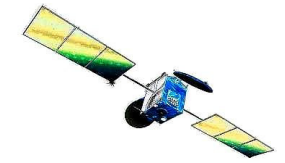
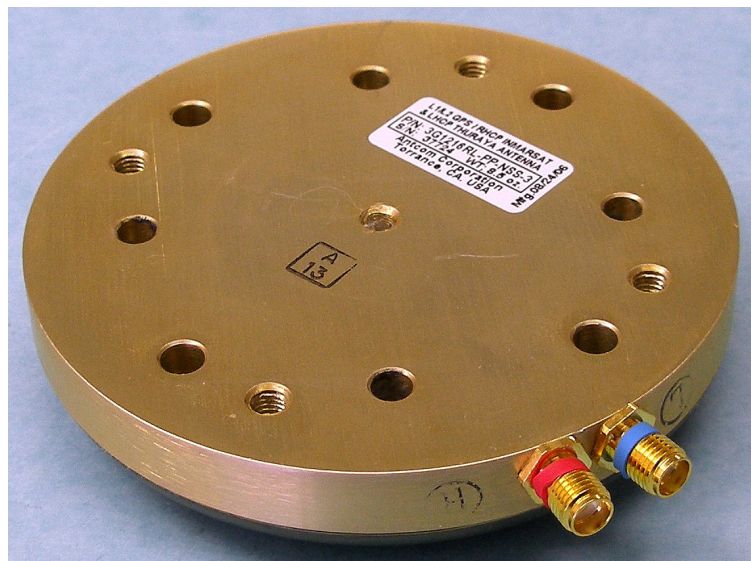
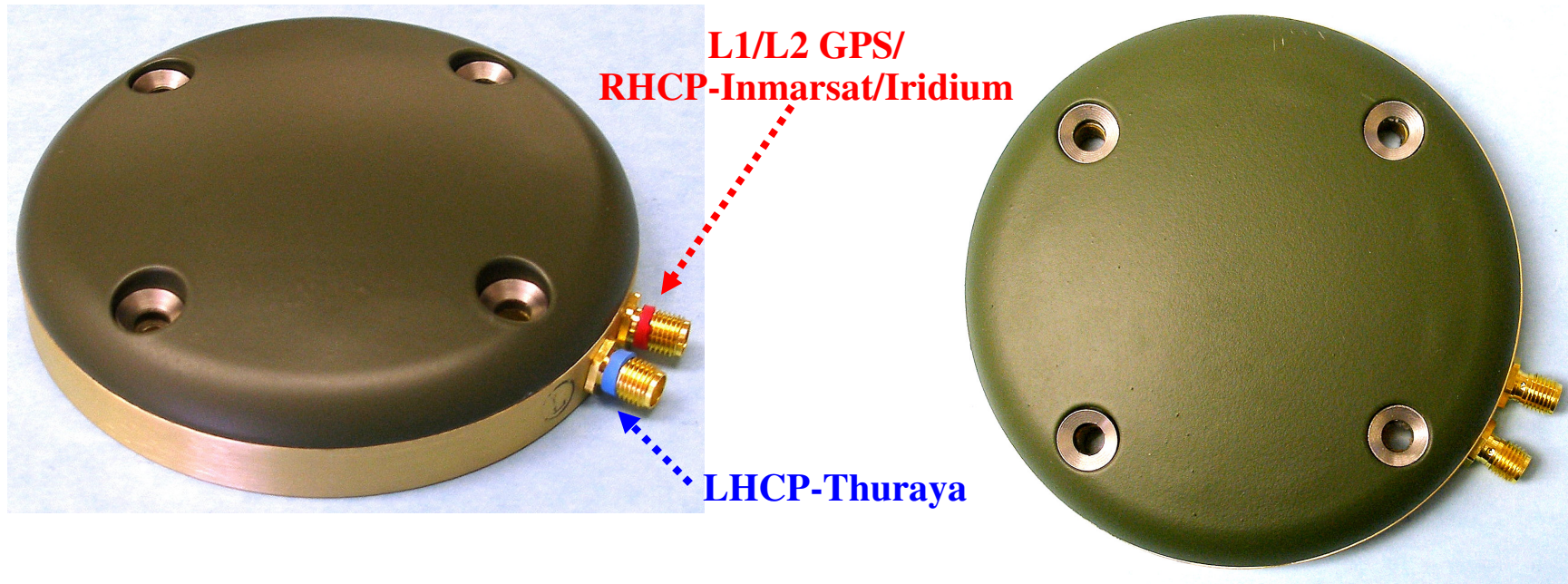


