



Cellular & WiFi

## Over 75 Years of Experience

Panorama Antennas is a privately owned family business, now in its third generation, and leading designer and manufacturer of antennas for wireless communication. Established in London in 1947, Panorama started life as a manufacturer of consumer products and buoyed by huge demand in 1952, began manufacturing TV components and antennas. With the transistor radio trend of the 1960s, Panorama's expert knowledge swiftly led the company into the manufacturing of communication antennas.

Throughout the 1970s and 80s, Panorama evolved to become the first specialised communication antenna manufacturer in the UK, developing a range of cellular antennas to coincide with the launch of the mobile phone network in Britain. 1990 was a year of huge change as Panorama found itself revolutionising cellular glass mount antenna technology, filing a patent application for the first ever solid state coupling circuit. Through creating a new benchmark for quality in the production of components and leading technology development, Panorama has grown side by side with the cellular telecommunications industry.

Today Panorama produces antennas for the world's leading communication companies and has grown to include over 100 staff in five international sales offices, as well as operating four fully owned subsidiaries. Manufacturing, design and development remain located in London less than a mile from the original factory. Our network of international sales representatives means that all customers get the attention and advice they require, providing local support on a global scale.

## Antennas for the Next Generation

Panorama's constant cutting-edge research ensures that our antennas meet the demands of the very latest technology. With 75 years experience in delivering world-class antenna products, Panorama's current product range reflects our unparalleled expertise in providing high-quality performance antennas.

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# Broadband & Enterprise



DMM-7-38

DMM-6-60



PWB-BC3G-38-RSMAP



PWB-6-60-RSMAP

## Portable 2x2 LTE Antenna



- 2x2 MiMo 5G/4G/3G/2G
- 698-3800MHz and 617-6000MHz versions
- Two omnidirectional wideband elements
- Desk stand, screen clip & window mount options
- 2m (6'6") cable supplied

The DMM offers a lightweight and stylish solution for your wireless broadband connection. It can improve your connection in challenging coverage areas with its unique 'X' design. The DMM series offers a flexible, portable solution designed for use on the go by travellers or as a simple and easy to install solution for fixed site installs like home offices here it is not possible to install an external antenna.

## 5G LTE Paddle Antenna



- Covers 5G/4G/3G/2G
- 698-3800MHz and 617-6000MHz versions
- Easy to install plug and play solution
- Ground plane independent

A wideband antenna with articulated right-angled connector, ideal for modems and terminals. Covering all 5G, 4G, 3G & 2G frequencies, the PWB enhances the performance of the most advanced terminals on the market today. As an easy to install, plug and play antenna, it is ideal for any 4G/5G modem or router.

698-3800MHz	MiMo Cellular	Connector
DMM-7-38-2SP	2x2	SMA Male
DMM-7-38-2TS9	2x2	TS9 Male
617-6000MHz	MiMo Cellular	Connector
DMM-6-60-2SP	2x2	SMA Male

698-3800MHz	Connector
PWB-BC3G-38-RSMAP	Articulated SMA Male
PWB-BC3G-38-RFDJ	Articulated FAKRA D
617-6000MHz	Connector
PWB-6-60-RSMAP	Articulated SMA Male
PWB-6-60-RFDJ	Articulated FAKRA D



## Medium Gain MiMo LTE Antenna



- 2x2 MiMo 5G/4G/3G/2G LTE
- 698-960/1710-3800MHz
- Two wideband elements with medium gain
- Optional Integrated GPS/GNSS
- Durable housing for indoor or outdoor use
- Suitable for mast, wall & desk mounting

The WMMG-7-38 antenna is a wide beam width, medium gain 2x2 MiMo antenna which incorporates two separately fed wideband, cross polarised elements in a rugged, weather resistant housing. Designed for wall, mast or desk mounting via the supplied brackets the WMMG-7-38 is designed for, fixed wireless access, failover and home offices.

