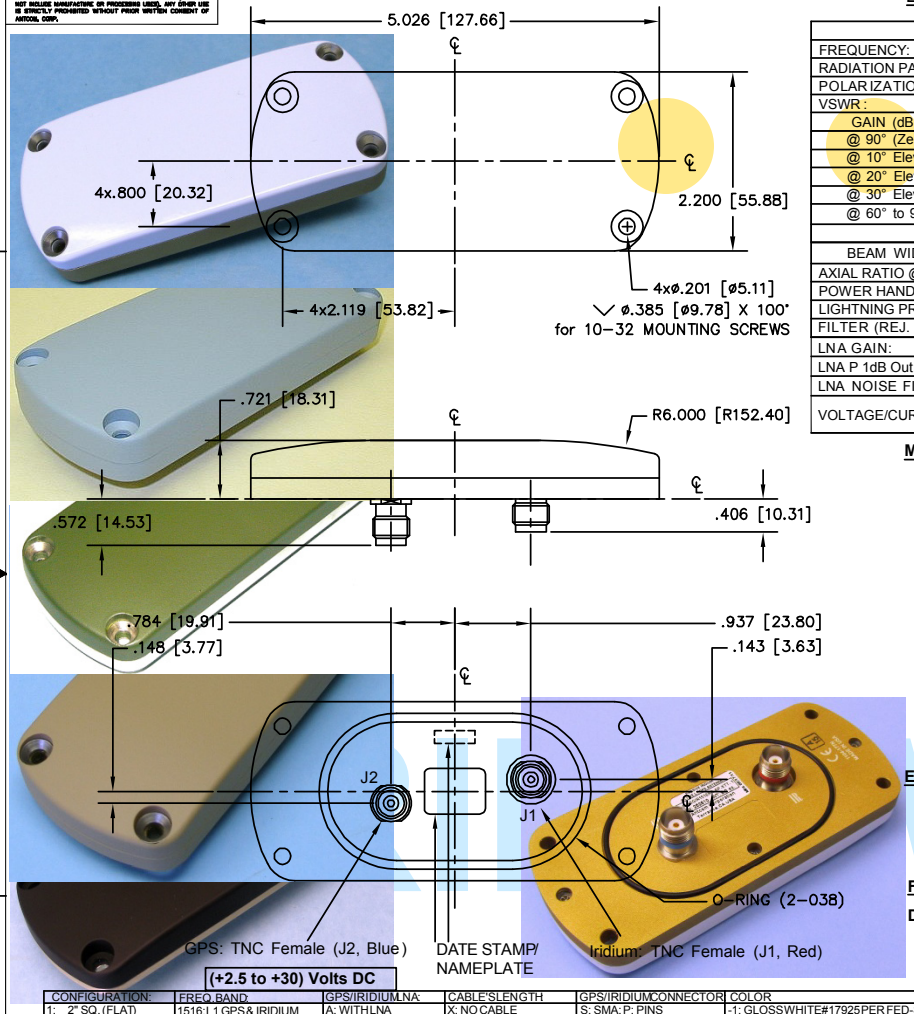
ANTCOM CORPORATION . 367 Van Ness Way, Suite 602 . Torrance, CA 90501, USA . Tel: (310) 782-1076 . Fax: (310) 782-1086 . E-mail: antennas@antcom.com . http://www.antcom.com

NOTICE OF PROPRIETARY RIGHTS
THIS DOCUMENT CONTAINS CONFIDENTIAL TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY (AND DOES NOT INCLUDE MANUFACTURE OR PROCESSING USES), ANY OTHER USE IS STRICTLY PROHIBITED WITHOUT PRIOR WRITTEN CONSENT OF ANTCOM, CORP.



