



FAA Approved Facility

# New G3 + BEACON (IALA) Antenna, P/N: PyramidBeacon-G3R-AN1-HF

For Marine, Survey, Drilling, Oil Rig, Exploration, Construction, and Ground Applications  
With Ruggedized Teflon Enclosure and 316 Stainless Steel Mount for Weather Proof/Corrosion Resistance



Antenna Mounts: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>

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**TOP VIEW**

6.427 [163.25] SQ.

**BOTTOM VIEW**

6.427 [163.25] SQ.

1.039 [26.39]

04.073 [103.47]

316 STAINLESS STEEL MOUNT

RUGGEDIZED TEFLON ENCLOSURE

**SIDE VIEW**

5.566 [141.38]

.823 [20.90]

6.427 [163.25]

5/8-11 UNC .673 DEEP (316 STAINLESS STEEL MOUNT)

N FEMALE CONNECTOR

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**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED

**SPECIFICATIONS**

	L1 GPS/SBAS	E1, E2 Galileo	L1 IRNSS	L1 GLONASS	BEACON (IALA)
<b>ELECTRICAL:</b>	OmniStar, L6 Galileo, L-Band, B1 Compass				
<b>FREQUENCY:</b>	(1525 - 1560) MHz	(1575 ± 17) MHz	(1598 - 1606) MHz	(1598 - 1606) MHz	(283.5 - 325) KHz
<b>RADIATION PATTERN:</b>	HEMISPHERICAL				
<b>POLARIZATION:</b>	RHCP	RHCP	RHCP	RHCP	RHCP
<b>VSWR:</b>	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1
<b>IMPEDANCE:</b>	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
<b>ANTENNA GAIN (dBi):</b>	Free Space	4 ft G.P.	Free Space	4 ft G.P.	Free Space
@ 90° (ZENITH):	+2.5	+1.6	+3.7	+1.5	+3.0
@ 10° Elevation:	-4.7	-2.4	-3.5	-3.5	-4.5
@ 20° Elevation:	-3.8	+0.7	-2.6	-0.9	-3.3
@ 30° Elevation:	-2.1	+2.3	-0.9	+0.3	-1.5
@ 60 - 90° Elevation:	> +1.0	> +2.1	> +2.3	> 0	> +1.8
<b>BEAM WIDTH (3dB):</b>	90 Deg.	140 Deg.	85 Deg.	140 Deg.	85 Deg.
<b>AXIAL RATIO:</b>	1.0 dB				
<b>LIGHTNING PROTECTION:</b>	INPUT: DC GROUNDING; OUTPUT: EN61000-4-5 Level 4				
<b>LNA:</b>	35 dB Gain	35 dB Gain	35 dB Gain	35 dB Gain	30 dB Gain
<b>LNA NOISE FIGURE:</b>	2.8 dB	2.8 dB	2.8 dB	2.8 dB	2.8 dB
<b>LNA P1dB Out:</b>	+13 dBm	+13 dBm	+13 dBm	+13 dBm	+13 dBm
<b>LNA DC POWER:</b>	(±2.8 to ±24 V) <60 mA				
<b>FRONT END FILTER REJECTION:</b>	(1625 - 1660) MHz <-34 dB				
<b>POWER HANDLING:</b>	Front End Limiter, 4 Watt CW, +50dBm Microsec Pulse Input				

**MECHANICAL:**

**SIZE:** 6.43 in SQ. [163.2mm SQ.]  
HEIGHT: 5.57 in [141.4mm]

**WEIGHT:** 13.6oz. (385.5 g)

**MATERIAL:** MOUNT: 316 STAINLESS STEEL  
RADOME/ ENCLOSURE: TEFLON, CORROSION RESISTANCE, SKYDROL RESISTANCE AND FIRE RETARDANT

**CONNECTOR:** N FEMALE  
(OPTION: TNC, SMA, QMA)

**ENVIRONMENTAL:**

**TEMPERATURE:** -67 °F TO +185 °F [-55 °C TO +85 °C]

**ENCLOSURE RATING:** IP69K

**HERMETICALLY SEALED**

**SHOCK AND VIBRATION:** EP455

**FEDERAL & MILITARY SPECIFICATIONS:**

BS IEC 60945, 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

**UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES**

FREQUENCY:	POLARIZATION:	LNA:	CONNECTOR:	COLOR:
L1L2: 1215 MHz	R: RHCP	P: WITHOUT LNA	S: SMA; Q: QMA	-1: TEFLON WHITE
L-BAND: 1525 - 1560 MHz	L: LHCP	A2: WITH LNA (22 dB)	T: TNC	
G3/L1 GLONASS/BAND		A: WITH LNA (33 dB)	N: N	
G5/L12 GLONASS/L-BAND/L5		A1: WITH LNA (13 dB)		
G6: GNSS				
G6S: GNSS/S-BAND				

**PARTS LIST**

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	REV NO

**ANTCOM CORP.** TORRANCE CALIFORNIA

**G3/ BEACON ANTENNA**

SCALE 1/1 SHEET 1 OF 1

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

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