



FAA Approved Facility

The COMBO BLADE New High Performance Arinc 743 Avionic Blade GNSS+S-Band+COM Antenna P/N: G8SAnt-743BA4TT1-COM Rev A

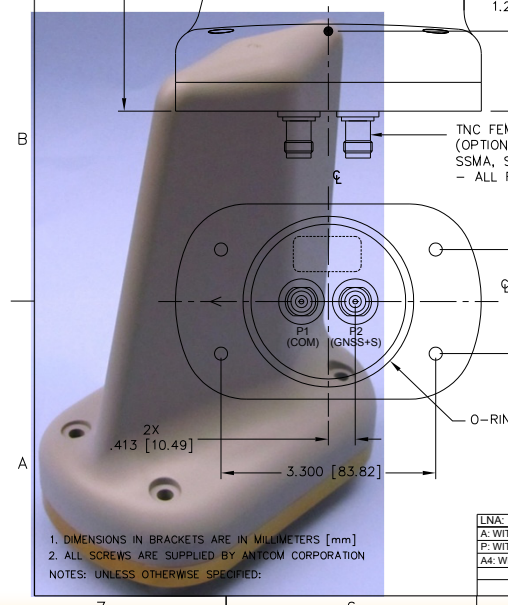
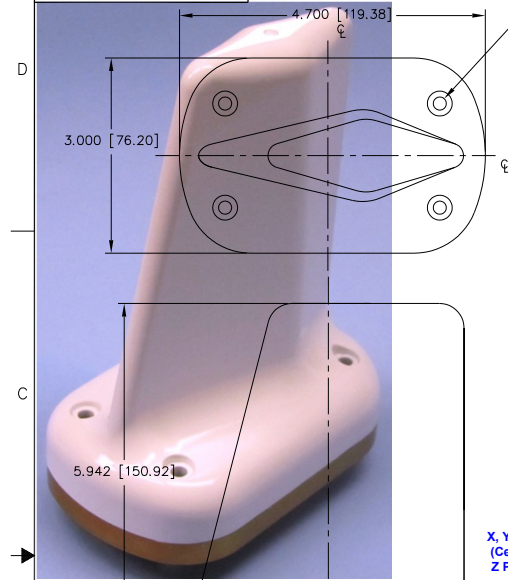
Antenna Mounts/Adapters: <http://www.antcom.com/documents/catalogs/PeripheralAntennaProducts2.pdf>



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“-HF” for High Iridium/Inmarsat/Thuraya-Rejection Front End Filter Option: $-22\text{dB}@1616\text{MHz}$, $-34\text{dB}@1625\text{--}1660\text{MHz}$,
“-HFO” for Additional Omnistar Rejection: $-27\text{dB}@1545\text{MHz}$

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X, Y Phase Center = 0.0
(Center of Antenna)
Z Phase Center = 1.228 [31.20]

TNC FEMALE CONNECTOR
(OPTION: SMA, QMA, SMB, SMC, SSMA, SSB, SSC, MCX, MMCX) - ALL FEMALE CONNECTORS -

SPECIFICATIONS

ZONE		REV	DESCRIPTION	DATE	APPROVED

ELECTRICAL:

	L5 GPS E5, E5a, E5b Galileo L5 IRNSS	L2 GPS B2 Compass	L2 GLONASS E6 Galileo B3 Compass	OmniSTAR / L-Band L6 Galileo B1 Compass	L1 GPS E1, E2 Galileo L1 IRNSS	L1 GLONASS	S-Band	(COM) QUAD-BAND (SSMPCS) L-Band Locater/W-FSC-Band
FREQUENCY:	1176.45 ± 12 MHz 1164.45 - 1219.14 MHz 1176.45 ± 12 MHz	1227.60 ± 12 MHz 1207.14 ± 10 MHz	1242 - 1252 MHz 1266.75 - 1290.75 MHz 1268.52 ± 10 MHz	1542.50 ± 14.0 MHz 1542.50 ± 5.0 MHz 1561.098 ± 10 MHz	1575.42 ± 15.0 MHz 1575.42 ± 17.0 MHz 1575.42 ± 12.0 MHz	1598 - 1609 MHz	2493 ± 12 MHz	824-960, 1710-1990 1600-1990 2300-2500, 4400-5900 (MHz)
RADIATION PATTERN:	HEMISPHERICAL							OMNI
POLARIZATION:	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP	RHCP	VERTICAL
VSWR:	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	< 2.0:1	(2.0-3.5):1
IMPEDANCE:	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms	50 ohms
ANTENNA GAIN (dBi):								(0-3.8) dBil
@ 90° Above Horizon (Top):	+ 3.4	+ 4.4	+ 4.6	+ 0.3	+ 2.1	+ 3.3	+ 4.1	
@ 15° Above Horizon:	- 6.1	- 5.6	- 5.7	- 4.3	- 3.5	- 3.1	- 3.5	
@ 20° Above Horizon:	- 4.6	- 4.0	- 3.9	- 2.9	- 2.2	- 1.9	- 2.1	
@ 25° Above Horizon:	- 3.0	- 2.3	- 2.1	- 1.5	- 0.9	- 0.6	- 1.4	
@ 30° Above Horizon:	- 2.3	- 1.5	- 1.3	- 1.2	- 0.5	- 0.2	- 0.7	
@ 70° Above Horizon:	+ 1.7	+ 3.8	+ 3.9	+ 1.1	+ 2.0	+ 2.5	+ 3.5	
BEAM WIDTH (3dB):	70 Deg.	80 Deg.	77 Deg.	127 Deg.	120 Deg.	109 Deg.	90 Deg.	OMNI
LIGHTNING PROTECTION:	DC GROUNDING							N/A
LNA GAIN:	42 dB	42 dB	42 dB	43 dB	43 dB	43 dB	43 dB	
LNA NOISE FIGURE (With Filter):	2.6 dB	2.6 dB	2.6 dB	2.9 dB	2.9 dB	2.9 dB	2.9 dB	
LNA P1dB Out:	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm	+10 dBm	
LNA DC POWER:	(3.3-24)V/-50mA							
POWER HANDLING:	3 Watt CW (With Limiter)							

MECHANICAL:

SIZE: 4.70 in. [119.4mm] X 3.00 in. [76.2 mm]
HEIGHT: 5.94 in [105.9mm]

WEIGHT: 16.1 oz. (457.6 g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL
BASE IRIDITE PER MIL-C-5541F CLASS 1A

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

CONNECTOR: TNC Female
(OPTION: SMA, QMA, SMB, SMC, SSMA, SSB, SSC, MCX, MMCX)

ENVIRONMENTAL:

TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C]
70,000 ft.

VIBRATION: > 30 G's
HERMETICALLY SEAL

FEDERAL & MILITARY SPECIFICATIONS:

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	ITEM NO.
4	Pan Head Mounting Screw: 10-32, 2.0"	M551958-71		2
1	O-Ring or Gasket; O-Ring Item 5511	2-142/N756-75		1

P/N: G8SAnt-743BA4TT1-COM

LNA:	CONNECTOR:	COLOR:
A: WITH LNA	S: SMA; Q:QMA; SMB; SMBR; B: BNC	-1: GLOSS WHITE #17925 PER FED-STD-595B
P: WITHOUT LNA	M: MCX; MM: MMCX; MMR: MMCX-R	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
A4: WITH LNA (40 dB)	N: N; NB: N-Bulkhead	-3: OLIVE DRAB GREEN #34094 PER FED-STD-595B
	T: TNC; TB: TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B
	SMC, SSMC, SSMB, SSMA	-5: DESERT TAN #33446 PER FED-STD-595B

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS ANGLES
± 1/64 ± .010 ± .1°
± .005 ± .005 ± .1°

TOLERANCE SURF PER ANSI Y14.5
REMOVE ALL SHARP BREAK EXTERNAL EDGES .005 TO .010
FILED TO .000 TO .010
SCREW THREADS PER MIL-S-8879
DAYS ON A COMMON S. OF 200

MACHINED SURFACES
DO NOT SCALE DRAWING

ANTCOM CORP. TOLERANCE CALIFORNIA

Arinc 743 Avionic Blade
GNSS + S-Band + COM ANTENNA

DATE: 30 Jun 2011
DRAWING NO: G8SAnt-743BA4TT1-COM
SCALE: 1/1 SHEET: 1 OF 1