SPECIFICATIONS

ELECTRICAL:

	IRIDIUM		GPS	
FREQUENCY:	(1610.0 - 1626.5) MHz		L1: (1575.42 ±13)	
RADIATION PATTERN:	HEMISPHERICAL		HEMISPHERICAL	
POLARIZATION:	RHCP		RHCP	
VSWR:	< 1.5: 1		< 1.5: 1	
GAIN (dB):	4 ft G.P.	Free Space	F.S.	4 ft G.P
@ 90° (Zenith):	+4.9	+5.0	+ 4.6	+ 2.9
@ 10° Elevation:	-1.0	-2.5	- 2.5	- 1.8
@ 20° Elevation:	+1.5	-0.5	- 1.1	+ 0.7
@ 30° Elevation:	+2.4	+1.0	+ 0.5	+ 1.7
@ 60° to 90°Elevation:	>+3.3	>+2.7	> 3.6	> 2.1
BEAM WIDTH (3dB):	129 °	98 °-106 °	103 °	146 °
AXIAL RATIO @ Zenith:	2 dB		2 dB	
POWER HANDLING:	30 W		1 Watt	
LIGHTNING PROTECTION:	DC GROUNDING		DC GROUNDING	
FILTER (REJ. @1616 MHz):			> 60 dB	
LNA GAIN:	N/A		(33.0+/-1.0) dB, 20dB (-A2- Option)	
LNA P 1dB Out:	N/A		+16 dBm	
LNA NOISE FIGURE:	N/A		2.8 dB (Filter loss is Included)	
VOLTAGE/CURRENT:	N/A		(+2.8 TO +28) Volts DC / (30 TO 50) mA	

MECHANICAL:

SIZE: WIDTH: 2.20 in. [55.88 mm], LENGTH: 5.026 in [127.66 mm], HEIGHT: 0.721 in. [18.31 mm]

WEIGHT: 8.3 oz (235 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL, AND NICKEL PLATING

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

CONNECTOR: IRIDIUM: TNC FEMALE (J1, Red); GPS: TNC FEMALE (J2, Blue)

MOUNTING: FLAT FIXED MOUNT; O-RING & 4 x 10-32 MOUNTING SCREWS PROVIDED

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, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455

CONFIGURATION:	FREQ BAND:	GPS/IRIDIUM LNA:	CABLE'S LENGTH	GPS/IRIDIUM CONNECTOR	COLOR
1: 2" SQ. (FLAT)	1516: L1 GPS & IRIDIUM	A: WITH LNA	X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
1.9: 1.9" SQ. (FLAT)	1216: L1/L2 GPS	P: WITHOUT LNA	M: WITH MAG. MOUNT	M: MCX; MM: MMCX	-2: LUSTER LESS GRAY #36320 PER FED-STD-595B
2: 2.6" DIA. (FLAT)	GPS & IRIDIUM		#: CABLE LENGTH (IN)	N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
3: 3.5" DIA. (FLAT)		A2: WITH 20dB LNA	R: RIGHT ANGLE CON.	T: TNC; TB: TNC- Bulkhead	-4: LUSTER LESS BLACK #37038 PER FED-STD-595B
4: MINI ARINC (FLAT)					
53: (HELIX ROD)					
5B: (HELIX BLADE)					
3D: (HELIX HANDHELD)					

P/N: S5GIR1516RR-AP-XTT-X

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

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED

QUANTITY REQD	DESCRIPTION	PART NO	MATERIAL	FINISH	ITEM NO
	PARTS LIST				
4	MOUNTING SCREW: (10-32, 1")	MS24693C276	-	-	5
					3
1	O-RING	2-038-N756-75	-	-	1

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS ± 1/64, DECIMALS .XX ±.030, .XXX ±.010, ANGLES ± 1°. TOLERANCE SYM PER ANSI Y14.5. REMOVE ALL BURRS. BREAK EXTERNAL EDGES .005 TO .016. FILLETS R .005 TO R .030. SCREW THREADS PER MIL-S-8879. DATE ON A COMMON R OF .005. MACHINED SURFACES 125. DO NOT SCALE DRAWING.

DRAWN
CHECKED
ENGINEER
APPROVED S. HUYNH DEC-13-02
CAD FILE NO

ANTCOM CORP. TORRANCE, CALIFORNIA

FLAT FIXED MOUNT ACTIVE IRIDIUM/GPS ANTENNA

SIZE	CAGE CD	DRAWING NO	REV
D	3CVE1	S5GIR1516RR-AP-XTT-1	-

SCALE 1/1 SHEET 1 OF 1