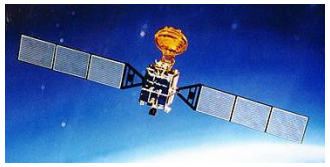
Tx/Rx Beidou Antennas, P/N: 4B1625LR-P-XX-XF0

(3.4” x 2.2”) Flat Mini Arinc Configurations



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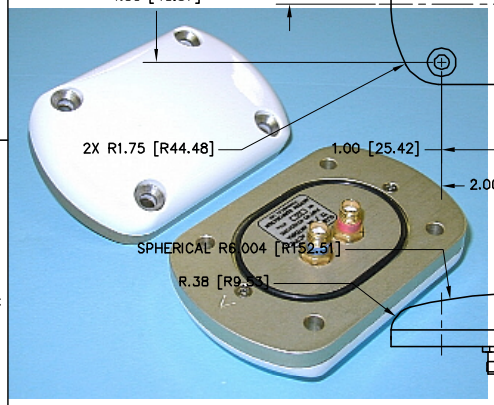

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED

SPECIFICATIONS

ELECTRICAL:

	TX		RX		
FREQUENCY:	(1610 - 1625) MHz		(2484 - 2499) MHz		
RADIATION PATTERN:	HEMISPHERICAL				SEE PART NO. BELOW
POLARIZATION:	LHCP		RHCP		
VSWR:	< 1.5:1				
GAIN (dB):	4 ft G.P.	Free Space	**4 ft G.P.**	Free Space	
@ 90° (Zenith) :	+4.2	+4.9	+1.8	+3.7	
@ 10° Elevation (Ave):	-1.3	-2.4	-1.8	-3.2	
@ 20° Elevation (Ave):	+1.4	-0.8	+0.9	-1.6	
@ 30° Elevation (Ave):	+2.3	+0.8	+0.2	-0.2	
@ 45° Elevation (Ave):	+2.2	+2.8	+0.6	+1.3	
@ 70° Elevation (Ave):	+3.5	+4.6	+0.6	+3.2	
AXIAL RATIO @ Zenith:	2 dB		2 dB		
POWER HANDLING:	>5 W		1 Watt		
DC GROUNDING:	YES (LIGHTNING PROTECTION)				
FILTER (REJ. @1616 MHz):	57 dB				
LNA GAIN:	N/A		(35 +/- 1) dB		
LNA NOISE FIGURE:	N/A		2.8 dB		
LNA VOLTAGE :	N/A		(+2.5 to +30) Volts DC FROM Rx RF CON.		
LNA DRAWING CURRENT:	N/A		< 38 mA		

MECHANICAL:

SIZE :	WIDTH: 2.20 in. [55.88 mm], LENGTH: 3.40 in. [86.36 mm], HEIGHT: 0.721 in [18.31 mm]
WEIGHT :	4.7 oz. (133 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 :	Tx (Red): SMA FEMALE, Rx (Blue): SMA FEMALE (OPTIONAL: TNC, MCX, MMCX, OR CABLES)

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	ITEM NO
				–	5
4	–	MOUNTING SCREW: (10–32, 1")	J507C1032R16		4
				–	3
A/R	–	WASHER, CUSTOM C'SINK	3G15P1001–70		
1		O–RING	2–031/N756–75	–	1

PARTS LIST

SIZE :	FREQ. BAND :	POLARIZATION:	LNA :	FILTER :
1: 2" SQ.	1625: Tx/Rx	LL: TX: LHCP, RX: LHCP	A1: WITH +35 dB LNA	F0: NO FILTER (20 dB Isolation)
1.9: 1.9" SQ.	25: Rx ONLY	LR: TX: LHCP, RX: RHCP		F1: 57 dB REJECTION @ 1616 MHz
2: 2.6" DIA.	16: Tx ONLY	RL: TX: RHCP, RX: LHCP	P: WITHOUT LNA	F2: >100 dB REJECTION @ 1616 MHz
3: 3.5" DIA.		RR: TX: RHCP, RX: RHCP		
4: MINI ARINC				

4B1625LR-P-XS-XF0

CABLE'S 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

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

NOTES: UNLESS OTHERWISE SPECIFIED:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS ± 1/64 DECIMALS .XX± .015 .XXX± .009 ANGLES ± 1°
TOLERANCE SYM PER ANSI Y14.5
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FILLETS R .020 TO R .030
SCREW THREADS PER MIL-S-8879
DIA'S ON A COMMON Ø .XX±.005
MACHINED SURFACES 120
DO NOT SCALE DRAWING

DRAWN
CHECKED
ENGINEER
APPROVED S. HUYNH Aug-28-03
CAD FILE NO

ANTCOM CORP. TORRANCE, CALIFORNIA

MINI ARINC, ACTIVE, OR PASSIVE Tx/Rx BEIDOU ANTENNA

SIZE	CAGE NO	DRAWING NO	REV
D	3CVE1	4B1625LR–X–XX–XFX	–

SCALE 1/1 SHEET 1 OF 1