

M470 MIMO 3-Lead Low-Profile Series Mobility M2M IoT Antenna

Multi-Carrier MIMO Cellular 4G LTE CBRS 5G NR / GPS GNSS / MIMO Multi Band WiFi 5 (2.4GHz ~5GHz) / Bluetooth (2.4GHz)

4G LTE CBRS 5G NR Frequency Range Bluetooth (2.4GHz) WiFi 5 Frequency Range	617-960MHz / 1710-5000MHz 2.4-2.5GHz / 4.9-5GHz (Concurrent)
4G CBRS 5G NR Avg. Peak Gain: <i>Isotropic</i> WiFi 5 / Bluetooth Avg. Peak Gain: <i>Isotropic</i>	(1.9dBi) 617-960MHz / (2dBi) 1710-3800MHz / (2dBi) 4900-5000MHz / (2.1dBi) CBRS 3.5GHz (2dBi) 2.4-2.5GHz / (2dBi) 4.9-5GHz
Typical Efficiency 4G 5G Elements	617-960MHz >70% 1710-3800MHz >70% 4900-5000MHz >85%
Typical Efficiency WiFi / Bluetooth Elements	>70%
Isolation 4G 5G Elements Isolation WiFi / Bluetooth Elements	>10dB >12dB
Correlation Co-efficient 4G 5G Elements Correlation Co-efficient WiFi / BT Elements	<0.2 <0.1
Nominal Impedance	50Ω
GPS GNSS Specifications	GPS Glonass Galileo QZSS BeiDou Compass <i>In-Band Frequency Interference Filter for LTE B13 B14</i>
Frequency Range	1562-1612MHz
LNA Gain	29dB ± 2dB
VSWR	<2.0:1
Out of Band Rejection	>45dB (@ > +/- 100MHz f)
Typical Noise Figure	<-2dB
Notch Filter Rejection @787MHz	24dB
Operating Voltage	3-5V DC
Typical Current	15mA


Mechanical / Environmental Specifications

Antenna Housing	High Impact UV Stable ABS Polymer (Black or White) Housing Height: 28mm (1.1") / Base Diameter: 73.6mm (2.9")
Connector Types	All Standard RF Connectors Available (Including FAKRA Connector Ends)
15ft Coax Cables (All Cables Full Length)	Cellular 4G 5G AGA200 Coax / Multi Band WiFi Bluetooth AGA200 Coax / GPS GNSS AGA100 Coax * Custom cable lengths & connector end options are available (Including FAKRA Connector Ends)
Bolt Mount Magnetic Mount / Adhesive Mount	Stainless Steel Mounting Bolt: Length 21.73mm (0.855") / Diameter 13.84mm (0.545") 3 x Commercial Grade Rare Earth Magnets w/Baseplate Pad (Includes 3M Adhesive Mount Pad)
Operating Temp	-40° / +80°C (-40° / +176°F)
Ingress Protection	IP69K




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 MIMO Cellular 4G LTE CBRS 5G NR / GPS GNSS
 MIMO Multi-Band WiFi 5 / WiFi HaLow / Bluetooth
 Built-In Ground Plane / Bolt Mount / Mag Mount / Adhesive Mount

M470 MIMO 3-Lead Low-Profile Series Bolt Mount Antenna
 Configuration Options

<p>M470 3-Element Bolt Mount Configurations</p>	<p>M470-BB-2CG: MIMO 2 x Cellular 4G LTE CBRS 5G NR / GPS GNSS – (Black) M470-BW-2CG: MIMO 2 x Cellular 4G LTE CBRS 5G NR / GPS GNSS – (White) M470-BB-2WG: MIMO 2 x Multi-Band WiFi 5 / GPS GNSS – (Black) M470-BW-2WG: MIMO 2 x Multi-Band WiFi 5 / GPS GNSS – (White) M470-BB-CGW: Cellular 4G LTE CBRS 5G NR / GPS GNSS / Multi-Band WiFi 5 – (Black) M470-BW-CGW: Cellular 4G LTE CBRS 5G NR / GPS GNSS / Multi-Band WiFi 5 – (White)</p>	
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M470 MIMO 3-Lead Low-Profile Series Magnetic / Adhesive Mount Antenna
 Configuration Options

