

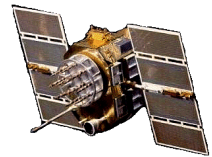


New Ruggedized, High Corrosion/Harsh Environmental Resistant Helix/Patch Antennas

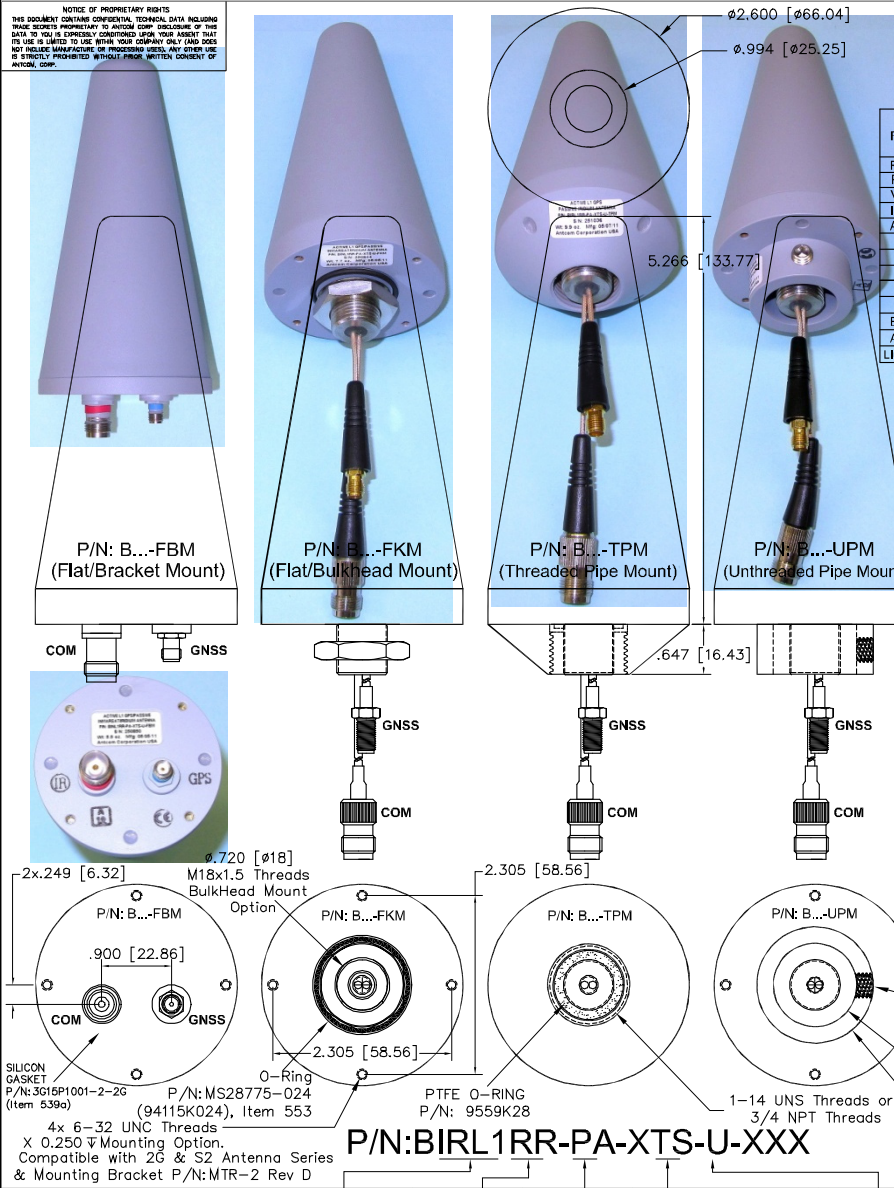
Inmarsat/Iridium GPS: P/N: B1NXXRR-PA-XTS-U-XXX, Iridium GPS: P/N: B1RXXRR-PA-XTS-U-XXX,
Thuraya/Tx-Globalstar GPS: P/N: B1XXLR-PA-XTS-U-XXX,
Quad-Band (GSM/PCS/Wi-Fi/S/C-Band) GPS: P/N: B1LXXVR-PA-XTS-U-XXX,
 for Buoy, Marines, Underwater, Ground, Weather Balloon, and Helicopter Applications

Also Available in other Mounting Configurations of 3G, 4G, 42G, 5G, S5, Mini-Arinc, and Arinc-743 Antenna Series

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



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



ELECTRICAL:

GNSS PORT: of either L1, or L1L2, or G3, or G5 Frequencies

L5 GPS E5/E5e/E5b (S-Band) L5 IRNSS	L2 GPS B2 Compass	L2 GLOSS E6 Galileo B3 Compass	OmniStar-Band E1 Galileo B1 Compass	L1 GPS E1 E2 Galileo L1 IRNSS	L1 L1	Rx Inmarsat or Thuraya	Tx Inmarsat or Thuraya	Iridium or Globalstar	QUAD-BAND (GSM/PCS) L1-Band Wi-Fi/S/C-Band
1176.4 ± 12 1191.5 ± 27 1176.4 ± 15	1227.60 ± 12 1207.14 ± 10	1252.5 ± 7.5 1278.7 ± 12 1268.5 ± 10	1542.5 ± 14 1542.5 ± 5 1561.1 ± 10	1675.4 ± 15 1575.4 ± 17 1575.4 ± 12	1609 ± 7.0	1542.5 ± 17	1642.5 ± 17	1610-1626.5	1110-1990 1800-1990 2300-2308 4400-5300