**2-Port L1/L2 GPS/RHCP-Inmarsat/Iridium & LHCP-Thuraya Antenna,  
P/N: 3G1216RL-PP-NSS-X,  
3.5" Diameter, Flat, Front/Back Mount, Side Connector Configuration**

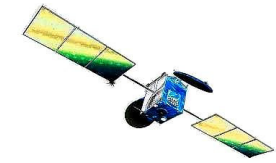


ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501 . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: [antennas@antcom.com](mailto:antennas@antcom.com) . <http://www.antcom.com>





# 2-Port L1/L2 GPS/RHCP-Inmarsat/Iridium & LHCP-Thuraya Antenna, P/N: 3G1216RL-PP-NSS-X, 3.5" Diameter, Flat, Front/Back Mount, Side Connector Configuration



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**MECHANICAL:**

SIZE: DIAMETER: 3.50 in. [ 88.90 mm]  
HEIGHT: 0.845 in. [21.46 mm]

WEIGHT: 5.21 oz. (148 g)

FINISH: SKYDROLRESISTANTPOLYURETHANEENAMEL  
BASE IRIDITE PER MIL-C-5441

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

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

**ENVIRONMENTAL:**

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

ALTITUDE: 70,000ft

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

QUANTITY REQD	DESCRIPTION	PART NO	FINISH	REV
4	MOUNTING SCREWS: 10-32, 3/4"	MS24693C274	-	5
1	ADHESIVE GASKET	12345G-3M-3G	-	1

**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED

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**REVISIONS**

ZONE	REV	DESCRIPTION	DATE	APPROVED

**UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES**

FRACTIONS: TOLERANCES ARE ANGLES: ± 1/64 THE DIM ± 1°

TOLERANCE 5/16 PER ANS Y14.3

REMOVE ALL BURRS

BREAK EXTERNAL EDGES .005 TO .015

FINISH: .0025 TO .005

DATE: 08/27/06

DATE ON A COMMON: 2/2/08

MACHINED SURFACES

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE, CALIFORNIA

3.5" Dia., Side Con. L1/L2 GPS/RHCP-INMARSAT/IRIDIUM & LHCP-L-BAND ANTENNA

APPROVED: S. HUYNH April-13-06

DWG FILE NO: D:\3C\VE1\3G1216RL-PP-NSS-3

SCALE: 1/1

SHEET 1 OF 1

**SPECIFICATIONS**

**ELECTRICAL:**

FREQUENCY(MHz):	L1/L2 GPS				Rx L-BAND	Tx L-BAND	IRIDIUM
	L1: (1575.42 ±12)	4 ft G.P.	L2: (1227.60 ±12)	4 ft G.P.	(1542.50 ±17.5)	(1642.50 ±17.5)	(1602-1626)
ANTENNA GAIN @ Fc (dBi):	Free Space	4 ft G.P.	Free Space	4 ft G.P.	Free Space	Free Space	Free Space
@ 90 ° (ZENITH):	+ 5.5	+ 4.5	+ 3.3	+ 4.9	+ 3.1	+ 3.4	+ 4.3
@ 10 ° Elevation:	- 1.2	- 1.4	- 3.8	- 3.6	- 3.7	- 3.1	- 2.2
@ 20 ° Elevation:	+ 0.3	+ 1.4	- 2.0	- 0.1	- 2.0	- 1.1	- 0.6
@ 30 ° Elevation:	+ 1.8	+ 2.2	- 0.5	- 1.8	- 1.3	0.0	+ 0.8
@ 60 - 90 ° Elevation:	> 4.8	> 3.8	> 2.7	> 3.0	> 2.0	> +2.6	> +3.5
BEAM WIDTH(3dB):	106 Deg.	130 Deg.	106 Deg.	75 Deg.	106 Deg.	106 Deg.	106 Deg.
POLARIZATION:	RHCP				RHCP/LHCP		RHCP
RADIATION PATTERN:	HEMISPHERICAL						
VSWR:	< 1.5:1						
IMPEDANCE:	50 ohms						
AXIAL RATIO:	2 dB						
LIGHTNING PROTECTION:	DC GROUNDING						
<b>LNA OPTION</b>							
LNA GAIN:	35 dB						
LNA NOISE FIGURE:	3.0 dB						
LNA P1dB Out:	+13 dBm						
LNA DC POWER:	2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<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)						

**MECHANICAL:**

SIZE: DIAMETER: 3.50 in. [ 88.90 mm]  
HEIGHT: 0.845 in. [21.46 mm]

WEIGHT: 5.21 oz. (148 g)

