

Comant CI 490-501-1

**COMDAT® SINGLE CHANNEL IRIDIUM™
SATCOM / GPS NON-WAAS NAVIGATION**

CI 490-501-1 ANTENNA

Comant's four through hole rectangle style mount (ARINC 743A footprint) Iridium antenna with TNC port and GPS non WAAS with BNC port. Iridium C159d certified primary designed for airborne bi-directional NGSS (Next Generation Satellite Systems) communication/data function between aircraft and the Iridium satellite constellation. A secondary non-flight critical function of the antenna is to provide a non-navigational GPS feature. It receives data from the GNSS (Global Navigation Satellite System) constellation to report the geographical location of aircraft around the globe. Suitable for top mounting for both light and heavy fixed wing single engine / multi-engine, helicopter and business jet aircraft.

APPLICATIONS

Light Fixed Wing Single Engine
Light Fixed Wing Multi-Engine
Heavy Fixed Wing Single Engine
Heavy Fixed Wing Multi-Engine
Helicopter
Business Jets
Warranty: 1 year
Always consult your installation shop for best application. See full disclaimer (Page 7) for more information.

FREQUENCIES COVERED

1616.0 - 1626.5 MHz (L Band - Iridium)
1575.42 MHz (L1 Band - GPS)
Nominal 27 dB Gain

SPECIFICATIONS

RF Characteristics

Iridium	TX / RX 1616.0-1626.5 MHz
VSWR	1.5:1 Max
Polarization	RHCP
Radiation Pattern	Hemispherical
Impedance	RF 50 Ohms
Power Handling	TX 6.5 Watts Average
Lightning Protection	DC Grounded
Gain	+4 dBic @ Zenith

Mechanical

Weight	8.5 oz.
Finish	Glossy White
Connector	TNC (Female)

Federal Specifications

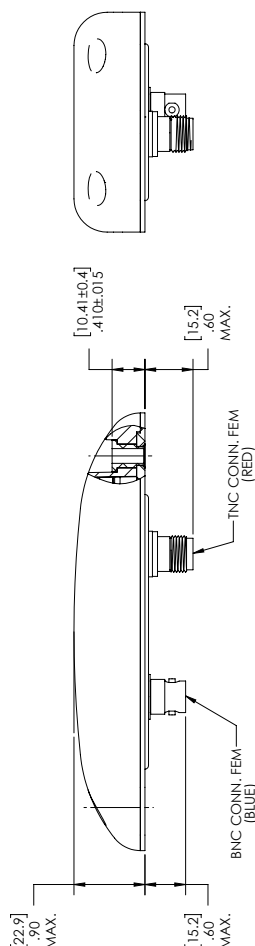
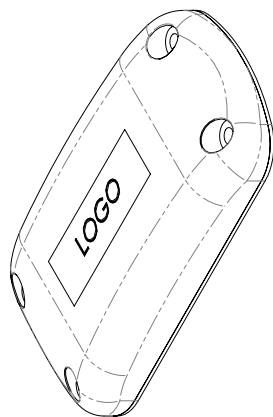
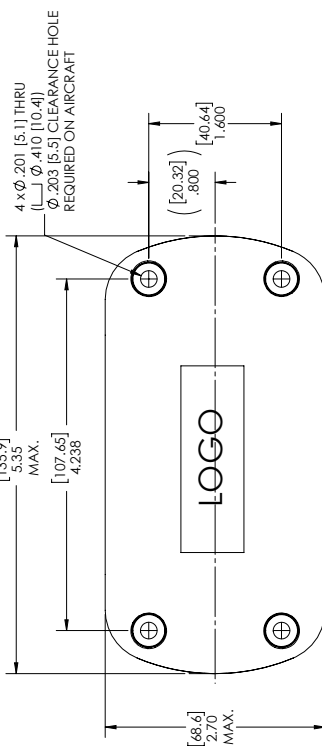
FAA	TSO C159d
RTCA	Environmental DO-160G

GPS Preamplifier Characteristics

Frequency	1575.42 MHz +/- 3 MHz
VSWR	1.5:1 Max
Polarization	RHCP
Radiation Pattern	Hemispherical
Impedance	50 Ohms
Gain	@ 1575.42 MHz 26.5-30.1 dB
DC Voltage	2.8-24 Volts
DC Current	Min/Max 30mA Min / 50mA Max
Noise	Figure 2.5 dB Max
Selectivity	-50 dB Min @ Satcom Frequency



REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
A	RELEASED DRAWING	RM 12/6/19	12/6/19
B	REF ECN 20-095	RM 2/11/21	DH 2/11/21



DASH NO.	ASSY DWG.	LOGO	PLATE IDENT
BSC	D49062	B49059-1	B49063-1
-1	D49071	B00979-1	B49072-1

INSTALLATION DRAWING

UNLESS OTHERWISE SPECIFIED		CONTRACT NO.		Comant Industries, inc.	
DIMENSIONS ARE IN INCHES					
TOLERANCES ON DECIMALS					
XX ± .03 XXX ± .010					
FRACTIONS 1/2" ± 1/32 ANGLES ± 1°		APPROVALS		TITLE	
MACHINE FINISH 125 ✓ PER ANSI-B46.1		DRAWN	R. MERCADO	12/6/19	
REMOVE BURRS AND		CHECK	A. KRESS	12/6/19	
SHARP EDGES .015 MAX		ENGR	D. HOLLOWAY	12/6/19	
MEET DIMENSIONS BEFORE PLATING					
DIMENSIONS ARE PER ASME Y14.5M					
MATERIAL :		MFG	J. JONES	12/6/19	
		QC	R. PRICE	12/6/19	
DO NOT SCALE	DRAWING	SCALE: 1:1		CAD FILE: --	SHEET: 1 OF 2
		CODE IDENT		DWG NO.	REV
		C 51351		CI 490-501-*	B

