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2X 2.686 [68.22] (FRPA MOUNTING FOOT PRINT)

R.780 [R19.81]

4.220 [107.19] SQ.

10.836 [275.23]

1.000 [25.40] DIA.

10.00 [254.0]

.836 [21.24]

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

4X Ø.201 [Ø5.11] THRU ON 1.343 RAD. (FRPA MOUNTING FOOT PRINT)

Ø1.500 [Ø38.10] CLEARANCE

IR IN T GPS

.650 [16.51] SQ.

**SPECIFICATIONS**

ZONE	REVISIONS				
	REV	DESCRIPTION	DATE	APPROVED	
B		GAIN/MOUNTING	03/14/17	S.H	

**ELECTRICAL:**

	Rx-Inmarsat	Rx-Thuraya	L1 GPS	L2 GPS	Iridium
FREQUENCY:	(1525 - 1560) MHz	(1525 - 1560) MHz	(1575.42 ±15) MHz	(1227.60 ±15) MHz	(1616.0 - 1626.5) MHz
RADIATION PATTERN:	HEMISPHERICAL				
VSWR:	RHCP	LHCP	RHCP	RHCP	RHCP
POLARIZATION:	2.0:1				
IMPEDANCE:	50 ohms				
ANTENNA GAIN (dBic):	Free Space				
@ 90 ° (ZENITH):	+ 1.6	+ 1.6	+ 4.5	+ 2.5	+ 3.8
@ 10 ° Elevation:	- 2.4	- 2.4	- 1.5	- 4.3	- 4.3
@ 20 ° Elevation:	+ 0.7	+ 0.7	0.0	- 3.0	- 2.2
@ 30 ° Elevation:	+ 2.3	+ 2.3	+ 1.1	- 1.5	- 0.7
@ 60 - 90 ° Elevation:	+ 2.1	+ 2.1	> + 3.0	> + 1.7	+ 2.5
BEAM WIDTH (3dB):	140 Deg.	140 Deg.	112 Deg.	104 Deg.	120 Deg.
AXIAL RATIO:	1 to 3 dB	1 to 3 dB	2 dB	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, (2.5-24V)/<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)				

**MECHANICAL:**

SIZE: WIDTH: 4.220 in. [105.56 mm] SQ.  
HEIGHT: 10.836 in. [275.23 mm]

WEIGHT: 20.4 oz. (578 g)

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

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

CONFIGURATION:	FREQ. BAND:	GPS LNA:	GPS INMARSAT/THURAYA CONNECTOR:	COLOR:
1: 2" SQ. (FLAT)	RxTx INMARSAT, RxTx INMARSAT & RxTx Iridium	A: WITH LNA	S: SMA	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	L1L2RxTxINIR, L1L2 GPS & RxTx 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)	L1RxTxT1L1 GPS & RxTx Thuraya		T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)	L1L2RxTxT1; L1L2 GPS & RxTx Thuraya		B: BNC FEMALE	-5: DESERT TAN #33446 PER FED-STD-595B
5: (HELIX ROD)				
5B: (HELIX BLADE)				
3C: (HELIX HANDHELD)				

**ANTCOM CORP.** TORRANCE CALIFORNIA

Thuraya/Inmarsat/Iridium / L1L2GPS Antenna

DATE: 03/14/17  
 DRAWN BY: S. HUYNH  
 CHECKED BY: P. TRAN  
 APPROVED BY: S. HUYNH

SCALE: 1/1

SHEET 1 OF 1