

# Datasheet | Mobile Mark | MXG944 Antenna

## MXG944

### SURFACE MOUNT MIMO ANTENNA

#### PRODUCT OVERVIEW

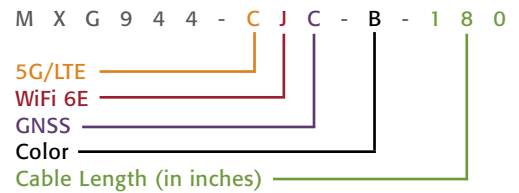
The MXG944 Antenna (4x 5G/LTE, 4x WiFi 6E/Bluetooth, 1x GNSS) provides complete coverage over all Cellular and WiFi 6E Frequencies, along with operation over GNSS Frequencies. GNSS operates on GPS, Galileo, Glonass, QZSS and Beidou at 1561, 1575, & 1602 MHz. Multiple WiFi 6E and Cellular elements provide MIMO coverage for both. This array of elements allows for a highly versatile antenna, while still managing to maintain an aerodynamic, sleek, and compact form, with all 9 elements being contained within the narrow profile of the MX series radomes. This Series is ideal for Public Safety and Emergency vehicles such as the Ford Police Interceptor.

\*Specify MXG944-HAHVHC-B-180 for the version with Fakra Connectors.

Visit our [eStore](#) to purchase an Antenna Online.

Electrical Specifications		
Frequency & Gain	5G/LTE Cables 1 - 4	617-960 MHz, 3 dBi Peak 1710-7200 MHz, 5 dBi Peak
	WiFi 6E Cables 5 - 8	2.4-2.5 GHz, 5 dBi Peak 4.9-7.2 GHz, 5 dBi Peak
	GNSS Cable 9	1561, 1575 & 1602 MHz, 5 dBi Peak
VSWR	5G/LTE - < 2.5:1 Over Range WiFi 6E - < 2:1 Over Range	
Impedance	50 Ohm Nominal	
Power Rating	10 Watts	
GNSS	Amplifier Gain & Bias Voltage	26 dB, 5 dBi 3/5 VDC
	Noise Figure	2.0 dB max, 1.7 dB typical
	Current	20 mA max, 10 mA typical

Mechanical Specifications	
Radome Material & Color	ASA UV-Inhibitive Plastic, Available in Black or White
Radome Dimension	2.50" Wide (63.5 mm) x 9.00" Length (228 mm) x 2.60" Height (66 mm)
Standard Connectors	5x SMA Plug (Male) for 5G/LTE and GNSS 4x Rev Pol SMA Plug (Male) for WiFi 6E SMA Jack (Female) for All Jumper Cables
1 Foot (0.30 m) Cables 14 Feet (4.27) Jumper Cables	LMR-100 Cables for 5G/LTE and WiFi 6E RG-174 Cable for GNSS
Operating Temperature	-40° to +80° C
Mounting	Stud Mount - 7/8" Dia. (22.22 mm) feed through. 3/4" lg. (19 mm) thread for up to 1/2" (12.7 mm) surface
Dust & Water Ingress	IP67 (When Properly Mounted)
Shock and Vibration	IEEE1478, EN61373, MIL-810G, TIA 329.2-C
RoHS Compliant	Yes



#### HIGHLIGHTS:

- 9 Cables (4x 5G/LTE, 4x WiFi 6E/BT, 1x GNSS)
- MIMO 5G/LTE & WiFi 6E/Bluetooth
- Mobile, Surface Mount
- Made-in-the-USA & UK

#### RELATED MODELS:

- LTMWG944 (4x 5G/LTE, 4x WiFi 6E, 1x GNSS)
- MXFG708 (2x 5G/LTE, 4x WiFi 6E, 1x GNSS)
- LTMG708 (2x 5G/LTE, 4x WiFi 6E, 1x GNSS)

#### COMMON APPLICATIONS:

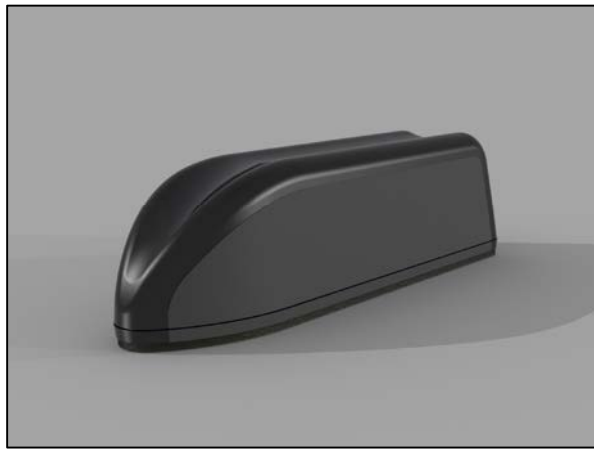
- Public Safety Vehicles
- Fleet Management
- Public Transportation
- Installations Requiring Sleek Profile
- Fits Between Roof Ridges of the Ford Interceptor SUV

