



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

P/N: 4G0815VR-XS-X:

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



FAA Approved Facility

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

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

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VIEW D: R.50 [R12.71], 1.60 [40.67], .80 [20.33], 2X R1.75 [R44.48], 1.00 [25.42], 2.00 [50.84], 4X Ø.20 [Ø5.11] √ Ø.385 [Ø9.78] X 100°

VIEW C: SPHERICAL R6.004 [R152.51], R.38 [R9.53], .721 [18.31]

VIEW B: 0.57" [14.53] (TNC), 0.72" [18.29] (N, N-Bulkhead), 0.357" [9.07] (SMA), 0.83" [21.00] (TNC-Bulkhead), 0.200" [5.08] (MCX), DATE STAMP APPROXIMATE LOCATION AS SHOWN, .15 [3.77]

VIEW A: SMA FEMALE CONNECTOR (BLUE, GPS) (+2.5 to +30) Volts DC (OPTIONAL: TNC, MCX, MMCX, OR CABLES), SMA FEMALE MALE CONNECTOR (RED, CELLULAR) (OPTIONAL: TNC, MCX, MMCX, OR CABLES), .255 [6.48], .51 [12.96]

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

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

SPECIFICATIONS

REVISIONS				
ZONE	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	+ 2.9
@ 10 ° Elevation:	- 2.5	- 3.1	- 1.8
@ 20 ° Elevation:	- 1.1	- 1.1	+ 0.7
@ 30 ° Elevation:	+ 0.5	+ 0.9	+ 1.7
@ 60 - 90 ° Elevation:	> 3.6	+3.1+0.3	> 2.1
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: SMA FEMALE (OPTION: TNC, 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	ITEM 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

ANTCOM CORP. TORRANCE CALIFORNIA

OUTLINE DRAWING L1 GPS & CELLULAR ANTENNA

DESIGNED: M. BOAS July-30-04
ENGINEER: S. HUYNH July-30-04
APPROVED: S. HUYNH July-30-04
Dwg File No: D 3CVE1
SCALE: 1/1

P/N: 4G0815VR-XS-1

2. O-RING, CUSTOM WASHERS AND MOUNTING SCREWS ARE SUPPLIED BY ANTCOM CORPORATION

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

NMO Connector is Now Available for Some Antennas