



FAA Approved Facility

Ruggedized, High Corrosion/Harsh Environmental Resistant Helix/Patch L1/L2 GPS/ Glonass and QUAD Band Antenna

P/N: BL01G5VR-PA-XRPSFS-1-FBM

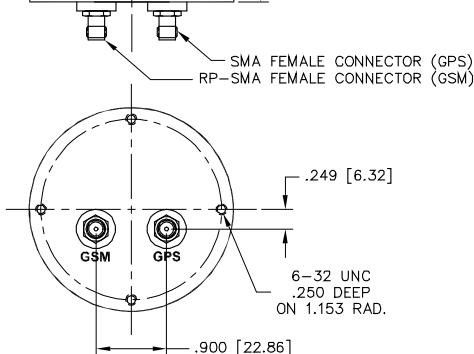
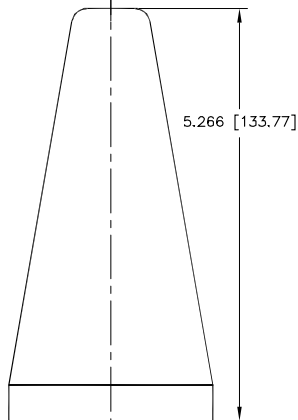
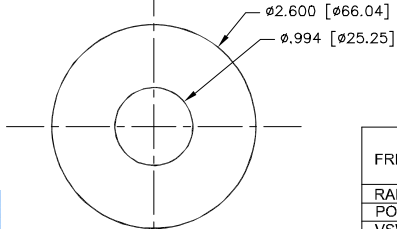
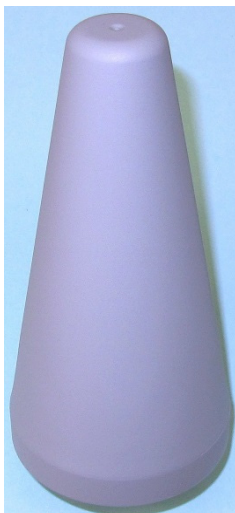
for Buoy, Marines, DeepSea, and Ground Applications

Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>



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SPECIFICATIONS:

ELECTRICAL:

GNSS PORT: of either L1, or L1L2, or G3, or G5 Frequencies	L5 GPS E5/E5a/E5b (Galileo) L5 IRNSS				L2 GPS B2 Compass	L2 GLONASS E6 Galileo B3 Compass	Omnistar/L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 GLONASS	COM PORT: of either Inmarsat/Iridium, or Iridium, or Thuraya, or Quad-Band....		
	Rx Inmarsat or Thuraya	Tx Inmarsat or Thuraya	Iridium or Tx Globalstar	QUAD-BAND (GSM/PCS) L-Band Wi-Fi/S/C-Band								
FREQUENCY (MHz):	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	1575.4 ± 15 1575.4 ± 17 1575.4 ± 12	1609 ± 7.0	1542.5 ± 17 1642.5 ± 17	1610-1626.5	824-960 1710-1990 1600-1990 2300-2500 4400-5900			
RADIATION PATTERN:	HEMISPHERICAL								OMNI			
POLARIZATION:	RHCP								RHCP or LHCP			
VSWR:	< 2.0:1								(2.0-3.5):1			
IMPEDANCE:	50 ohms								50 ohms			
ANTENNA GAIN (dBic):	Free Space								4.5 dBil			
@ 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	- 2.6	- 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):												
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: REVERSE POL. SMA FOR GSM, SMA FEMALE FOR GPS (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, DO-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, MIL-STD-461EF, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	REV
1	SILICON GASKET, Item 539a		3G15P1001-2-2G	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TO DECIMALS ANGLES TO 1/64 .0002 .005 ± 1°	APPROVALS: S. HUYNH April-11-11	ANTCOM CORP. Inmarsat/Iridium, or Iridium, or Thuraya/Tx-Globalstar or Tx-Globalstar or Quad-Band (GSM/PCS/L-Band/Locata/Wi-Fi/S/C-Band) & (L1-GPS, or L1/L2-GPS/Glonass/L-Band/B1 or L1/L2-GPS, or L1/L2-GPS/Glonass/B1/B3/B2/L5) Antenna P. TRAN FAB-17-14 S. HUYNH FAB-17-14		
TOLERANCE S/M PER ANSI Y14.5	APPROVALS: S. HUYNH FAB-17-14			
REMOVE ALL BURRS BREAK EXTERNAL EDGES 000 TO 010 FILES & JOBS TO 0.005 SCREEN THREADS PER MIL-C-8879 DAVIS BY A COMBINATION OF 2/35	APPROVALS: S. HUYNH FAB-17-14			
WASHED SURFACES 1/2	APPROVALS: S. HUYNH FAB-17-14			
DO NOT SCALE DRAWING	SCALE 1/1	D 3CVE1 BL01G5VR-PA-XRPSFS-1-FBM		SHEET 1 OF 1

COM & GNSS FREQUENCY (GHz):	POLARIZATION:	LNA:	CONNECTOR:	COLOR:
INL1:COM=Inmarsat/Iridium; GNSS=L1GPS IRL1:COM=Iridium;GNSS=L1GPS	RR: RHCP/RHCP	P: PASSIVE	T: TNC, S: SMA, SMB; SMV, B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B PAINT
TL1:COM= Thuraya/Tx-Globalstar GNSS= L1GPS	LR: LHCP/RHCP	A: with	RPS: REVERSE POL SMA	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B PAINT
Lo1:COM=QUAD-BAND (GSM/PCS/L-Band/Locata/Wi-Fi/S/C-Band);GNSS=L1GPS	VR: Vertical/RHCP	LN/FILTERS for	N: MCX; M: MMCX;MMR;MMCX-R	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B PAINT
Change "L1" to "L1L2" for GNSS= L1/L2 GPS, to "G3" for GNSS=L1GPS/Glonass/L-band/B1 to "G5" for GNSS= L1/L2 GPS/Glonass/L-Band/B1/B3/B2/L5		Rx only VERSIONS	N: NIN-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B PAINT
			S:MC, SSMC, SSMB, SSMA	-5: TAN #; FS 23446 or 33446, FED-STD-595 PAINT

NMO Connector is Now Available for Some Antennas