



FAA Approved Facility

# GPS/RHCP-Inmarsat/Iridium & Wi-Fi Antenna, P/N: 3D121625RV-4.5MM-3

## 1" Diameter x 4.2" Tall, Swivel, Side Mount Configuration

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



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**SPECIFICATIONS**

ZONE	REVISIONS					
	REV	DESCRIPTION	DATE	APPROVED		

**ELECTRICAL:**

PORT:	J1					J2
FREQUENCY (MHz):	(1575.42±15)	(1542.50±17.5)	(1642.50±17.5)	(1610-1626)	(1227.60±15)	(2400-2500)
GAIN in FS/3in GP (dBic)	L1 GPS	Rx INMARSAT	Tx INMARSAT	IRIDIUM	L2 GPS	Wi-Fi
@ 90° (Zenith):	+1.4/+1.1	+1.1/+0.7	+0.1/-0.3	+0.5/+0.1	-5.0	>2.5 dB
@ 10° Elevation:	-1.5/-0.9	-2.0/-1.6	-2.1/-1.9	-2.0/-1.6	-6.5 to -11.5	
@ 20° Elevation:	-0.5/-0.2	-1.0/-0.8	-1.1/-1.1	-0.9/-0.8	-6.2 to -9.2	
@ 30° Elevation:	+0.2/+0.3	-0.2/-0.2	-0.7/-0.8	-0.3/-0.7	-5.7 to -7.7	
@ 45° Elevation:	+0.7/+0.6	+0.5/+0.3	-0.2/-0.7	+0.3/-0.3	-4.6 to -6.0	
@ 70° Elevation:	+1.2/+0.3	+1.0/+0.3	-0.4/-1.6	+0.2/-0.7	-4.0	
BEAM WIDTH (3dB)	152/173 Deg.	150/173 Deg.	170/180 Deg.	160/182 Deg.	(107 to 170) Deg.	50 ° x360 °
AXIAL RATIO (dB)	1 to 3	1 to 3	1 to 3	1 to 3	1 to 5	
RADIATION PATTERN:	HEMISPHERICAL					Omni
POLARIZATION:	RHCP					Vertical
VSWR:	< 1.5:1					

**DC GROUNDING:** YES (LIGHTNING PROTECTION)

**LNA OPTION:**

LNA GAIN: (22.0+/-2.0) dB  
 LNA NOISE FIGURE: 2.0 dB  
 LNA P 1dB Out: +13 dBm  
 VOLTAGE/CURRENT: (+2.4 TO +5) Volts DC / (15 TO 30) mA

**MECHANICAL:**

SIZE: DIAMETER: 1.00 in. [ 25.40 mm]  
 HEIGHT: 4.2 in. [106.68 mm]  
 WEIGHT: 3.3 oz (93.55 g)  
 FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL  
 BASE IRIDITE PER MIL-C-5441  
 COLOR: OLIVE DRAB GREEN #34031 PER FED-STD-595B  
 MATERIAL: 6061-T6 ALUMINUM ALLOY BASE  
 COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT

CONNECTOR: 4.5" Long Flexible Cable with Right Angle MMCX Connector (OPTION: MCX, SMA, TNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, QMA, 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, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

**ACCEPTANCE TEST PROCEDURE:** ATP-GPS-L1L2-100

FREQ. BAND:	1	1							
1215: L1/L2									1
15: L1 ONLY									
1216: L1/L2 GPS/Inmarsat/Iridium									
121625: L1/L2 GPS/Inmarsat/Iridium and Wi-Fi									

**UNLESS OTHERWISE SPECIFIED**  
 DIMENSIONS ARE IN INCHES  
 FRACTIONS DECIMALS ANGLES  
 ± 1/64 ± .015 ± 1°  
 TOLERANCE SHIP PER ANSI Y14.5  
 REMOVE ALL BURRS  
 BREAK EXTERNAL EDGES .060 TO .015  
 FILE TO .005 TO .010  
 SHOW THE ADD PER MIL-STD-8839  
 DATA ON A COMMON 1/8" GRID  
 MACHINED SURFACES

**ANTCOM CORP.** TORRANCE CALIFORNIA

HANDHELD L1/L2 GPS/INMARSAT/IRIDIUM/Wi-Fi ANTENNA

3D121625RV-4.5MM-3

SCALE 1/1 SHEET 1 OF 1

**NOTES:** UNLESS OTHERWISE SPECIFIED:  
 1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

CABLE LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; C: QMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG; N: No MAG	M: MMCX; M1: MMCX	-2: LUSTERLESS GRAY #35320 PER FED-STD-595B
#: CABLE LENGTH (IN)	N: NB; N1: 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

NMO Connector is Now Available for Some Antennas