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**SPECIFICATIONS**

ZONE	REV	REVISIONS		
		DESCRIPTION	DATE	APPROVED
A		REVISED ELECTRICAL DATA	10/16/12	S.H.

	Rx	L1 GPS,	IRIDIUM,	Tx
	OmniStar, L6 Galileo, B1 Compass	E1, E2 Galileo, L1 IRNSS	L1 GLONASS	
FREQUENCY:	(1542.5 ± 17.5) MHz	(1575 ± 17) MHz	(1609 -1626) MHz	(1642.5 ± 17.5) MHz
RADIATION PATTERN:	HEMISPHERICAL			
POLARIZATION:	RHCP (Inmarsat) LHCP (Thuraya)	RHCP	RHCP	RHCP (Inmarsat) LHCP (Thuraya)
VSWR:	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1
IMPEDANCE:	50 ohms	50 ohms	50 ohms	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):	+ 2.5 + 1.6	+ 3.7 - 1.5	+ 3.0 - 0.5	+ 3.4 + 0.5
@ 10 ° Elevation:	- 4.7 - 2.4	- 3.5 - 3.5	- 4.5 - 4.0	- 3.8 - 3.3
@ 20 ° Elevation:	- 3.8 + 0.7	- 2.6 - 0.9	- 3.3 - 1.2	- 2.7 - 0.6
@ 30 ° Elevation:	- 2.1 + 2.3	- 0.9 + 0.3	- 1.5 - 0.3	- 1.0 - 0.1
@ 60 - 90 ° Elevation:	> +1.0 > +2.1	> +2.3 > 0	> +1.8 > -1.3	> +2.2 > -1.5
BEAM WIDTH (3dB):	90 Deg.	140 Deg.	85 Deg.	140 Deg.
AXIAL RATIO:	3.0 dB			
LIGHTNING PROTECTION:	DC GROUNDING			
LNA OPTION (Rx Only):	35 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:	200 Watts CW (WITHOUT LNA) , 1 Watt CW (WITH LNA)			

**ELECTRICAL:**

**MECHANICAL:**

SIZE: DIAMETER: 3.66 in. [ 93.07 mm]  
HEIGHT: 1.55 in. [ 39.37 mm]

WEIGHT: 16.2 oz. (460 g)

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: NEW MOTOROLA MOUNT (NMO)

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

ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100

SIZE:	FREQ. BAND:	LNA:
1: 2" SQ.	Rx: L1 GPS/ GLONASS +	A: WITH LNA
1.8: 1.8" SQ.	Rx/Tx: INMARSAT/IRIDIUM +	AL: WITH LNA/LIMITER
2: 2.6" DIA.	Tx: GLOBALSTAR	P: WITHOUT LNA
3: 3.5" DIA.	Tx: Rx/Tx THURAYA	
4: MINI ARINC		

**P/N: 3GNSS16P-XNMO-4**

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	I: NMO; NEW MOTOROLA MOUNT	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG. N. No Mag.	S: SMA; P: PINS	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#R: CABLE LENGTH (IN)	M: MCX; MM: MMCX	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	N: N; NB: N-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	T: TNC; TB: TNC-Bulkhead	-5: TAN #33446 PER FED-STD-595B

QTY	DESCRIPTION	PART NO	FINISH	ITEM NO
1	GASKET	3BG15P1001-2-NMO, Item 546-NMO	-	2
2				1

QUANTITY REQD	PARTS LIST
1	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS DECIMALS ANGLES TOLERANCES ARE ± 1/64 .001 .005 ± 1°
1	TOLERANCE SVI PER ANSI Y14.5 REMOVE ALL BURRS
1	BEVEL EXTERNAL EDGES .005 TO .015
1	SAFETY HEADS PER MIL-S-8879
1	25° CHAMFER PER MIL-S-8879
1	MACHINED SURFACE
1	DO NOT SCALE DRAWING

DATE	BY	APPROVED	DESCRIPTION
Feb-17-09	S. HUYNH		ORIGINAL DRAW
Feb-17-09	S. HUYNH		ORIGINAL REDRAW
Feb-25-14	S. HUYNH		UPDATED
Feb-25-14	P. TRAN		UPDATE DRAW
Feb-25-14	S. HUYNH		APPROVED

**ANTCOM CORP.** TORRANCE, CALIFORNIA

3.5" Dia.  
GPS/IRIDIUM/INMARSAT/L-BAND  
ANTENNA

D 3CVE1 3GNSS16P-XNMO-4 A

SCALE 1/1 SHEET 1 OF 1

NMO Connector is Now Available for Some Antennas