



ISO 9001:2008/FAA Approved Facility

Active L1 / Passive Iridium Antenna for DeepSea Applications

P/N: S5GIR1516RR-AP-XDGO2-UU (DGO); P/N: S5GIR1516RR-AP-XX2-UU (Other Con.)
 P/N: S5GIR1216RR-AP-XDGO2-UU (L1/L2,DGO); P/N: S5GIR1216RR-AP-XX2-UU (L1/L2,Other Con.)

Other Frequencies and Connectors are Available. Depth Rate = 10 Km

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



ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501, USA . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . <http://www.antcom.com>

4X ϕ .201 [Ø5.11] THRU
 $\sqrt{\phi}$.390 [9.91] X 100°

R2.290 [R58.17]

5.106 [129.69]

2.280 [57.91]

2.995 [76.07]
 For DGO Connector
 .960 [24.38]
 For Other Connectors

2.698 [68.53]

2.100 [53.34]

.70 [17.78]

DGO CONNECTOR

GPS

IR

2X 1.600 [40.64]

2X CLEARANCE DIA. .866

2X 1.374 [34.90]

4X 2.119 [53.81]

SPECIFICATIONS

ELECTRICAL:

	GPS	IRIDIUM
FREQUENCY:	L1: (1575.42 ±13)	(1610.0 - 1626.5) MHz
RADIATION PATTERN:	HEMISPHERICAL	HEMISPHERICAL
POLARIZATION:	RHCP	RHCP
VSWR:	< 1.5:1	< 2.0:1
GAIN (dB):	F.S.	4 ft G.P
@ 90° (Zenith):	+4.6	+4.9
@ 10° Elevation:	-2.5	-1.8
@ 20° Elevation:	-1.1	+1.5
@ 30° Elevation:	+0.5	+2.4
@ 60° to 90° Elevation:	> 3.6	>+3.3
BEAM WIDTH (3dB):	103°	146°
AXIAL RATIO @ Zenith:	2 dB	2 dB
POWER HANDLING:	1 Watt	30 W
LIGHTNING PROTECTION:	DC GROUNDING	DC GROUNDING
FILTER (REJ. @1616 MHz):	> 60 dB	
LNA GAIN:	(33.0+/-1.0) dB, 20dB (-A2- Option)	N/A
LNA P 1dB Out:	+16 dBm	N/A
LNA NOISE FIGURE:	2.8 dB (Filter loss is Included)	N/A
VOLTAGE/CURRENT:	(+2.8 TO +28) Volts DC / (30 TO 50) mA	N/A

MECHANICAL:

SIZE: WIDTH: 2.28 in. [58 mm], LENGTH: 5.11 in. [130 mm], HEIGHT: 2.995 in. [76.07 mm] FOR DGO CONNECTOR HEIGHT: .960 in. [24.38 mm] FOR OTHER CONNECTORS

WEIGHT: <2.26 lbs. (1.03 Kg)

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

COLOR: LUSTERLESS GRAY #36320 PER FED-STD-595B GLOSS WHITE #17925 PER FED-STD-595B OLIVE DRAB GREEN #34031 PER FED-STD-595B LUSTERLESS BLACK #37038 PER FED-STD-595B

MATERIAL: 6061-T6 ALUMINUM ALLOY BASE THERMOSET PLASTIC RADOME, UV, ABRASION AND SKYDROL RESISTANCE

CONNECTOR: DGO FEMALE CONNECTORS (OPTIONAL: SMA, N, BNC, TNC)

ENVIRONMENTAL:

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

ALTITUDE: 70,000 ft.

VIBRATION: 10 G's

LEAKAGE: HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

DO-160D, MIL-C-5541, MIL-E-5400, MIL-I-45208A, AND MIL-STD-810

CONFIGURATION:	FREQ. BAND (MHz):	LNA:	FEMALE CONNECTOR:	COLOR:
15: L1 (1575)	08: 824-894	A: WITH LNA	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
5G: (5.0x2.2)in Rect.	09: 878-960	P: WITHOUT LNA	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
G3: L1 GPS/L1 Glonass/Omnistar	18: 1710-1880		N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
19: 1850-1990			T: TNC; TB: TNC- Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
3B: BLADE	G5: L5/L12 GPS/L1L2 Glonass/Omnistar		B: BNC Female	-5: TAN #S 23446 or 33446, FED-STD-595
	16: 1610 - 1626		DGO: DGO	UU: Gray Color Teflon Coating
	23: 2200 - 2400			
	25: 2400 - 2500			

P/N: S5GIR1516RR-AP-XDGO2-UU

QUANTITY REQD	DESCRIPTION	PART NO	MATERIAL	REV
4	10-32 SCREW, 3.5" L (Item 584-3.5)	91781A844	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	ORIGINAL DRAWN	S. HUYNH	DATE	Dec-13-02
FRACTIONS TO BE DECIMALS	ORIGINAL DESIGNED	S. HUYNH	DATE	Dec-15-02
TOLERANCE .5W PER ANSI Y14.5	UPDATED	S. HUYNH	DATE	Mar-18-14
REMOVE ALL SHARP BREAK EXTERNAL EDGES .005 TO .015	UPGRADE DRAWN	P. TRAN	DATE	Mar-18-14
FILED IN 200 TO 10 010	APPROVED	S. HUYNH	DATE	Mar-18-14
SCREW THREADS PER MIL-C-8879	DO NOT SCALE DRAWING			
DWG'S ON A COMMON 8.27x11.69				
MACHINED SURFACES 125				

ANTCOM CORP. TORRANCE, CALIFORNIA	
Active L1 GPS / Iridium ANTENNA	
REV: D	REV: B
3CVE1	S5GIR1516RR-AP-XDGO2-UU
SCALE 1/1	SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas