Comant CI 1085 Series

Dual Port - Multi-Function VHF/UHF Antenna

The most important thing we build is trust

CI 1085-20-L

Our sleek new VHF/UHF is a whole lot more than meets the eye. This single antenna in one radome holds no less than 5 different TSO's from the FAA.

The CI 1085 uses a popular footprint that contains ATCRBS Mode S Transponder/DME//UAT ADS-B and VHF communications.

No one has done this before. On today's crowded airframes we expect this design will be a welcome relief to installers everywhere.

And reduction of antenna count on aircraft will be welcomed by everyone.

Applications

Fixed wing turbine powered aircraft. Some light jets. Consult your FBO or installation shop for best application information.

Frequencies Covered

116-156 MHz VHF Comm
960-1220 MHz DME
978 MHz UAT/ADS-B
1030-1090 MHz ATCRBS Transponder/Mode S

Specifications

VHF Specifications

Frequency MHz	116-156 / 960-1220 / 1030-1090 / 978			
VSWR Maximum	3.0:1	2.0:1	1.5:1	1.7:1
Polarization	Vertical			
Radiation Pattern	Omni Directional			
Impedence	50 Ohms			
Power Rating	VHF 40 Watts / L Band 1 KW Peak			

Mechanical / Environmental

RTCA	DO-160G
FAA TSO (incomplete systems)	C74d ATCRBS/Transponder C66c DME C112e ATCRBS/Mode S Transponder C154c UAT/ADS-B C169a VHF Comm
Connector	J1 BNC (F) 116-156 MHz J2 TNC (F) 960-1220 /1030-1090 MHz
Finish	Polyurethane white paint
Weight	2.25 LBS. Maximum
Installation Instr.	A108529 Supplied with Antenna

WARNING: Use factory supplied drawings and specifications for installation. Refer to FAA AC 43.13-2B for installation guidelines.

Order at:
Tel: 714-870-2420 Fax: 714-870-6294
Email: comantorders@cobham.com

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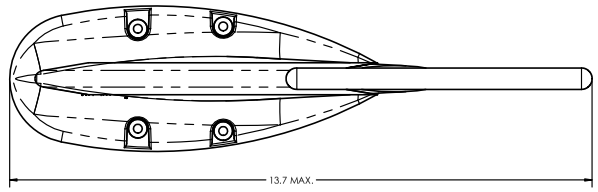
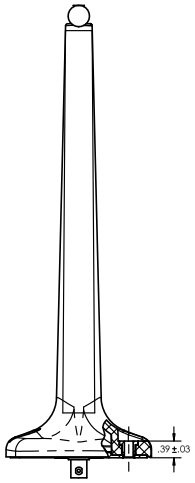
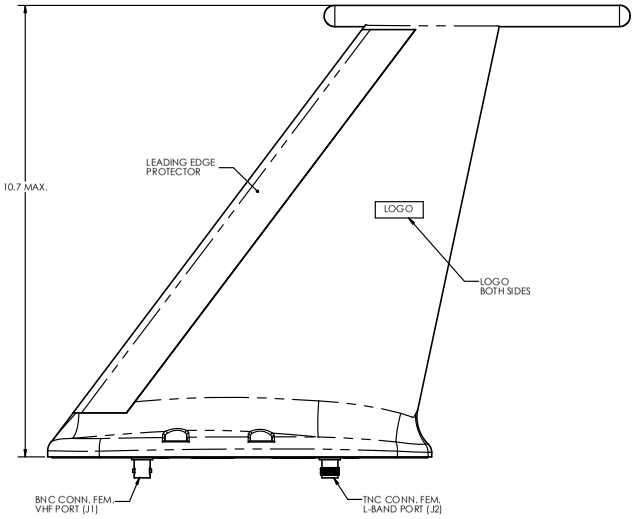
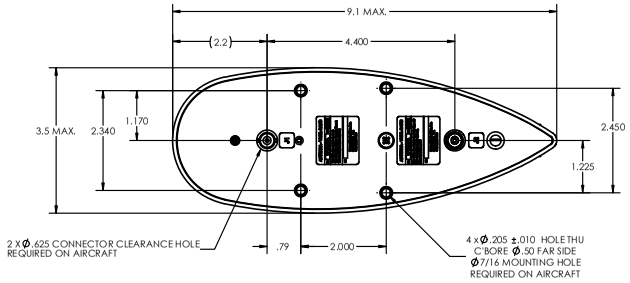
REVISIONS				
LTR	DESCRIPTION		DATE	APPROVAL
A	RELEASED DRAWING	MN	9/17/13	DH 09/17/13
B	REF ECN 14-034	MN	2/05/14	DH 2/05/14









ASSY DWG. D108501

NOTES: UNLESS OTHERWISE SPECIFIED

1. RF CHARACTERISTICS

FREQUENCY	116 MHz TO 156 MHz	960 MHz TO 1220 MHz	1030 MHz TO 1090 MHz	978 MHz
VSWR	3.0:1 MAX @	2.0:1 MAX	1.5:1 MAX	1.7:1 MAX
RETURN LOSS	-6.02 dB MAX.	-9.54dB MAX.	-13.98 dB MAX.	-11.73 dB
ISOLATION	30 dB			
POLARIZATION	VERTICAL			
RADIATION PATTERN	ESSENTIALLY OMNI -DIRECTIONAL			
IMPEDANCE	50 OHMS			
RF POWER	VHF: 40 WATTS, L-BAND: 1 KW PEAK			

2. CONNECTORS:
   J1: BNC (F) 116-156 MHz
   J2: TNC (F) 960-1220 MHz, 1030-1090 MHz, 978 MHz
3. WEIGHT: 2.25 LBS. MAX.
4. FINISH: POLYURETHANE WHITE PAINT.
5. MOUNTING SURFACE, CONNECTOR AND MOUNTING HOLES ARE FREE OF PAINT.
6. TSO-C66c (INCOMPLETE SYSTEM), 960-1215 MHz
   TSO-C74d (INCOMPLETE SYSTEM), CLASS A, 1030-1090 MHz
   TSO-C112e (INCOMPLETE SYSTEM), 1030-1090 MHz
   TSO-C154c (INCOMPLETE SYSTEM), CLASS A3, 978 MHz
   TSO-C169a (INCOMPLETE SYSTEM), CLASS C, D, E, 3, 4, 5, 6, 118-137 MHz
   RTCA/DO-160G ENV. CAT.: [F2X]ACE[R(C,C1)H(R)]XSFSXSXXXX[XXX][XX]X[XXXXXX][XX]AXX
7. A108529 INSTALLATION INSTRUCTIONS SUPPLIED WITH ANTENNA.

INSTALLATION DRAWING

–	ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL / SPECIFICATIONS
QTY REQD		PARTS LIST		

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON DECIMALS
.X ± .03 .XX ± .01 .XXX ± .005
FRACTIONS ± 1/32 ANGLES ± 1°
MACHINE FINISH 125√ PER ANSI- B46.1
REMOVE BURRS AND SHARP EDGES .015 MAX
MEET DIMENSIONS BEFORE PLATING
DIMENSIONS ARE PER ASME Y14.5M
MATERIAL : –
DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS		DATE
DRAWN	M. NGUYEN	9/17/13
CHECK	D. HOLLOWAY	9/17/13
ENGR	D. HOLLOWAY	9/17/13
MFG	J. JONES	9/17/13
QC	S. ADAMS	9/17/13

Comant Industries, Inc.

ANTENNA-VHF/L-BAND

DWG SIZE	CODE IDENT	DWG. NO.	REV.
D	51351	CI 1085-20-L	B

SCALE: 1:1 CAD FILE: -- SHEET : 1 OF 1

DWG NO CI 1085-20-L REV B