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4X  $\phi$ .020 [ $\phi$ 5.11] THRU  
 $\phi$ .385 [ $\phi$ 9.78] X 100"

M18 X 1.5

(GPS/XM) SMA MALE CABLE  
(IR) TNC MALE CABLE

O-RING  
P/N: 2-038-N756-75

GPS XM IR

**ELECTRICAL:**

	L1 GPS/L-Band	IRIDIUM	XM, OR SIRIUS RADIO
FREQUENCY:	(1575.42 ±12) MHz,	(1610.0 - 1626.5) MHz	(2338.75 +/- 10) MHz
RADIATION PATTERN:	(1555.00 ±17) MHz	HEMISPHERICAL	HEMISPHERICAL
POLARIZATION:	RHCP	RHCP	LHCP (XM), RHCP (SIRIUS)
VSWR:	< 1.5:1	< 1.5:1	< 1.5:1
GAIN (dB):	F.S      4 ft G.P.	F.S      4 ft G.P.	F.S      4 ft G.P.
@ 90° (Zenith):	+ 4.6      + 2.9	+4.9      +4.2	+3.7      +1.8
@ 10° Elevation (Ave):	- 2.5      - 1.8	-2.4      -1.3	-3.2      -1.8
@ 20° Elevation (Ave):	- 1.1      + 0.7	-0.8      +1.4	-1.6      +0.9
@ 30° Elevation (Ave):	+ 0.5      + 1.7	+0.8      +2.3	-0.2      +0.2
@ 45° Elevation (Ave):	> 3.6      > 2.1	+2.8      +2.2	+1.3      +0.6
@ 70° Elevation (Ave):	> 3.6      > 2.1	+4.6      +3.5	+3.2      +0.6
AXIAL RATIO @ Zenith:	2 dB	2 dB	2 dB
POWER HANDLING:	10 Watt	10 Watt	10 Watt
DC GROUNDING:	YES (LIGHTNING PROTECTION)		
FILTER (REJ. @1616 MHz):	57 dB		
REJECTION @ (-50/+50) MHz	< -85 dB		
@ (-100/+100) MHz	< -85 dB		
LNA GAIN:	34 dB (P1dBout = +13 dBm)	(35 +/- 1) dB	
LNA NOISE FIGURE:	2.4 dB	2.8 dB	
LNA VOLTAGE:	(+2.5 to +30) Volts DC FROM Rx RF CON.	(2.5 to +30) Volts DC FROM Rx RF CON.	
LNA DRAWING CURRENT:	< 30 mA	< 38 mA	

**MECHANICAL:**

SIZE: WIDTH: 2.200 in. [55.88 mm], LENGTH: 5.026 in [127.66 mm]  
HEIGHT: 0.721 in. [18.31 mm]

WEIGHT: < 8.0 oz. (226 g)

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

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

CONNECTOR: GPS: SMA MALE, IRIDIUM: TNC MALE, XM: SMA MALE  
(OPTION: N, 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-I-45208A, MIL-STD-810, AND SAE J1455

QUANTITY	DESCRIPTION	PART NO	MATERIAL	FINISH	ITEM NO
4	MOUNTING SCREW: (10-32, 1")	MS24893C276	-	-	2
1	O-RING	2-038-N756-75	-	-	1

CONFIGURATION:	FREQ. BAND:	POLARIZATION:	LNA:	GPS/IRIDIUM/XM CON.:	COLOR:
1: 2" SQ. (FLAT)	1516: GPS/IRIDIUM	R: RHCP	A: WITH LNA	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	151623: GPS/IRIDIUM/XM	L: LHCP	P: WITHOUT	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)	151615: GPS/IRIDIUM/L-Band			N: N; NB: N-Bulkhead	-3: CAMO GREEN #34094 PER FED-STD-595B
3: 3.5" DIA. (FLAT)				T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)					-5: DESERT TAN #33446 PER FED-STD-595B
5G: (5.0x2.2") Rect.					
5B: (I-HELIX BLADE)					
3C: (I-HELIX HANDHELD)					

**P/N: 5G151623RRL-ALPP-12STSC-4-10WIR**

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		DIMENSIONS ARE IN MILLIMETERS		TOLERANCES UNLESS OTHERWISE SPECIFIED	
FRACTIONS	DECIMALS	FRACTIONS	DECIMALS	FRACTIONS	DECIMALS
± 1/64	± .0156	± .002	± .05	± 1/16	± .0625

DATE	BY	DESCRIPTION
July-22-05	S. HUYNH	ORIGINAL DRAW
July-22-05	S. HUYNH	ORIGINAL DESIGNED
July-22-05	S. HUYNH	UPDATED
May-17-17	F. TRAN	UPDATE DRAW
May-17-17	S. HUYNH	APPROVED

**ANTCOM CORP.** TORRANCE, CALIFORNIA

GPS/IRIDIUM/XM (SIRIUS or S-Band)  
ANTENNA

REV: 3CVE1      PART NO: 5G151623RRL-ALPP-12STSC-4-10WIR      SHEET 1 OF 1

SCALE: 1/1

NMO Connector Option is Now Available for Some Antennas