



FAA Approved Facility

IEEE Zigbee S-Band RHCP Antennas, P/N: 3G24RR-P-XS-1

3.5" Diameter Configurations with Front/Back Mounting Option



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

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MECHANICAL:
 SIZE: DIAMETER = 3.50 in. [88.90 mm]
 HEIGHT = 0.583 in. [14.81 mm]
 WEIGHT: 5.15 oz. (.146 Kg)
 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: TNC BULKHEAD CONNECTOR, (OPTION: TNC, SMA, 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, DO-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

FREQUENCY:	(2400 - 2500) MHz	
RADIATION PATTERN:	HEMISPHERICAL	SEE PART NO. BELOW
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	
GAIN (dB):	4 ft G.P.	Free Space
@ 90° (Zenith):	+4.6	+6.1
@ 10° Elevation (Ave):	-1.1	-2.4
@ 20° Elevation (Ave):	+2.2	-0.3
@ 30° Elevation (Ave):	+2.2	+1.0
@ 45° Elevation (Ave):	+3.4	+2.9
@ 70° Elevation (Ave):	+4.4	+5.3
Beam Width (3dB):	110°	88°
AXIAL RATIO @ Zenith:	2.0 dB	
IMPEDANCE:	50 Ohms	
POWER HANDLING:	200 Watt	
DC GROUNDING:	YES (LIGHTNING PROTECTION)	

MECHANICAL:

Max. Dim: 0.25" [6.37] (MCX/MMCX), 0.46" [11.68] (SMA/R-SMA), 0.57" [14.53] (TNC), 0.83" [21.00] (TNC-BH), 0.72" [18.29] (N, N-BH)

NAMEPLATE APPROXIMATE LOCATION

SMA FEMALE CONNECTOR (OPTION: TNC, TNC Bulkhead, N, N-Bulkhead, MCX, MMCX, or Cable)

SIZE: 1: 2" SQ. 1625-TX/RX
 1.9: 1.9" SQ. 25: 2493 MHz
 2: 2" DIA. 18: 1816 MHz
 3: 3.5" DIA. 24, or 802.11
 4: MINIARINC (2.4-2.5 GHz)

LL: TX: LHCP, RX: LHCP
 LR: TX: LHCP, RX: RHCP
 RL: TX: RHCP, RX: LHCP
 RR: TX: RHCP, RX: RHCP

A1: WITH +23dB LNA
 A2: WITH +43dB LNA
 P: WITHOUT LNA

TABLES:

SIZE	FREQ. BAND	POLARIZATION	LNA	FILTER
1: 2" SQ.	1625-TX/RX	LL: TX: LHCP, RX: LHCP	A1: WITH +23dB LNA	
1.9: 1.9" SQ.	25: 2493 MHz	LR: TX: LHCP, RX: RHCP	A2: WITH +43dB LNA	
2: 2" DIA.	18: 1816 MHz	RL: TX: RHCP, RX: LHCP	P: WITHOUT LNA	
3: 3.5" DIA.	24, or 802.11	RR: TX: RHCP, RX: RHCP		
4: MINIARINC	(2.4-2.5 GHz)			

QUANTITY REQ

DESCRIPTION	PART NO	MATERIAL	FINISH	QTY
MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	-	-	5
ADHESIVE GASKET (Optional)	12345G-3M-3G	-	-	3
GASKET	3G15P1001-3G	-	-	1

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 FRACTIONS DECIMALS ANGLES
 ± 1/64 ± .005 ± 1°
 TOLERANCE 5/16 PER AMS 1145
 REMOVE ALL BURRS
 BREAK EXTERNAL EDGES .006 TO .016
 FILED 8 .006 TO .016
 SMOOTH THE 200 PER MIL-C-8879
 FINISH ON A COMMON 2.00
 MACHINED SURFACES 25/

ANTCOM CORP. TORRANCE, CALIFORNIA
 3.5" Dia. FLAT FIXED MOUNT
 S-Band (IEEE-ZIGBEE) ANTENNA

APPROVED: S. HUYNH, Sep-15-03
 DATE FILED: 3G24RR-P-XS-1
 SCALE: 1/1
 SHEET: 1 OF 1

NMO Connector Option is Now Available for Some Antennas