



L1 GPS & GSM (810-996MHz) Antenna: P/N: 5BG15GSMRV-AP-XTT-1, P/N: 5BG1215GSMRV-AP-XTT-1 (for L1/L2)
 L1 GPS & WIFI (2.4-2.5GHz) Antenna: P/N: 5BG1524RV-AP-XTT-1, P/N: 5BG121524RV-AP-XTT-1 (for L1/L2)
 L1 GPS & Quad Band (0.810-2.5GHz) Antenna: P/N: 5BG15QBRV-AP-XTT-1, P/N: 5BG1215QBRV-AP-XTT-1 (For L1/L2)
 L1 GPS & Wide Band (0.810-5.9GHz) Antenna: P/N: 5BG15WBRV-AP-XTT-1, P/N: 5BG1215WBRV-AP-XTT-1 (For L1/L2)
 L1 GPS & Wide Band 2 (2.4-5.9GHz) Antenna: P/N: 5BG15WB2RV-AP-XTT-1, P/N: 5BG1215WB2RV-AP-XTT-1 (For L1/L2)
 L1 GPS & L/S-Band 2 (1.6-2.5GHz) Antenna: P/N: 5BG15LSRV-AP-XTT-1, P/N: 5BG1215LSRV-AP-XTT-1 (For L1/L2)



ISO 9001:2008/FAA Approved Facility

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

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SPECIFICATIONS

| REVISIONS | | DATE | APPROVED |
|-----------|-----|-------------|----------|
| ZONE | REV | DESCRIPTION | |
| | | | |

5.040 [128.02]
 2.214 [56.24]
 1.600 [40.64]
 R2.257 [R57.33]
 4.237 [107.63]
 4x#2.01 [#5.11] Thru.
 #.385 [#9.78] x 100°
 1.119 [28.42]
 5.163 [131.14]
 .898 [22.81]
 TNC FEMALE CONNECTOR (OPTION: SMA, N, BNC, or F)
 .784 [19.91]
 .937 [23.80]
 .148 [3.77]
 .148 [3.63]
 1.600 [40.64]
 1.891 [48.03]
 3.319 [84.30]
 4.237 [107.63]
 O-RING P/N: 2-038-N756-75

ELECTRICAL:

| FREQUENCY (MHz): | Cellular, GSM, ISM, WLAN, RFID | PCS 802.11b, 802.11g, WiFi, Bluetooth, Hotspot | 802.11a, WiFi, ISM | GPS | | | | | |
|-----------------------------------|--|--|--------------------|--|------------|-----------------------------------|------------|------------|-----------|
| | UHF (810-960) | (1610-1850-2400-2500) S-BAND (2400-2500) | C-BAND (4400-5850) | L1 GPS: (1575 ± 17) | | L2 GPS OPTION: (1227.60 ± 15) MHz | | | |
| RADIATION PATTERN: | OMNIDIRECTIONAL | | | HEMISPHERICAL | | | | | |
| POLARIZATION: | VERTICAL | | | RHCP | | RHCP | | | |
| VSWR: | 2.0:1 | | | < 2:1 | | < 2:1 | | | |
| IMPEDANCE: | 50 ohms | | | 50 ohms | | | | | |
| ANTENNA GAIN (dBi): | > 2 dB | | | Free Space | 16 In G.P. | 4 ft G.P. | Free Space | 16 in G.P. | 4 ft G.P. |
| @ 90° Elevation: | | | | +4.7 | +0.4 | +3.5 | +3.3 | +1.5 | +4.9 |
| @ 10° Elevation: | | | | -1.8 | -3.2 | -2.0 | -3.8 | -4.0 | -3.5 |
| @ 20° Elevation: | | | | -0.3 | +1.0 | +0.8 | +2.0 | -2.0 | +0.1 |
| @ 30° Elevation: | | | | +1.4 | +0.9 | +1.8 | +0.5 | 0.0 | -1.8 |
| @ 60 - 90° Elevation: | | | | > 3.9 | +3.4/+0.4 | > 2.8 | > 2.7 | +2.4/+1.5 | > 3.0 |
| BEAM WIDTH (3dB): | | | | 114 Deg. | 115 Deg. | 139 Deg. | 106 Deg. | 111 Deg. | 75 Deg. |
| LIGHTNING PROTECTION: | DC GROUNDING | | | | | | | | |
| LNA OPTION: | | | | | | | | | |
| LNA GAIN: | | | | 33 dB | | 35 dB | | | |
| LNA NOISE FIGURE: | | | | 3.0 dB | | 3.0 dB | | | |
| LNA P1dB Out: | | | | +13 dBm | | +13 dBm | | | |
| LNA DC POWER: | | | | 2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V / <50mA | | | | | |
| REJECTION @ (-50/+50) MHz: | | | | -41 dB / -59 dB | | -40 dB / +40 dB | | | |
| @ (-100/+100) MHz: | | | | < -45 dB | | < -45 dB | | | |
| POWER HANDLING: | 1 Watt CW, 2000 Peak 1 Microsec Pulse (<AL-) | | | | | | | | |