#### BANDS:

- 5G: n1,n2,n3,n5,n7,n8,n12,n20,n25,n28,n34,n38,n39,n40,n41,n66,n70,n71,n77,n78,n79,n80,n81,n82,n83,n84
- LTE: 1,2,3,4,5,6,7,8,9,10,12,13,14,17,18,19,20,22,23,25,26,27,28,29,30,33,34,35,36,37,38,39,40,41,42,43,44,46,47,48,49,52,53,54,66,67,68,69,70,71,85,252,255



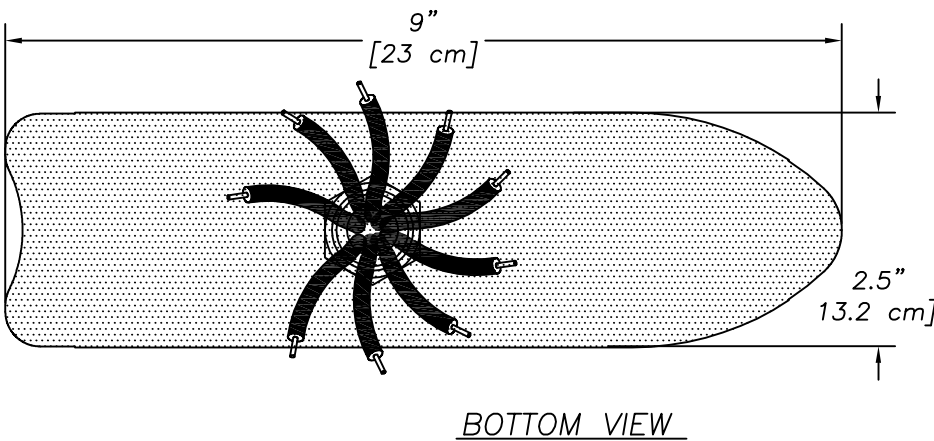
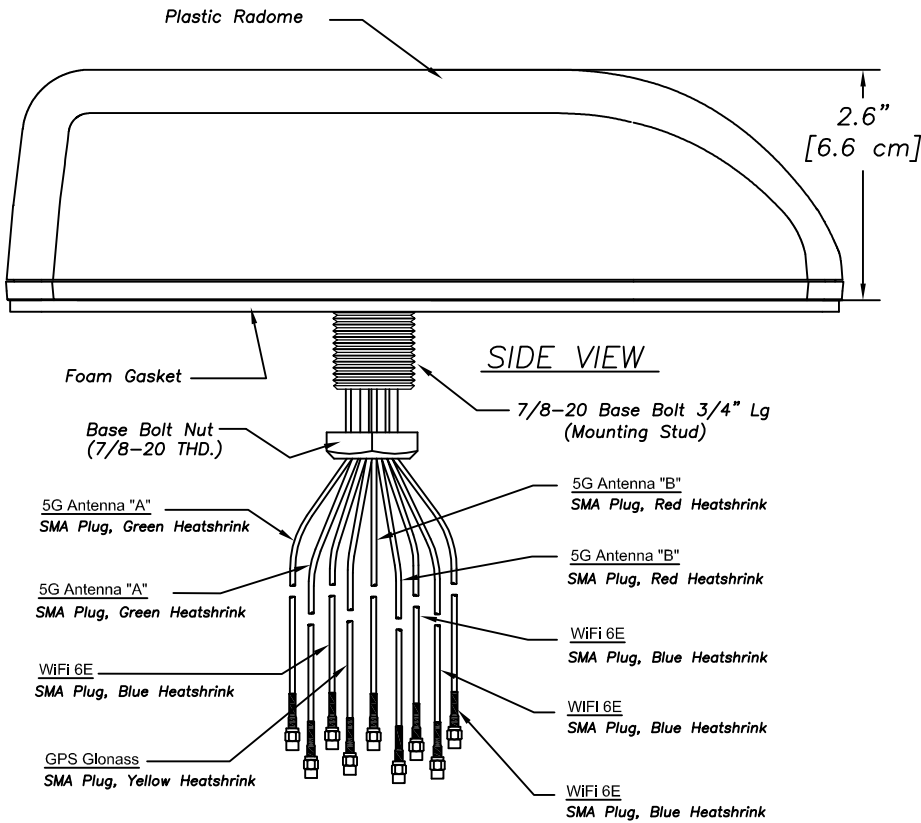
Moving Wireless Forward®



