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4x.201 [Ø5.11] for
✓ 0.385 [Ø9.78] X 100"
10-32 MOUNTING SCREWS

2.214 [56.24]
1.600 [40.64]

5.040 [128.02]
4.237 [107.63]

0.900 [22.86]

2x.828 [21.04] .784 [19.91]

Active Rx-Only LHCP-Thuraya: TNC Female (Green)
(+2.5 to +24) Volts DC

2x.300 [7.61]

Active Rx-Only RHCP-Inmarsat: TNC Female (Red)
(+2.5 to +24) Volts DC

Active Rx-Only Iridium/GPS: TNC Female (Blue)
(+2.5 to +24) Volts DC

0-RING (2-038)

1.48 [3.77]

GPS

SPECIFICATIONS

	REVISIONS				
	ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

	L1 GPS	Rx-IRIDIUM, [USE FOR ACTIVE RECEIVE ONLY]	Rx-Inmarsat (RHCP) [USE FOR ACTIVE RECEIVE ONLY]	Rx-Thuraya (LHCP) [USE FOR ACTIVE RECEIVE ONLY]				
	FREQUENCY:	(1575.42 ±13) MHz	(1609 -1626) MHz	(1518 to 1567) MHz	(1518 to 1567) MHz			
RADIATION PATTERN:	HEMISPHERICAL							
VSWR:	< 2.0:1							
IMPEDANCE:	50 ohms							
ANTENNA GAIN (dBi):	Free Space	4 ft G.P.	Free Space	4 ft G.P.	Free Space	4 ft G.P.	Free Space	4 ft G.P.
@ 90 ° (ZENITH):	+4.6	+2.9	+3.0	-0.5	+2.5	+1.6	+2.5	+1.6
@ 10 ° Elevation:	-2.5	-1.8	-4.5	-4.0	-4.7	-2.4	-4.7	-2.4
@ 20 ° Elevation:	-1.1	+0.7	-3.3	-1.2	-3.8	+0.7	-3.8	+0.7
@ 30 ° Elevation:	+0.5	+1.7	-1.5	-0.3	-2.1	+2.3	-2.1	+2.3
@ 60 - 90 ° Elevation:	>+3.6	>+2.1	>+1.8	>-1.3	>+1.0	>+2.1	>+1.0	>+2.1
BEAM WIDTH (3dB):	103 Deg.	146 Deg.	85 Deg.	140 Deg.	90 Deg.	140 Deg.	90 Deg.	140 Deg.
AXIAL RATIO:	2.0 dB	2.0 dB	3.0 dB		3.0 dB		3.0 dB	
LIGHTNING PROTECTION:	DC GROUNDING							
LNA OPTION:	33 dB Gain		33 dB Gain		33 dB Gain			
LNA NOISE FIGURE:	3.0 dB		3.0 dB		3.0 dB			
LNA P1dB Out:	+13 dBm		+13 dBm		+13 dBm			
LNA DC POWER:	(2.5 to 24)V/≤50mA							
REJECTION @	-60dB @ 1616 MHz for GPS without Iridium Version		-17 dB @ 1475 MHz		-17 dB @ 1475 MHz			
	2-Pole Filter for Iridium with GPS Version		-52 dB @ 1626 MHz		-52 dB @ 1626 MHz			
POWER HANDLING:	1 Watt CW (WITH LNA)							

MECHANICAL:

SIZE: WIDTH: 2.214 in. [56.24 mm], LENGTH: 5.040 in [128.02 mm], HEIGHT: 0.900in. [22.86 mm]

WEIGHT: 10.4 oz. (295g)

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

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

CONNECTOR: TNC FEMALE
(OPTION: SMA, TNC Bulkhead, 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 SEALED

FEDERAL & MILITARY SPECIFICATIONS:

DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-145208A, MIL-STD-810, AND SAE J1455

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	REV
4	MONTING SCREWS: 10-32, 100" Flat Head, 1"	J507C1032R16		2
1	O-RING	2-038-N756-75		1

CONFIGURATION:	FREQ. BAND:	LNA:	CABLE'S LENGTH:	Thuraya/Inmarsat/Iridium Connector:	COLOR:
1: 2" SQ. (FLAT)		A: WITH LNA	X: NO CABLE	S: SMA	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)		P: WITHOUT LNA	M: WITH MAG. MOUNT	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)			#: CABLE LENGTH (IN)	N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
3: 3.5" DIA. (FLAT)		A2: WITH 20dB LNA	R: RIGHT ANGLE CON.	T: TNC; TB: TNC- Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARING (FLAT)				B: BNC FEMALE	-5: DESERT TAN
53: (HELIX ROD)					
5B: (HELIX BLADE)					
3D: (HELIX HANDHELD)					

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
FRACTIONS TO BE DECIMALS
± 1/64 XXX 015
± 1/16 XXX 005 ± 1"

REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
CLEAN PARTS TO 100%
DIA'S ON A COMMON & .0005
MACHINED SURFACES

DO NOT SCALE DRAWING

NOTES: UNLESS OTHERWISE SPECIFIED:
DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]
ALL SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

ANTCOM CORP. TORRANCE, CALIFORNIA
Combined Avionics Active Rx-Only
Thuraya, Inmarsat, and Iridium/GPS
Antenna

DRN: S. HUYNH Aug-27-12
ENGR: S. HUYNH Aug-27-12

SCALE 1/1

SHEET 1 OF 1

NMO Connector is Now Available for Some Antennas