



Active GPS & [Cellular (824-896), (890-960), (824-860), or GSM (1850-1990) MHz] Antennas

P/N: 4G0815VR-XT-X:

(3.4" x 2.2") Flat Mini Arinc, TNC Configuration



FAA Approved Facility

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

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SPECIFICATIONS

ZONE		REVISIONS		
REV	DESCRIPTION	DATE	APPROVED	
A	NEW ADDRESSIVE	7/30/04	S.H	

ELECTRICAL:

FREQUENCY:	L1: (1575.42±12) MHz	CELLULAR(824-896) MHz
RADIATION PATTERN:	HEMISPHERICAL	OMNI
POLARIZATION:	RHCP	VERTICAL
VSWR:	< 2.0:1	
IMPEDANCE:	50 ohms	
ANTENNA GAIN (dBic):	Free Space	16 in G.P.
	4 ft G.P.	
@ 90 ° (ZENITH):	+ 4.6	+ 0.3
@ 10 ° Elevation:	- 2.5	- 3.1
@ 20 ° Elevation:	- 1.1	- 1.1
@ 30 ° Elevation:	+ 0.5	+ 0.9
@ 60 - 90 ° Elevation:	> 3.6	+3.1+0.3
BEAM WIDTH (3dB):	103 Deg.	120 Deg.
	146 Deg.	
AXIAL RATIO:	2 dB	
LIGHTNING PROTECTION:	DC GROUNDING	
LNA GAIN:	33 dB	
LNA NOISE FIGURE:	2.2 dB	
LNA P1dB Out:	+13 dBm	
LNA DC POWER:	2.5V/20mA, 3V/20mA, 3.3V/20mA, (2.5-24)V/ <30mA	
REJECTION @ (-50/+50) MHz	-45 dB / -70 dB	
@ (-100/+100) MHz	< -65 dB	
POWER HANDLING:	1 Watt CW, Optional: 10 Watts 1 Microsec Pulse (-AL-)	

MECHANICAL:

SIZE: WIDTH: 2.20 in. [55.88 mm], LENGTH 3.40 in. [86.36 mm], HEIGHT: 0.71 in. [18.16 mm], 0.61" [15.49] (Optional for Passive)

WEIGHT: 5.15 oz. (146g)

FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDITE PER MIL-C-5441

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

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

ENVIRONMENTAL:

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

ALTITUDE: 70,000 ft.

VIBRATION: > 30 G's

LEAKAGE: HERMETICALLY SEAL

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

QUANTITY REQD	DESCRIPTION	PARTS LIST	PART NO	FINISH	ITER NO
4	MOUNTING SCREWS for -PL- ONLY: (10-32, 3/4")		MS24693C274	-	5
4	MOUNTING SCREW: (10-32, 1")		MS24693C276	-	4
					3
1	O-RING		2-031/N756-75	-	1

SIZE: 1. 2" SQ. 0815: (824-896) MHz & L1 GPS
1.9: 1.9" SQ. 0915: (890-960) MHz & L1 GPS
2: 2.6" DIA. 1915: (1850-1990) MHz & L1 GPS
3: 3.5" DIA.
4: MINI ARINC

FREQ. BAND:

SIZE	FREQ. BAND
1: 2" SQ.	0815: (824-896) MHz & L1 GPS
1.9: 1.9" SQ.	0915: (890-960) MHz & L1 GPS
2: 2.6" DIA.	1915: (1850-1990) MHz & L1 GPS
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4: MINI ARINC	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

FRACTIONS	DECIMALS	ANGLES
± 1/64	± .0005	± 1°

TOLERANCE SIN PER ANS Y14.3
REMOVE ALL BURRS
BREAK EXTERNAL EDGES .005 TO .015
FLATS IN .005 TO .010
SOFT SURFACES PER MIL-STD-883B
MACHINED SURFACES
DO NOT SCALE DRAWING

P/N: 4G0815VR-XT-1

CABLE'S LENGTH:	CONNECTOR:	COLOR:
X: NO CABLE	S: SMA; P: PINS	-1: GLOSS WHITE #17925 PER FED-STD-595B
M: MAG; N: NO MAG	M: MCX; MM: MMCX	-2: LUSTERLESS GRAY #36320 PER FED-STD-595B
#: CABLE LENGTH (IN)	N: NB; N: N-Bulkhead	-3: OLIVE DRAB GREEN #34031 PER FED-STD-595B
R: RIGHT ANGLE CON.	T: TB; TNC; TNC-Bulkhead	-4: LUSTERLESS BLACK #37038 PER FED-STD-595B

ANTCOM CORP. TORRANCE, CALIFORNIA

OUTLINE DRAWING
L1 GPS & CELLULAR
ANTENNA

ORDERED BY: M. BOAS July-30-04
ENGINEER: S. HUYNH July-30-04
CHECKED BY: S. HUYNH July-30-04

REV: 1 OF 1
D 3CVE1 4G0815VR-XT-1
SCALE 1/1 SHEET 1 OF 1

NMO Connector is Now Available for Some Antennas