

M20M 3-Lead Omni MIMO Cellular 4G LTE 5G NR / MIMO WiFi 6 / GPS GNSS Specifications – Magnetic Mount
Multi-Carrier MIMO Cellular 4G LTE CBRS 5G NR / GPS GNSS / MIMO Multi Band WiFi 6 (2.4GHz ~6GHz) / Bluetooth (2.4GHz)

4G LTE CBRS 5G NR Frequency Range Bluetooth (2.4GHz) WiFi 6 Frequency Range	617-960MHz / 1710-6000MHz 2.4-2.5GHz / 4.9-6GHz (Concurrent)
4G CBRS 5G NR Avg. Peak Gain: <i>Isotropic</i> WiFi / Bluetooth Avg. Peak Gain: <i>Isotropic</i>	(3.5dBi) 617-960MHz / (6dBi) 1710-3800MHz / (7dBi) 4900-6000MHz / (5dBi) CBRS 3.5GHz (9dBi) 2.4~6GHz
Typical Efficiency 4G 5G Elements	617-960MHz >70% 1710-3800MHz >70% 4900-6000MHz >85%
Typical Efficiency WiFi 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
Horizontal Half Power Beamwidth	360° / 360°
Vertical Half Power Beamwidth	70° / 35°
VSWR	≤2.0 / ≤2.0
Nominal Impedance	50Ω
Polarization	MIMO 2 x Vertical Omni Directional
Max. Power	50W
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



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 MIMO Cellular 4G LTE 5G NR / MIMO WiFi 6 / GPS GNSS
 Omni-Directional / Magnetic Mount / Outside or Inside Use
 * Contact Us For M20M HaLow WiFi Configuration Options

Mechanical / Environmental Specifications

Radome	High Impact Polycarbonate Height: 9.3" / 237mm - Diameter: 2.4" / 60mm
16ft Coax Cables 1ft Coax Cables	Cellular 4G 5G 16ft AGA200 Coax / WiFi 16ft AGA200 Coax / GPS 16ft AGA100 Coax Cellular 4G 5G 1ft AGA200 Coax / WiFi 1ft AGA200 Coax / GPS 1ft AGA100 Coax <i>(Custom Length Coax Cable Options are Available. Contact us for details)</i>
Connector Types	All Standard RF Connectors Available (Including FAKRA Connector Ends)
Mount Type	Magnetic Mount 3 x Rare Earth Magnets
Ingress Protection	IP69K
Wind Velocity	120 MPH
Operating Temp	-40° / +80°C (-40° / +176°F)
Net Weight	1.5bs / 0.7kg <i>Includes Magnetic Mount</i>

Supported Cellular Service Provider Networks

Verizon	Verizon 4G LTE 5G NR Bands 4G LTE: B2 B4 B5 B13 B46 B48 B66 (CBRS B48) 5G NR: N2 N5 N66 N77 Carriers (MVNOs) using Verizon Network: <i>Reach Mobile, Red Pocket Mobile, Spectrum Mobile, Ting Total, Tracfone, Twigby, US Mobile, Visible, Xfinity Mobile</i>
T-Mobile	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 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>
AT&T	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 Carriers (MVNOs) using AT&T Network <i>Cricket Wireless, Net 10 Wireless, Red Pocket Mobile, Straight Talk</i>

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 1-6	WiFi 1 WiF 2 (802.11ba) WiFi 3 (802.11g) WiFi 4 (802.11n) WiFi 5 (802.11ac) WiiFi 6 6E (802.11ax)
* WiFi HaLow	WiFi HaLow (802.11ah) * Contact Us For M120M HaLow WiFi Configuration Options



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M20M Omni MIMO Series Antenna
 Dimensions / Magnetic Mount

60mm
 2.4"



3 x Commercial Grade
 Rare Earth Magnets

Includes
 3 x Coax Cables

Magnetic Mount

M20M / M20MF MIMO Series Antennas Include Built in Ground Plane / Coax Cables / L-Bracket Mount
 "Built To Spec" Custom Cable Options are Available. Contact us for details.