# MXG944-BAHVHC-B-180

## Multi-Band 4x MIMO Antenna

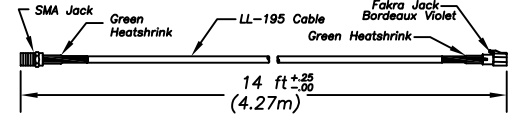
**4 X 617-960 MHz, 1710-7200 MHz (5G SUB-6)**  
**4 X 2.4-2.5GHz, 4.9-7.2 GHz (WiFi 6E/ Bluetooth)**  
**with GPS / GLONASS**



### Jumper Cable

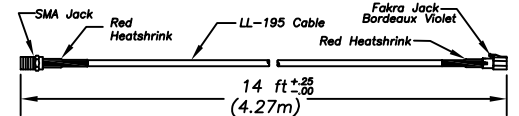
#### 2 X CA168/195-VHA-GRN-LTE-A (LTE Ant. "A")

Cable Assy: 14 ft (4.27m) LL-195 Cable with SMA Jack and Fakra Jack- Claret/Bordeaux Violet Code D



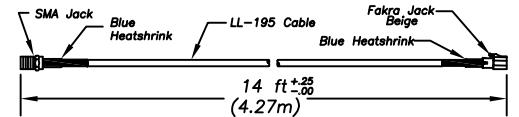
#### 2 X CA168/195-VHA-RED-LTE-B (LTE Ant. "B")

Cable Assy: 14 ft (4.27m) LL-195 Cable with SMA Jack and Fakra Jack- Claret/Bordeaux Violet Code D



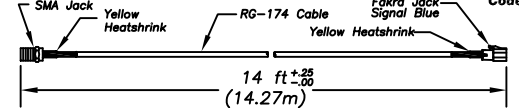
#### 4 X CA168/195-VHV-BLU-WIFI (WiFi)

Cable Assembly: 14 ft (4.27m) LL-195 Cable with SMA Jack and Fakra Jack- Beige Code I



#### 1 X CA168/174-VHC-YLW-GNSS (Tri-B GNSS)

Cable Assembly: 14 ft (4.27m) RG-174 Cable with SMA Jack and Fakra Jack- Signal Blue Code C



### Antenna Specifications

\*\*Frequency/Gain: 5G 617-960 MHz, 3dBi Peak  
 5G 1710-7200 MHz, 5dBi Peak  
 WiFi 2.4-2.5/4.9-7.2 GHz, 5dBi Peak

GPS/GLONASS Gain — 26 dB, 5 dBi Antenna

Voltage — 3.3/5 VDC  
 Current — 10mA (typ.), 20mA (max.)

\*\*VSWR: 5G — < 2.5:1 VSWR over range  
 WiFi — < 2:1 VSWR over range

Maximum Power: — 10 Watts

Dimension: — 9" L x 2.5" W x 2.6" H

Radome Material: — ASA UV Inhibitive Plastic

Cable: 5G Antenna "A" — LMR-100, 1 ft. (30.5cm)  
 5G Antenna "B" — LMR-100, 1 ft. (30.5cm)  
 WiFi — LMR-100, 1 ft. (30.5cm)  
 GNSS — RG-174, 1 ft. (30.5cm)

Connectors/Interface: — "See Jumper Cable Chart Above"  
 5G — FAKRA JACK-BORDEAUX VIOLET  
 WiFi — FAKRA JACK-BEIGE  
 GNSS — FAKRA JACK-SIGNAL BLUE

Impedance: — 50 OHM Nominal

Water Ingress: — IP67 (when properly mounted)

Shock & Vibration: — IEEE1478, EN61373,  
 MIL-810G, TIA 329.2-C

Mounting: — 7/8" Dia. Feed through.  
 3/4" lg. thread for up to  
 1/2" thick surface

