



New Infinite Balance 1/2 Wave Length Quadrifilar Helix L1/L2 GPS Timing Antenna, P/N: BL1L2R-A-XTB-1-FKM-LP
 for More Gain, High Multipath Rejection & Broader 194deg Beamwidth for Timing, Buoy, Marines, Ground and Weather Station App.
 with High Iridium/Inmarsat/Thuraya-Rejection Front Filters (36dB @ 1616MHz, 44dB @ 1625MHz, 55dB @ 1640MHz, 67dB @ 1660MHz)
 with High Power Front End Limiter Suitable for High Interference Environment
 with Lightning Protection Compliance Per EN61000-4-5 Level 4
 Available in L1GPS, L1GPS/Glonass, L1GPS/Glonass/Omnistar, L1/L2GPS/Glonass, L1/L2GPS/Glonass/Omnistar, and Other GNSS Bands



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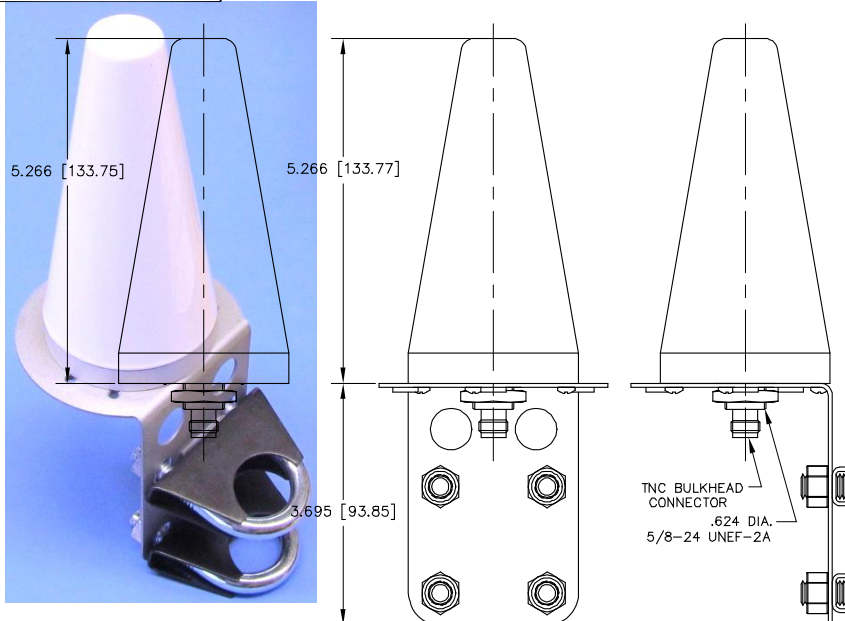
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SPECIFICATIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

FREQUENCY:	L2: 1227.60 ± 12 MHz	L1: (1575.42 ± 12.0) MHz
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	RHCP
VSWR:	< 2.0:1	< 2.0:1
IMPEDANCE:	50 ohms	50 ohms
ANTENNA GAIN (dBic):		
@ 90 ° Above Horizon (Top):	- 3.0	+ 1.2
@ 15 ° Above Horizon:	- 5.4	- 0.2
@ 20 ° Above Horizon:	- 5.0	+ 0.2
@ 25 ° Above Horizon:	- 4.5	+ 0.5
@ 30 ° Above Horizon:	- 4.4	+ 0.6
@ 70 ° Above Horizon:	- 3.4	+ 0.0
BEAM WIDTH (3dB):	166 Deg.	192 Deg.
AXIAL RATIO:	1 dB	1 dB
MULTIPATH REJECTION (RHCP/LHCP):		
@ 90 ° Above Horizon (Top):	19 dB	20 dB
@ 15° Above Horizon:	11 dB	16 dB
@ 25° Above Horizon:	13 dB	18 dB
DC GROUNDING:	YES	
LIGHTNING PROTECTION COMPLIANCE:	PER EN61000-4-5 LEVEL 4	
LNA GAIN (OPTION):	33 dB	
LNA NOISE FIGURE:	2.7 dB	
LNA P1dB Out:	+13 dBm	
LNA DC POWER:	(+2.4 TO +5) Volts DC / (30 TO 50) mA	
FRONT FILTER REJECTION @ (-50/+50) MHz:	-41 dB / -59 dB	
@ (-100/+100) MHz:	< -65 dB	
FRONT END HIGH POWER LIMITER:	BUILT-IN	
ANTENNA PROPAGATION DELAY:	27 ns	34 ns



MECHANICAL:

SIZE: DIAMETER: 2.60in. [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

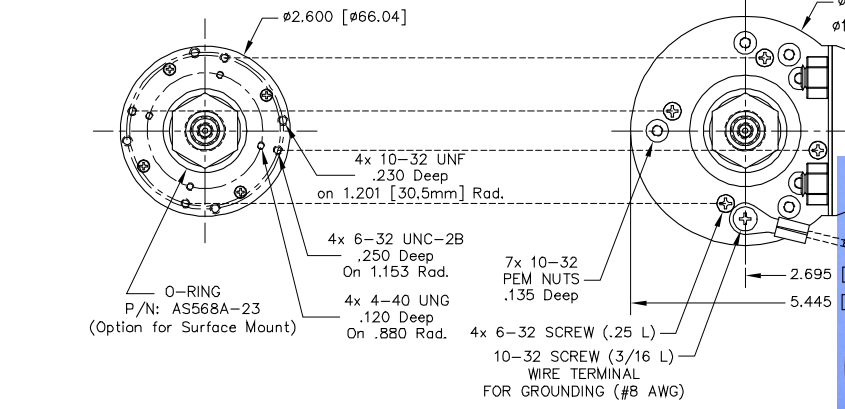
CONNECTOR: TNC FEMALE BULKHEAD (OPTION: TNC-BK, F, SMA, BNC, N, MCX, MMCX)

ENVIRONMENTAL:
 TEMPERATURE: -95 °F TO +194 °F [-70 °C TO +90 °C]
 -700ft to +70,000 ft. (for -U-FKM-U-TPM, from Mounting Surface)
 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-883C, MIL-STD-461E/F, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100



P/N: BL1L2R-A-XTB-1-FKM-LP

FREQUENCY (GHz):	L1: 1575.42 ± 12.0 MHz	L2: 1227.60 ± 12 MHz	L5: 1196.45 ± 12.0 MHz	Q: 1601.43 ± 12.0 MHz	W: 1616.00 ± 12.0 MHz	X: 1625.00 ± 12.0 MHz	Y: 1640.00 ± 12.0 MHz	Z: 1660.00 ± 12.0 MHz
IN: Inmarsat/IRIDIUM/L1GPS/Glonass (RHCP); IRIDIUM/L1GPS/Glonass (RHCP)	R: RHCP	P: WITHOUT LNA	F: TNC; TB: TNC-Bulkhead; B: BNC	C: GLOSS WHITE #17925 PER FED-STD-595B PAINT	D: GLOSS WHITE #17925 PER FED-STD-595B PAINT	E: LUSTERLESS GRAY #36320 PER FED-STD-595B PAINT	F: LUSTERLESS GRAY #36320 PER FED-STD-595B PAINT	G: OLIVE DRAB GREEN #34094 PER FED-STD-595B PAINT
T: Thuraya/Tx Globalstar (LHCP); G: Tx only Globalstar (LHCP)	L: LHCP	A: WITH LNA (33dB)	S: SMA; SMB; SMBR; MCX	M: MMCX; N: N-Bulkhead; Q: QMA	N: N-Bulkhead; N: N-Bulkhead; Q: QMA	O: LUSTERLESS BLACK #37038 PER FED-STD-595B PAINT	P: LUSTERLESS BLACK #37038 PER FED-STD-595B PAINT	R: TAN # FS 23440 or 33440, FED-STD-595 PAINT
L1: L1 GPS Only; G3: L1 GPS/GLONASS/L-Band/B1; L1L2: L1/L2 GPS only	V: Vertical	A2: WITH LNA (20dB)	M: MMCX; N: N-Bulkhead; Q: QMA	S: SMA; SMB; SMBR; MCX	S: SMA; SMB; SMBR; MCX	S: SMA; SMB; SMBR; MCX	S: SMA; SMB; SMBR; MCX	S: SMA; SMB; SMBR; MCX
G5: L1/L2 GPS/GLONASS/L-Band/B1/B3/B2/L5	H: Horizontal	A4: WITH LNA (40 dB)	S: SMA; SMB; SMBR; MCX	S: SMA; SMB; SMBR; MCX	S: SMA; SMB; SMBR; MCX	S: SMA; SMB; SMBR; MCX	S: SMA; SMB; SMBR; MCX	S: SMA; SMB; SMBR; MCX
Lo1: QUAD-BAND (GSMPCS/L-Band/Locata/Wi-Fi/S/C-Band)			T: TNC-Bulkhead with Microdot Thread on 2.0 Rad.					

QTY REQD	DESCRIPTION	PART NO	ITEM NO
1	WIRE TERMINAL, #8 AWG	McMASTER P/N: 7113K241, Item 521-UP	5
4	PAN HEAD SCREW, 6-32, .25" L	McMASTER P/N 91400A144, Item 566-IN	4
1	PAN HEAD SCREW, 10-32, 3/16" L	McMASTER P/N: 91772A824, Item 46-02	3
1	MTR Mount, VERTICAL/ HORIZONTAL	MTR-LP REV E, Item 482-316LP	2
1	O-RING (For Surface Mount)	McMASTER P/N: AS568A-23, Item 553-23	1

ANTCOM CORP. TORRANCE, CALIFORNIA

Active L1L2 GPS Timing Antenna

REV: 3C
 SCALE: 1/1
 SHEET: 1 OF 1

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