

"HF" for High Iridium/Inmarsat/Thuraya-Rejection Front End Filter Option: -22dB@1616MHz, -34dB@1660MHz

NMO Connector Option is Now Available for Some Antennas

Phase Center:
x=y=0;
z=.557 [14.15]

NAMEPLATE APPROXIMATE LOCATION

TNC FEMALE CONNECTOR (OPTION: SMA, TNC Bulkhead, N, N Bulkhead, MCX, MMCX, or Cable)

P/N: 53GO15A4F-MTR-1

SIZE	FREQ. BAND	LNA GAIN	CABLE LENGTH	CONNECTOR	COLOR
1: 2" SQ.	42: ARINC 743	GO1216: L1/L2 GPS/GNSS/L-Band	A: 33 dB, A4: 37 dB	X: NO CABLE	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ.	5: 5" CIRCULAR	GO1215: L1/L2 GPS/L-Band	AF or A4F: LNA	M: MCX, N: NO MAG	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
2: 2.5" DIA.		GO16: L1 GPS/GNSS/L-Band	WITH FILTER	N: NBI, N: N-Bulkhead	-3: OLIVE DRAB GREEN #34301 PER FED-STD-595B
3: 3.5" DIA.		GO1316: L1/L2 GPS & L1/L2 Glonass	WITHOUT LNA	R: RIGHT ANGLE CON.	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC		GO1116: L1/L2/L3/L5/L6 GPS/GNSS/Galileo		T: TB, TNC, TNC-Bulkhead	

SPECIFICATIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

	Rx L-Band/ L6 Galileo (1525 - 1560)	L1 GPS/ L1/E1/E2 Galileo (1555 - 1595)
FREQUENCY (MHz):		
ANTENNA GAIN (dBic):	Free Space	Free Space
@ 90° (ZENTH):	> + 2.5	+ 5.5
@ 10° Elevation:	> - 4.7	- 1.2
@ 20° Elevation:	> - 3.0	+ 0.3
@ 30° Elevation:	> - 2.3	+ 1.8
@ 60 - 90° Elevation:	> + 2.0	> 4.8
BEAMWIDTH (3dB):	106 Deg.	106 Deg.
RADIATION PATTERN:	HEMISPHERICAL	
POLARIZATION:	RHCP	
VSWR:	< 1.5:1	
IMPEDANCE:	50 ohms	
AXIAL RATIO:	3 dB	
LIGHTNING PROTECTION:	DC GROUNDING	

LNA OPTION

LNA GAIN:	40 dB (-A4), 20 dB (-A2), 33 dB (-A)
LNA NOISE FIGURE:	< 2.9 dB
LNA P1dB Out:	+13 dBm
LNA DC POWER:	(2.5-24) Volts @ < 39 mA
FILTER REJECTION:	9dB @ 1609 MHz, 21 dB @ 1626 MHz, 38dB @ 1660 MHz
POWER HANDLING:	200 Watts CW (WITHOUT LNA), 1 Watt CW (WITH LNA)

SIZE: DIAMETER: 5.0 in. [127 mm], 3.5 in [89 mm] without Ground Plane
HEIGHT: 0.947 in. [24 mm]

WEIGHT: 14 oz. (397 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL WITH NICKEL PLATED BASE

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

CONNECTOR: TNC FEMALE CONNECTOR (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 SEAL

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

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	TRM NO
4	MOUNTING SCREWS: 10-32, 3/4"		MS24693C274	-	5
1	EPDM GASKET (Item 541a)		3G15P1001-3G-S	-	4
1	5" DIA. GROUND PLANE (Item 551)		12G1215P001-B6 Rev A	-	3
1	PIPE MOUNT (Item 479)		MTR-1-1.25 Rev D	-	2
1	ANTENNA ONLY WITHOUT MOUNT/GROUND PLANE		3GO15A4F-XT-1	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
 FRACTIONS: DECIMALS: ANGLES: ± 1/64: ± .015: ± 1'

ANTCOM CORP. TORRANCE, CALIFORNIA

Active L1 GPS/OmniStar (L-Band) Pipe Mount Antenna

3CVE1 53GO15A4X-MTR-1

SCALE 1/1 SHEET 1 OF 1