Part no.	GPS/GNSS	Cable & Connector
WMMG-7-38-5SP		5m (17') SMA Male
WMMG-7-38-03Nj		0.3m (1') N-Female
WMMGG-7-38-5SP	•	5m (17') SMA Male



## High Gain Directional MiMo LTE Antenna



- 2x2 MiMo 5G/4G/3G/2G LTE
- 698-960/1710-3800MHz
- Cross polarised, high gain elements
- Optional integrated GPS/GNSS
- Durable housing for indoor or outdoor use
- Suitable for mast, wall & desk mounting

The WMM8G-7-38 is a high gain, directional 2x2 MiMo antenna suitable for use in rural and edge of cell areas. It has 2 cross polarised elements with effective isolation and low correlation coefficient value. It features a rugged, sealed housing, brackets for wall, mast or desk mounting and integrated 'twinned' ultra-low loss coax cables, prefitted with SMA plugs for simple installation.

Part no.	GPS/GNSS	Cable & Connector
WMM8G-7-38-5SP		5m (17') SMA Male
WMM8G-7-38-03Nj		0.3m (1') N-Female
WMM8GG-7-38-5SP	•	5m (17') SMA Male



## Omnidirectional 2x2 MiMo 4G/5G Antenna



- 2x2 MiMo omnidirectional antenna for 4G/5G
- 617-960/1710-6000MHz
- Optional integrated GPS/GNSS
- Suitable for wall, mast & marine mount applications

The BSM-6-60 antenna is a 2x2 MiMo 4G/5G medium gain omnidirectional solution. It covers 617-960/1710-6000MHz and is IP67 certified making it suitable for indoor or outdoor use. Supplied with integrated low loss cable assemblies the antenna is suitable for wall or mast mounting and using the optional SAB-315 adaptor allows the antenna to mount to standard 1" 14TPI marine mounts. BSGM-6-60 versions include active GPS/GNSS.

Part no.	GPS/GNSS	Connector
BSM-6-60-5SP		5m (17') SMA Male
BSM-6-60-5FKJ		5m (17') FAKRA D
BSM-6-60-5NP		5m (17') N-Male
BSM-6-60-05Nj		0.5m (1.6') N-Female
BSGM-6-60-5SP	•	5m (17') SMA Male
BSGM-6-60-5NP	•	5m (17') N-Male
BSGM-6-60-5FKJ	•	5m (17') FAKRA D
BSGM-6-60-05Nj	•	0.5m (1.6') N-Female



## Omnidirectional 4x4 MiMo 4G/5G Antenna



- 4x4 MiMo 4G/5G
- 617-960/1427-6000MHz
- Supports new generation CAT 18/20 devices
- Optional integrated GPS/GNSS
- Mast, wall or desk mount & integrated low loss cables

The DWMM4[G]-6-60 antenna provides a 4x4 MiMo solution for global 4G/5G networks from 617-6000MHz. Incorporating four separately fed ultra-wideband elements in a single housing, the antenna is suitable for a wide range of fixed site main and failover applications.

Part no.	GPS/GNSS	Connector
DWMM4-6-60-5SP		5m (17') SMA Male
DWMM4-6-60-5FKJ		5m (17') FAKRA D
DWMM-6-60-5NP		5m (17') N-Male
DWMM4-6-60-05Nj		0.5m (1.6') N-Female
DWMM4G-6-60-5SP	•	5m (17') SMA Male
DWMM4G-6-60-5FKJ	•	5m (17') FAKRA D
DWMMG-6-60-5NP	•	5m (17') N-Male
DWMM4G-6-60-05Nj	•	0.5m (1.6') N-Female



## 4x4 MiMo 4G/5G Desk Mount MiMo Antenna



- 4x4 MiMo 4G/5G – 617-960/1710-6000MHz
- Desk, window and wall mountable design
- Lightweight portable plug-and-play solution
- 4G/5G CAT18/20 LTE ready
- 2m (6'6") cable supplied

