



FAA Approved Facility

# New 2-Port Active Rx-Thuraya & Active Rx-Inmarsat Antenna

P/N: 3GRxTRxIN-AA-XSS-1 (P/N: 3G1545RL-AA-XS-1-RoHS)

Other Frequencies, Color and Connector Options are Available

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



FAA Approved TSO Antennas

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**SPECIFICATIONS**

REVISIONS		DATE	APPROVED
ZONE	REV	DESCRIPTION	
A		ADDED FILTER	10-31-16 S.H

**ELECTRICAL:**

	Rx-Thuraya (LHCP)	Rx-Inmarsat (RHCP)
FREQUENCY:	(1542.5 ± 17.5) MHz	(1542.5 ± 17.5) MHz
RADIATION PATTERN:	HEMISPHERICAL	
VSWR:	< 2.0:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	Free Space 4 ft G.P.	Free Space 4 ft G.P.
@ 90 ° (ZENITH):	+ 2.5	+ 1.6
@ 10 ° Elevation:	- 4.7	- 2.4
@ 20 ° Elevation:	- 3.8	+ 0.7
@ 30 ° Elevation:	- 2.1	+ 2.3
@ 60 - 90 ° Elevation:	> + 1.0	> + 2.1
BEAM WIDTH (3dB):	90 Deg.	140 Deg.
AXIAL RATIO:	3 dB	
LIGHTNING PROTECTION:	DC GROUNDING	
LNA OPTION:	33 dB Gain	
LNA NOISE FIGURE:	3.0 dB	
LNA P1dB Out:	+13 dBm	
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA	
REJECTION @ (-50/+50) MHz	-40 dB / -40 dB	
@ (-100/+100) MHz	< -65 dB	
POWER HANDLING:	100 Watts CW (WITHOUT LNA) , 1 Watt CW (WITH LNA)	

**SIZE:** DIAMETER: 3.530in [89.66]mm  
HEIGHT: 0.888in [22.56]mm

**WEIGHT:** 9.2 oz. (261g)

**FINISH:** SKYDROL RESISTANT POLYURETHANE ENAMEL  
BASE IRIDITE PER MIL-C-5541F

**MATERIAL:** 6061-T6 ALUMINUM ALLOY BASE  
COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT

**CONNECTOR:** SMA FEMALE  
(OPTION: TNC, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, SMP, BNC, or Cable)

**ENVIRONMENTAL:**

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]  
ALTITUDE: 70,000 ft.  
VIBRATION: > 30 G's  
LEAKAGE: HERMETICALLY SEALED

**FEDERAL & MILITARY SPECIFICATIONS:**

FAA TSO-C144, DO-160D, DO-228, MIL-C-5541, MIL-E-5400, MIL-145208A, MIL-STD-810, AND SAE J1455

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

**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED
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**PHOTOS:**

**MECHANICAL DRAWINGS:**

Top View Dimensions: Diameter: 3.530 [89.66], Hole Diameter: 0.201 [5.11] THRU 0.385 [9.78] X 100°, Hole Spacing: 1.900 [48.26] SQ.

Side View Dimensions: Height: 0.888 [22.56]

Bottom View Dimensions: Hole Diameter: 0.249 [6.32], Hole Spacing: 1.945 [49.39] SQ., Mounting Hole Diameter: 0.452 [11.48]

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

**TABLES:**

SIZE:	FREQUENCY:	LNA:
1: 2" SQ.	L1RxT : L1-GPS & Rx-Thuraya; L1RxR: L1-GPS & Rx-Inmarsat	A: WITH 33dB LNA
1.8: 1.8" SQ.	L1RxT: L1-GPS & Rx-Thuraya; L1L2RxTx: L1L2-GPS & Rx-Thuraya	A2: WITH 22dB LNA
2: 2" DIA.	L1RxTxR: L1-GPS & Rx-Thuraya; L1L2RxTxR: L1L2-GPS & Rx-Thuraya	P: WITHOUT LNA
3: 3.5" DIA.	L1RxTxTR: L1-GPS & Rx-Thuraya & Rx-Tx-Inmarsat	
4: MNF/ARINC, 42: ARINC 743	1545: RxTRxIN	

**P/N: 3GRxTRxIN-AA-XSS-1**

**TABLES:**

CABLE LENGTH:	Connector:	COLOR:
X NO CABLE	S: SMA; B: BNC	-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: N; NB: N-Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
		-5: DESERT TAN #33446 PER FED-STD-595B

**ANTCOM CORP.** TORRANCE, CALIFORNIA

3.5" Dia., Active Rx-Thuraya & Active Rx-Inmarsat ANTENNA

DATE: 10/31/16  
DRAWN BY: S. HUYNH  
CHECKED BY: P. TRAN  
APPROVED BY: S. HUYNH

SCALE: 1/1

SHEET 1 OF 1

**TABLES:**

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	REQD
4	MOUNTING SCREWS: 10-32, 1", Item 579		J507C1032R16	-	3
4	WASHER, CUSTOM C'SINK		3G15P1001-6		2
1	GASKET		3G15P1001-3G		1

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS TO DECIMALS DECIMALS TO THOUSANDS ANGLES ± 1/64 .002 .010 ± 1°

TOLERANCE 5VM PER ANSI Y14.5 REMOVE ALL SHARP BREAK EXTERNAL EDGES .005 TO .015 SURF FINISHES PER MIL-C-8870 DIA'S OR A CORNER R > .015 MACHINED SURFACES 12.5

DO NOT SCALE DRAWING

NMO Connector is Now Available for Some Antennas