



FAA Approved Facility

Active Down-Link Thuraya + Inmarsat + Iridium + L1L2 GPS Antenna

P/N: 4NF-L1L2RxTINIR-4A-XT4-2-AFRO-FRPA (for Receiving @ Rx-Bands, Gray)

P/N: 4NF-L1L2RxTINIR-4A-XT4-1-AFRO-FRPA (for Receiving @ Rx-Bands, White)

Other Frequencies, Mounting Foot Prints, Connectors, and Colors Options are Available

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



ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

MECHANICAL:

SIZE: WIDTH: 4.220 in. [105.56 mm] SQ.
HEIGHT: 0.836 in. [21.24 mm]

WEIGHT: 10.4 oz. (295g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5441F

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

CONNECTOR: TNC FEMALE
(OPTION: SMA, N, BNC, F, MCX, or MMCX)

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, D0-228, MIL-C-5541,
MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

SPECIFICATIONS

	REVISIONS				
	ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:	L1 GPS	L2 GPS	Rx-Inmarsat (RHCP) OmniStar, L6 Galileo B1 Compass (RHCP) Rx-Thuraya (LHCP)	IRIDIUM L1 GLONASS (RHCP) Tx-Globalstar (LHCP)
	FREQUENCY:	(1575.42 ±12) MHz	(1227.60 ±12) MHz	(1542.5 ± 17.5) MHz
RADIATION PATTERN:	HEMISPHERICAL			
POLARIZATION:	RHCP	RHCP	RHCP or LHCP	RHCP or LHCP
VSWR:	< 2.0:1			
IMPEDANCE:	50 ohms			
ANTENNA GAIN (dBic):	Free Space	4 ft G.P.	Free Space	4 ft G.P.
@ 90 ° (ZENITH):	+ 4.5	+ 2.4	+ 5.6	+ 1.6
@ 10 ° Elevation:	- 1.5	- 1.7	- 4.3	- 2.8
@ 20 ° Elevation:	0.0	+ 0.9	- 3.0	+ 0.5
@ 30 ° Elevation:	+ 1.1	+ 2.0	- 1.5	+ 2.4
@ 60 - 90 ° Elevation:	> 3.0	> 2.5	> 1.7	> 3.6
BEAM WIDTH (3dB):	112 Deg.	145 Deg.	104 Deg.	80 Deg.
AXIAL RATIO:	2 dB		2 dB	
LIGHTNING PROTECTION:	DC GROUNDING			
LNA OPTION (For Rx Only):	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)			

QUANTITY	RECORD	DESCRIPTION	PARTS LIST	PART NO	FINISH	REV	NO.
4	SCREW, MOUNTING (10-32, 1.5" L)	93085A837	-	-	1		2
-1							1

CONFIGURATION:	FREQ. BAND:	GPS LNA:	GPS Inmarsat/Thuraya Connector:	COLOR:
1: 2" SQ. (FLAT)	Rx/Tx INIR: Rx/Tx Inmarsat & Rx/Tx Iridium	A: WITH LNA	S: SMA	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	L1L2RxTxINIR: L1L2 GPS & Rx/Tx Inmarsat/Iridium	P: WITHOUT LNA	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)	L1L2RxTxINIR: L1L2 GPS & Inmarsat	A2: WITH 20dB LNA	N: N; NB: N-Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
3: 3.5" DIA. (FLAT)	L1RxTx1: L1 GPS & Rx/Tx Thuraya		T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)	L1L2RxTx1: L1L2 GPS & Rx/Tx Thuraya		B: BNC FEMALE	-5: DESERT TAN #33446 PER FED-STD-595B
5: (HELIX ROD)				
5B: (HELIX BLADE)				
3D: (HELIX HANDHELD)				

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