FINISH: SKYDROLRESISTANTPOLYURETHANEENAMEL  
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FINISH: .0025 TO .005

DATE: 08/27/06

DATE ON A COMMON: 2/2/08

MACHINED SURFACES

DO NOT SCALE DRAWING

**ANTCOM CORP.** TORRANCE, CALIFORNIA

3.5" Dia., Side Con. L1/L2 GPS/RHCP-INMARSAT/IRIDIUM & LHCP-L-BAND ANTENNA

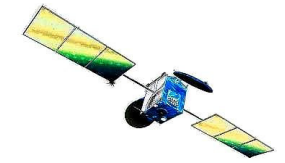
APPROVED: S. HUYNH April-13-06

DWG FILE NO: D:\3C\VE1\3G1216RL-PP-NSS-3

SCALE: 1/1

SHEET 1 OF 1

**2-Ports, L1/L2 GPS/RHCP-Inmarsat/Iridium & LHCP-Thuraya Antenna,  
P/N: 3G1216RL-XSS-X,  
3.5" Diameter, Flat, Back Mount, Bottom Connector Configuration**



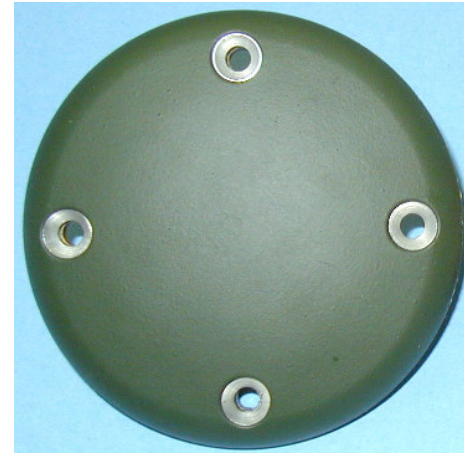
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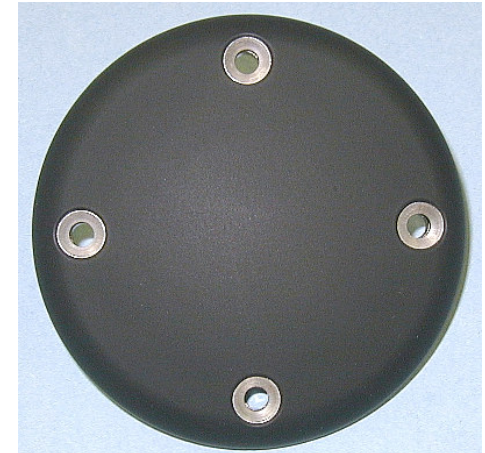
**P/N: 3G1216RL-P-XSS-1  
(White)**



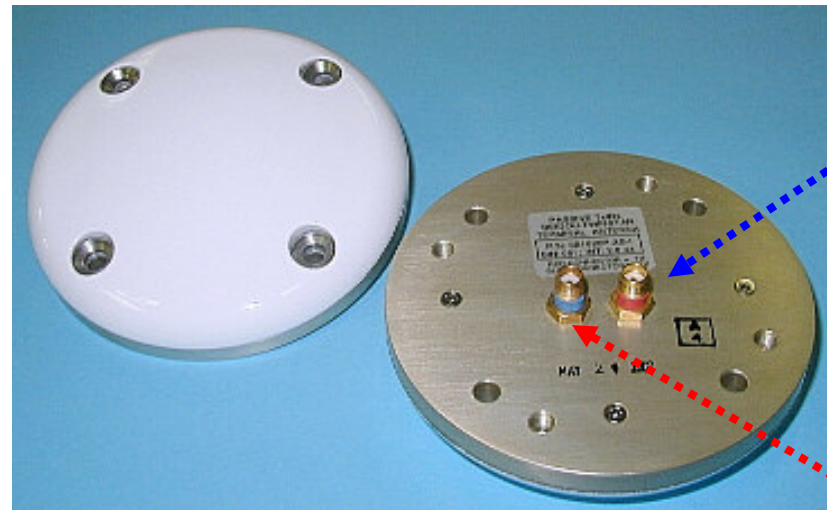
**P/N: 3G1216RL-P-XSS-2  
(Gray)**



**P/N: 3G1216RL-P-XSS-3  
(Green)**



**P/N: 3G1216RL-P-XSS-4  
(Black)**



**LHCP-Thuraya**

**L1/L2 GPS/  
RHCP-Inmarsat/Iridium**

**P/N: 3G1216RL-P-XSS-1 (3.5" Dia. White with SMA Connector)**

- **Hermetically Sealed, Designed for Harsh Environment Applications.**
- **Connector is Available in SMA, MCX, MMCX, TNC, TNC-B, N, or N-Bulkhead (See Drawing)**
- **Other Configurations are also available**