RADIATION PATTERN: HEMISPHERICAL
POLARIZATION: RHCP
VSWR: < 2.0:1
IMPEDANCE: 50 ohms
ANTENNA GAIN (dBi): Free Space
 @ 90° (ZENITH): -7, +0.5, -0.8, +1.9, +4.1, +2.0, +0.7, -0.3, +0.1
 @ 10° Elevation: -13, -5.6, -7.1, -5.0, -2.8, -5.1, -1.6, -1.9, -1.6
 @ 20° Elevation: -11, -3.9, -5.4, -3.9, -1.9, -4.1, -0.8, -1.1, -0.8
 @ 30° Elevation: -10, -2.6, -4.3, -2.6, -0.4, -2.5, -0.2, -0.8, -0.7
 @ 60-90° Elevation: > -8, > -1, > -2.4, > +0.8, > 2.9, > +0.8, > +0.3, > -1.6, > -0.7
BEAM WIDTH (3dB): 105 Deg., 105 Deg., 90 Deg., 95 Deg., 95 Deg., 95 Deg., 173 Deg., 180 Deg., 180 Deg., OMNI
AXIAL RATIO (dB): 1.5, 1, 1, 1, 1, 2, 1 to 3, 1 to 3, 1 to 3, N/A
LIGHTNING PROTECTION: DC GROUNDING

LNA OPTION (for GNSS or GNSS/COM=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:	< 10oz. (283g)
FINISH:	HERMETICALLY SEAL & TEFLON COATED
MATERIAL:	6061-T6 ALUMINUM ALLOY BASE & RUGGEDIZED RADOME IMPACT, ABRASION, UV, SOLVENT, SKYDROL, CORROSION RESISTANCE, AND FIRE RETARDANT
CONNECTOR:	COM PORT: TNC FEMALE; GNSS PORT: SMA FEMALE (OPTION: TNC, F, SMA, BNC, N, MCX, MMCX)

ENVIRONMENTAL:

TEMPERATURE:	-95 °F TO +194 °F [-70 °C TO +90 °C] -700ft to +70,000 ft. (for -U-FBM-U-FKM-U-TPM, from Mounting)
VIBRATION:	30 G's HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-L-45208A, MIL-STD-810, MIL-STD-461E/F, AND SAE J1455

ACCEPTANCE TEST PROCEDURE:

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]

COM & GNSS FREQUENCY (GHz):	POLARIZATION:	LNA:	COM/GNSS Female Connector:	COLOR:-U: TEFLON COATED GRAY for MARINES/BUOY APP.
INL1:COM=Inmarsat/Iridium; GNSS=L1GPS IRL1:COM=Iridium;GNSS=L1GPS	RR: RHCP/RHCP	P: PASSIVE	T: TNC; F: F	-1: GLOSS WHITE #17925 PER FED-STD-595B PAINT
TL1:COM=Thuraya/Tx-Globalstar; GNSS=L1GPS	LR: LHCP/RHCP	A: WITH LNA/FILTERS for Rx only VERSIONS	S: SMA; SMB; SMBR; B: BNC	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B PAINT
LoL1:COM=QUAD-BAND (GSM/PCS/L-Band/Locata/Wi-Fi/S/C-Band); GNSS=L1GPS	VR: Vertical/RHCP		M: MCX; MM; MMCX; MMR; MMCX-R	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B PAINT
Change "L1" to "L1L2" for GNSS=L1L2 GPS, to "G3" for GNSS=L1GPS/Gloss/L-Band/B1 to "G5" for GNSS=L1L2 GPS/Gloss/L-Band/B1/B3/B2/L5			N: N/N-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B PAINT
			SMC, SSMC, SSMB, SSMA	-5: TAN #; FS 23446 or 33446, FED-STD-595 PAINT

COMMON SPECIFICATIONS:		REVISIONS			
ZONE	REV	DESCRIPTION	DATE	APPROVED	

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ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	ITEM NO
1	Additional SILICON GASKET (Item 539a) for -FBM/-FKM		3610101-2-2G	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES ± 1/64 ± .005 ± .010 ± 1°		TOLERANCE SHW PER ANSI Y14.5	
DRAWN: S. HUYNH		DESIGNED: S. HUYNH	
CHECKED: S. HUYNH		ENGINEER: S. HUYNH	
APPROVED: S. HUYNH April-11-11		DATE: April-11-11	
CAD FILE NO: D 3CVE1		SCALE: 1/1	
DO NOT SCALE DRAWING		SHEET 1 OF 1	

NMO Connector Option is Now Available for Some Antennas