Operating Temperature: — -40° to +80° C

\*\* Gain and VSWR measured with 12" cable on 2' Ground Plane

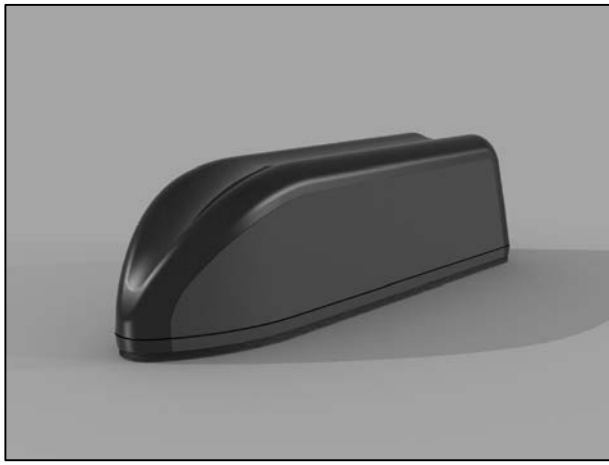
**MobileMark**  
 antenna solutions

US OFFICE & HEADQUARTERS: 1140 W THORNDALE AVE, ITASCA, IL 60143  
 TEL: (847) 671-6690 \* FAX (847) 250-5120

UK OFFICE: 8 MIRAS BUS PARK, KEYS PARK ROAD, HEDNESFORD WS12 2FS, UK  
 UK TEL: (+44) 1543-459555 FAX (+44) 1543-459545

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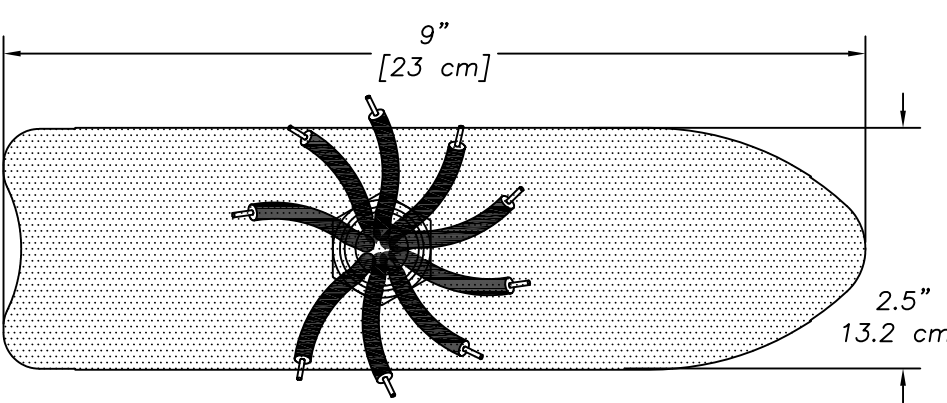
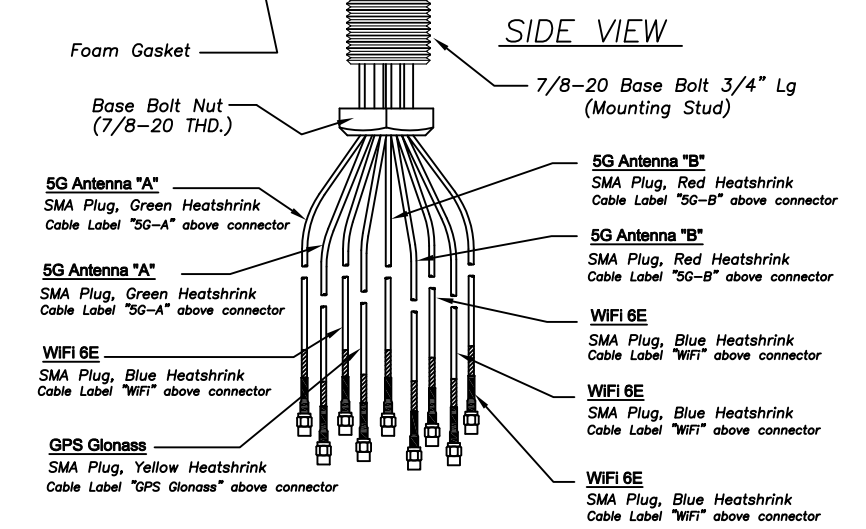
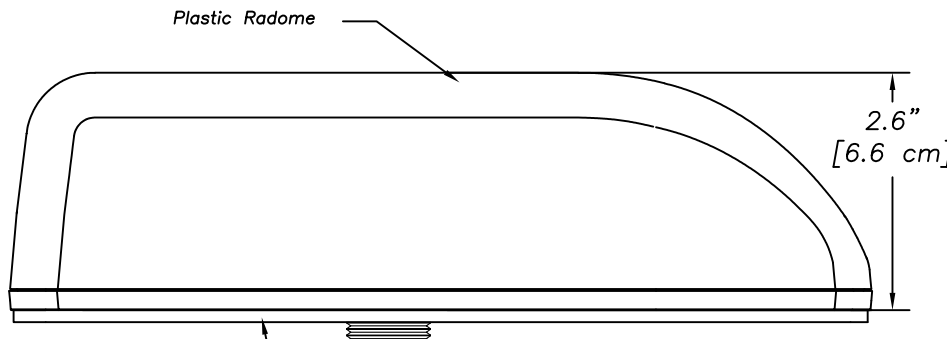