<p>M470 3-Element Magnetic / Adhesive Mount Configurations</p>	<p>M470-MB-2CG: MIMO 2 x Cellular 4G LTE CBRS 5G NR / GPS GNSS – (Black) M470-MW-2CG: MIMO 2 x Cellular 4G LTE CBRS 5G NR / GPS GNSS – (White) M470-MB-2WG: MIMO 2 x Multi-Band WiFi 5 / GPS GNSS – (Black) M470-MW-2WG: MIMO 2 x Multi-Band WiFi 5 / GPS GNSS – (White) M470-MB-CGW: Cellular 4G LTE CBRS 5G NR / GPS GNSS / Multi-Band WiFi 5 – (Black) M470-MW-CGW: Cellular 4G LTE CBRS 5G NR / GPS GNSS / Multi-Band WiFi 5 – (White)</p>	
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M470 MIMO 3-Lead Low-Profile Series Antenna Housing Color Options
 Black / White



M470 MIMO 3-Lead Low-Profile Series Antenna Coax Cable Labels (SMA)
 CELL / WIFI / GPS



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 "Built To Spec" Custom Cable Options are Available. Contact us for details.



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Supported Cellular Service Provider Networks

Verizon	<p>Verizon 4G LTE 5G NR Bands 4G LTE: B2 B4 B5 B13 B46 B48 B66 (CBRS B48) 5G NR: N2 N5 N66 N77</p> <p>Carriers (MVNOs) using Verizon Network: <i>Reach Mobile, Red Pocket Mobile, Spectrum Mobile, Ting Total, Tracfone, Twigby, US Mobile, Visible, Xfinity Mobile</i></p>
T-Mobile	<p>Mobile 4G LTE 5G NR Bands 4G LTE: B2 B4 B5 B12 B25 B26 B41 B48 B66 B71 (CBRS B48) 5G NR: N25 N41 N66 N71</p> <p>Carriers (MVNOs) using T-Mobile Network <i>Mint Mobile, TextNow, Lyca Mobile, Metro, Red Pocket Mobile Republic Wireless, Simple Mobile, Ting, Tracfone, US Mobile</i></p>
AT&T	<p>AT&T 4G LTE 5G NR Bands 4G LTE: B2 B4 B5 B12 B14 B17 B29 B30 B48 B66 (CBRS B48) GSM: 1900MHz 5G NR: N2 N5 N66 N77</p> <p>Carriers (MVNOs) using AT&T Network <i>Cricket Wireless, Net 10 Wireless, Red Pocket Mobile, Straight Talk</i></p>

Supported Cellular Bands

5G NR Bands	n1 n2 n3 n5 n7 n8 n12 n13 n14 n18 n20 n25 n26 n28 n29 n30 n38 n40 n41 n48-CBRS n66 n71 n75 n76 n77 n78 n79 C-band
4G LTE Bands	B1 B2 B3 B4 B5 B7 B8 B12 B13 B14-FirstNet B17 B18 B19 B20 B25 B26 B28 B29 B30 B32 B38 B39 B40 B41 B42 B43 B46-LAA B48-CBRS B66 B71
3G Bands	B1 B2 B3 B4 B5 B6 B8 B9 B19

Supported WiFi IEEE Standards

WiFi 1-5	WiFi 1 WiF 2 (802.11ba) WiFi 3 (802.11g) WiFi 4 (802.11n) WiFi 5 (802.11ac)
* WiFi HaLow	WiFi HaLow (802.11ah) * <i>Contact Us For M470 HaLow WiFi Configuration Options</i>



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M470 MIMO 3-Lead Low-Profile Series Antenna
 Dimensions – Bolt Mount

M470 MIMO 3-Lead Low-Profile Series
 Bolt Mount

Height: 28mm (1.1") / Diameter: 73.6mm (2.9")



Stainless Steel Mounting Bolt
 Length 21.73mm (0.855")
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M470 MIMO 3-Lead Low-Profile Series
 Bolt Mount





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M470 MIMO 3-Lead Low-Profile Series Antenna
 Dimensions – Magnetic / Adhesive Mount

M470 MIMO 3-Lead Low-Profile Series
 Magnetic / Adhesive Mount Antenna

Height: 28mm (1.1") / Diameter: 73.6mm (2.9")



M470 Low-Profile Series Antenna Include Built in Ground Plane / Full Length 15ft Coax Cables
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M470 MIMO 3-Lead Low-Profile Series Antenna
 Optional L-Bracket Mount
 (Sold Separately)

M470 MIMO 3-Lead Low-Profile Series Bolt Mount Antenna
 w/ Optional L-Bracket Mount
 Sold Separately



Optional: L-Bracket Mount
 w/ U-Bolt Set
 Sold Separately

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