MECHANICAL:

SIZE: WIDTH 2.214 in. [56 mm], LENGTH 5.040 in. [128 mm], HEIGHT 5.163 in. [131 mm]

WEIGHT: 14.9 oz. (422g)

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

COLOR: LUSTERLESS GRAY #36320 PER FED-STD-595B
 GLOSS WHITE #17925 PER FED-STD-595B
 OLIVE DRAB GREEN #34031 PER FED-STD-595B
 LUSTERLESS BLACK #37038 PER FED-STD-595B

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

CONNECTOR: TNC-FEMALE (OPTION: SMA, N, BNC)

MOUNTING: FLAT FIXED MOUNT; O-RING & 10-32 MOUNTING SCREWS ARE PROVIDED

ENVIRONMENTAL:

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

ALTITUDE: 70,000 ft.

VIBRATION: 30 G's

LEAKAGE: HERMETICALLY SEALED

FEDERAL & MILITARY SPECIFICATIONS:

FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-STD-461E/F, SAE J1455
 MIL-E-5400, MIL-I-45208A, MIL-STD-810, MIL-S-901D, MIL-STD-167-1A

| SIZE: | Frequency | Other Band | GPS/RX only LNA: | DC BLOCK/LIMITER: |
|---------------|-----------------------|---------------------|---------------------|-------------------------------------|
| 1: 2" SQ. | 15: L1 GPS | C: (4.4-5.9) GHz | A2: WITH +20 dB LNA | D1: WITH DC BLOCK & WITH LIMITER |
| 1.8: 1.8" SQ. | 1215: L1/L2 GPS | 24: (2.4-2.5) GHz | A3: WITH +33 dB LNA | BLANK: WITHOUT DC BLOCK NOR LIMITER |
| 2: 2.2" DIA. | 5: G5 L1/L2 GPS/Gloss | L: (1.5-2.0) GHz | P: WITHOUT LNA | |
| 3: 3.8" DIA. | | GSM: (810-996) MHz | | |
| 4: MINI BNC | | QB: (0.810-2.5) GHz | | |
| | | WB: (0.810-5.9) GHz | | |

5B: Blade, 53: Root

P/N: 5BG1524RV-AP-XTT-1

| CABLE LENGTH: | UHF/GSM-Band CON. | COLOR: |
|--|----------------------|--|
| NO CABLE | S: SMA; B: BNC; F: F | -1: GLOSS WHITE #17925 PER FED-STD-595B |
| M: WITH MAG. MOUNT | M: MMCX; M/M: MMCX | -2: LUSTERLESS GRAY #36320 PER FED-STD-595B |
| P: CABLE LENGTH (IN) & NIN: # of Pins | N: NIN: # of Pins | -3: OLIVE DRAB GREEN #34031 PER FED-STD-595B |
| R: RIGHT ANGLE CON. 1: TB; TNC; B: Block | | -4: LUSTERLESS BLACK #37038 PER FED-STD-595B |

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

1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]

NOTES: UNLESS OTHERWISE SPECIFIED:

| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES | FRACIONS SHOULD BE IN 16ths | ANGLES SHOULD BE IN DEGREES |
|---|-----------------------------|-----------------------------|
| ± 1/64 | 300 010 | ± 1° |
| ± 0.005 | 300 005 | |
| TOLERANCE 50V PER AWS 114.5 | | |
| REMOVE ALL BURRS | | |
| BREAK CRITICAL DIMS 2005 TO .015 | | |
| FINISH: 2.00 TO 3.0 (100) | | |
| DAYS ON A COMMON & 27,000 | | |
| MACHINED SURFACES | | |
| DO NOT SCALE DRAWING | | |

| ORIGINALLY DRAWN | DATE | BY |
|------------------|-----------|----|
| S. HUYNH | Sep-23-11 | |
| S. HUYNH | Sep-22-11 | |
| S. HUYNH | Jan-24-13 | |
| P. TRAN | Jan-24-13 | |
| S. HUYNH | Jan-24-13 | |

ANTCOM CORP. TORRANCE CALIFORNIA

GPS / GSM BLADE ANTENNA

D 3CVE1 5BG1524RV-AP-XTT-1

SCALE 1/1 SHEET 1 OF 1

NMO Connector Option is Now Available for Some Antennas