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M20M 3-Lead Omni MIMO Cellular 4G LTE 5G NR / MIMO WiFi 6 / GPS GNSS Antenna – Magnetic Mount
 Dimensions / Configuration Options w/16ft Coax Cables (SMA)

<p>Configuration Options (SMA)</p>	<p>M20M-16-2CG: MIMO 2 x Cellular 4G 5G / GPS GNSS Antenna w/3 x 16ft Coax Cables – 3 x SMA M20M-16-2WG: MIMO 2 x WiFi 6 / GPS GNSS Antenna w/3 x 16ft Coax Cables – 2 x RPSMA / SMA M20M-16-CWG: Cellular 4G 5G / WiFi 6 / GPS GNSS Antenna w/3 x 16ft Coax Cables – SMA / RPSMA / SMA * Contact Us For M20M HaLow WiFi Configuration Options</p>
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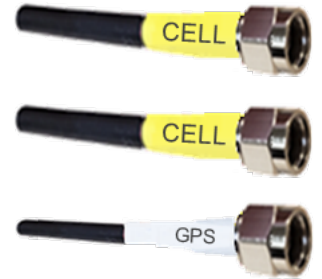
M20M-16-SMA



Magnetic Mount

Includes
 3 x 16ft Coax Cables
 SMA

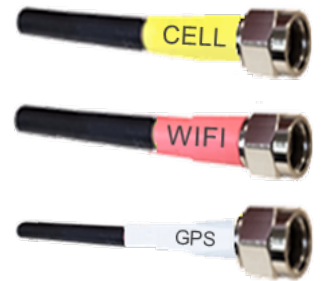
M20M-16-2CG



M20M-16-2WG



M20M-16-CWG





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M20MF 3-Lead Omni MIMO Cellular 4G LTE 5G NR / MIMO WiFi 6 / GPS GNSS Antenna – Magnetic Mount
 Dimensions / Configuration Options w/16ft Coax Cables (FAKRA)

Configuration Options (FAKRA)	M20MF-16-2CG: MIMO 2 x Cellular 4G 5G / GPS GNSS Antenna w/3 x 16ft Coax Cables – FAKRA M20MF-16-2WG: MIMO 2 x WiFi 6 / GPS GNSS Antenna w/3 x 16ft Coax Cables – FAKRA M20MF-16-CWG: Cellular 4G 5G / WiFi 6 / GPS GNSS Antenna w/3 x 16ft Coax Cables – FAKRA * Contact Us For M20M HaLow WiFi Configuration Options
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M20MF-16-FAKRA



Includes
 3 x 16ft Coax Cables
 FAKRA

M20MF-16-2CG



M20MF-16-2WG



M20MF-16-CWG



Magnetic Mount



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M20M 3-Lead Omni MIMO Cellular 4G LTE 5G NR / MIMO WiFi 6 / GPS GNSS Antenna – Magnetic Mount
 Dimensions / Configuration Options w/1ft Coax Cables (NF / SMA)

Configuration Options (NF / SMA)	M20M-1-2CG: MIMO 2 x Cellular 4G 5G / GPS GNSS Antenna w/ 3 x 1ft Coax Cables – 2 x NF / SMA M20M-1-2WG: MIMO 2 x WiFi 6 / GPS GNSS Antenna w/ 3 x 1ft Coax Cables – 2 x NF / SMA M20M-1-CWG: Cellular 4G 5G / WiFi 6 / GPS GNSS Antenna w/ 3 x 1ft Coax Cables – 2 x NF / SMA * Contact Us For M20M HaLow WiFi Configuration Options
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M20M-16-SMA

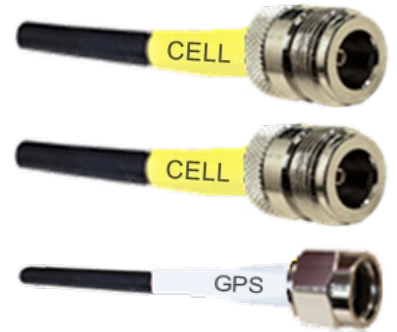


Includes
 3 x 1ft Coax Cables
 2 x NF / SMA
 (Extension Cables Sold Separately)



Magnetic Mount

M20M-1-2CG



M20M-1-2WG



M20M-1-CWG