# MXG944-CJC-B-180

## Multi-Band 4x Mimo Antenna

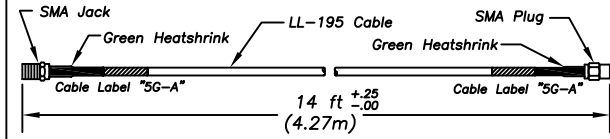
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**with GPS / GLONASS**



### Jumper Cable

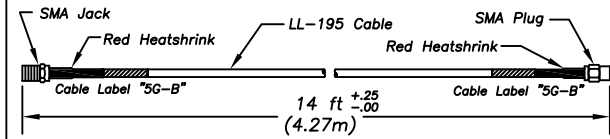
#### 2 X CA168/195-VC-GRN-LTE-A

14 ft (4.27m) LL-195 Cable with SMA Jack and SMA Plug



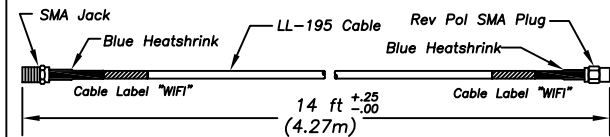
#### 2 X CA168/195-VC-RED-LTE-B

14 ft (4.27m) LL-195 Cable with SMA Jack and SMA Plug



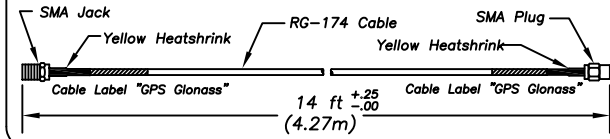
#### 4 X CA168/195-VJ-BLU-WIFI

14 ft (4.27m) LL-195 Cable with SMA Jack and Rev Pol SMA Plug



#### 1 X CA168/174-VC-YLW-GNSS

14 ft (4.27m) RG-174 Cable with SMA Jack and SMA Plug



### Antenna Specifications

- \*\*Frequency/Gain:
  - 5G 617-960 MHz, 3dBi Peak
  - 5G 1710-7200 MHz, 5dBi Peak
  - WiFi 2.4-2.5/4.9-7.2 GHz, 5dBi Peak
- GPS/GLONASS Gain: 26 dB, 5 dBi Antenna
- Voltage: 3/5 VDC
- Current: 10mA (typ.), 20mA (max.)
- \*\*VSWR:
  - 5G < 2.5:1 VSWR over range
  - WiFi < 2:1 VSWR over range
- Maximum Power: 10 Watts
- Dimension: 9" L x 2.5" W x 2.6" H
- Radome Material: ASA UV Inhibitive Plastic
- Cable:
  - 5G Antenna "A" — LMR-100, 1 ft. (30.5cm)
  - 5G Antenna "B" — LMR-100, 1 ft. (30.5cm)
  - WiFi — LMR-100, 1 ft. (30.5cm)
  - GNSS — RG-174, 1 ft. (30.5cm)
- Connectors/Interface: "See Jumper Cable Chart Above"
  - 5G — SMA
  - WiFi — Rev Pol SMA
  - GNSS — SMA
- Impedance: 50 OHM Nominal
- Water Ingress: IP67 (when properly mounted)
- Shock & Vibration: IEEE1478, EN61373, MIL-810G, TIA 329.2-C
- Mounting: 7/8" Dia. Feed through. 3/4" lg. thread for up to 1/2" thick surface
- Operating Temperature: -40° to +80° C
- \*\* Gain and VSWR measured with 12" cable on 2' Ground Plane



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