 12) **Stainless Steel Material for Screws**: DFARS 252-225-7014/DFARS 225.872-1, and MS Standards.
- 13) **Aluminum Material**: Al6061-T6 per ASTM-B-221.
- 14) **Chem Film**: Mil-C-5541F Type I Class 1A for Yellow, Type II Class 1A for Clear (ROHS).
- 15) **Black Anodize**: MIL-A-8625F Type II Class II.
- 16) **REACH Compliance**: SVHC Candidate List Published by European Chemical Agency (ECHA) on Oct-28-2008 Regarding Regulation (EC) No 1907/2006 Concerning REACH

CE Test Reports:

http://www.antcom.com/documents/catalogs/Antcom_Antenna_CE_Approval_Test%20Report_1_of_2.pdf
http://www.antcom.com/documents/catalogs/Antcom_Antenna_CE_Approval_Test%20Report_2_of_2.pdf

EMI/EMC/Emission/Immunity/High Power Test Reports:

http://www.antcom.com/documents/catalogs/Antcom_Antenna_MIL_STD_461E_EMI_Test_Report_antc1853.pdf
http://www.antcom.com/documents/catalogs/Antcom_Antenna_MIL_STD_461F_Electromagnetic_Susceptibility_Test_Report_antc1852.pdf
http://www.antcom.com/documents/catalogs/EMC_Test_Report1_Feb_29_08_SC801023_01.pdf
http://www.antcom.com/documents/catalogs/EMC_Test_Report2_Feb_29_08_SC801023_01.pdf
http://www.antcom.com/documents/catalogs/Immunity_Test_Report3_Feb_29_08_SC801023_01.pdf
 \\0-Antcom's Products\Quality Control Information\TSO, EMI, FCC, CE, and Other Enviromental Qual Test Data\High Power Test Report for ATP-Mini-Qual-GPS, Antcom's Paveway Antenna, Dec-19-06.pdf

Lightning Test Reports:

http://www.antcom.com/documents/catalogs/Antcom_Lightning_Test%20Report_TR056159.pdf
http://www.antcom.com/documents/catalogs/Antcom_5B_Antenna_DO_160F_Lightning_P_Static_Test_Report_TR056376_Dec_28_09.pdf

Environmental Test Report:

http://www.antcom.com/documents/catalogs/Antcom_5B_Antenna_DO_160D_Test_Report_antc7764_Rev1_Jan_10_10.pdf
http://www.antcom.com/documents/catalogs/Antcom_DO_160D_Test.pdf
http://www.antcom.com/documents/catalogs/Antcom_Antenna_MIL_STD_810C_D_Test_Report_antc1852_2.pdf
http://www.antcom.com/documents/catalogs/Vibration_Test_Report_for_Antcom_C130_Sextant_Port_Antenna.pdf
 \\0-Antcom's Products\Quality Control Information\TSO, EMI, FCC, CE, and Other Enviromental Qual Test Data\Antcom Antenna REACH Compliance.pdf

NGS (NOAA) Government Calibration Test Report for GPS/GNSS Antennas:

http://www.ngs.noaa.gov/cgi-bin/query_cal_antennas.prl?Model=ACC

Contacts:

Website: <http://www.antcom.com>; RFQ/RFP: sales@antcom.com; Send POs: sales@antcom.com; Order Status: status@antcom.com; Tech Support: tech@antcom.com; RMA: rma@antcom.com, QA: qa@antcom.com, Accounting: accounting@antcom.com; Purchasing: purchasing@antcom.com, HR: hr@antcom.com, Facility: facility@antcom.com



Certificate US08/5275

The management system of

Antcom Corp

367 Van Ness Way Suite 602
Torrance, CA, 90501
United States

has been assessed and certified as meeting the requirements of

ISO 9001:2008

For the following activities:

Design, Manufacturer and Testing of Antennas and RF/Microwave Components.

Further clarifications regarding the scope of this certificate and the applicability of ISO 9001:2008 requirements may be obtained by consulting the organization.

This certificate is valid from 4 November 2008 until 3 November 2011 and remains valid subject to satisfactory surveillance audits. recertification audit due a minimum of 60 days before the expiration date. Issued on 28 October 2010. Certified since 4 November 2008.

Authorized by


 Zachary C. Pivarnik
 Accreditation Manager, North America
 SGS US Testing Company Inc., Systems & Services Certification
 201 Route 17 North, Rutherford, NJ 07070
 t (201) 508-3000 f (201) 935-4555 www.us.sgs.com

This certificate remains the property of SGS and shall be returned upon request

Page 1 of 1



Year of Incorporation:
Oct-02-1996 (California Corp)

TAX ID: 33-0731772

Business License: BUS-0114500

Sale Permit: SR AS 97-286780

DUNS: 008912367 (3A1)

Case Code: 3CVE1

ITAR: Registered

NAICS: 334220

SIC: 3663

ECCN: 5A991.b

HTS: 8529104000