The DMM4 portable antenna is an innovative antenna design which provides 4x4 MiMo function for 4G/5G with fallback to 3G/2G. The DMM4 antenna is a future-proof solution for CAT 18/20 4G & 5G devices. Incorporating four separately fed, ultra wide band elements for 617-960/1710-6000MHz in a single housing, the DMM4 provides a 4x4 MiMo function. It can also provide 2x 2x2 MiMo function for a router with dual 2x2 modems. The DMM4 series offers a flexible, portable solution designed for use on the go by travelers or as a simple and easy to install solution for fixed site installs like home offices where it is not possible to install an external antenna.

Part no.	MiMo 4G/5G	Connector
DMM4-6-60-2SP	4x4	SMA Male
DMM4-6-60-2TS9	4x4	TS9 Male
DMM4-6-60-2FDJ	4x4	FAKRA D



## 4x4 MiMo Wall/Mast Mount Antenna



- 4x4 MiMo 4G/5G – 698-960/1710-4900MHz
- Compact housing
- Wall or mast mounting
- Integrated low loss coaxial cable

The WMM4-7-49 antenna provides 4x4 MiMo solution for global 4G/5G networks from 698-960/1710-4900MHz. Incorporating four separately fed, ultra-wideband elements within an IP rated compact housing, the WMM4-7-49 is suitable for a wide range of 4G Cat 18/20 and 5G fixed site and failover applications.

The weather-proof design, integrated low loss coaxial cables and wall and mast mount brackets make the product ideal for mounting externally where signal is strongest.

Part no.	MiMo 4G/5G	Cable	Connector
WMM4-7-49-5SP	4x4	5m/16ft	SMA Male
WMM4-7-49-5FKDJ	4x4	5m/16ft	FAKRA D
WMM4-7-49-05NJ	4x4	0.5/1.5ft	N Female



## Directional 4x4 MiMo 4G/5G Antenna



- 4x4 MiMo high gain directional antenna for 4G/5G
- 617-960/1710-6000MHz
- Optional integrated GPS/GNSS (WMM4GG)
- Supports new generation CAT 18/20 devices
- Suitable for wall or mast mounting

The WMM4G-6-60 is a high gain directional 4x4 MiMo antenna for 4G and 5G networks. It incorporates four pairs of wideband element assemblies in a single housing and is designed to support fixed site 4G CAT18/20 & 5G client devices. It offers 6dBi peak gain for 617-960MHz and 9dBi peak gain for 1710-6000MHz.

Part no.	GPS/GNSS	Cable & Connector
WMM4G-6-60-05NJ		0.5m (1.6') N-Female
WMM4G-6-60-5SP		5m (17') SMA Male
WMM4G-6-60-5FKJ		5m (17') FAKRA D
WMM4G-6-60-5NP		5m (17') N-Male
WMM4GG-6-60-05NJ	•	0.5m (1.6') N-Female
WMM4GG-6-60-5SP	•	5m (17') SMA Male
WMM4GG-6-60-5FKJ	•	5m (17') FAKRA D
WM-IN2582-10		10m (33') SMA Male
WM-IN2582-15		15m (50') SMA Male



## Directional 2x2 MiMo 4G/5G Antenna



- 2x2 MiMo high gain directional antenna for 4G/5G
- 617-960/1427-6000MHz
- Optional integrated GPS/GNSS (WMM2GG)
- Suitable for wall or mast mounting

The WMM2G-6-60 is a high gain directional 2x2 MiMo antenna for global 4G/5G networks from 617-6000MHz. Incorporating two separately fed ultra-wideband elements in a single housing, the antenna is suitable for a wide range of fixed site main and failover applications.

Part no.	GPS/GNSS	Cable & Connector
WMM2G-6-60-05NJ		0.5m (1.6') N-Female
WMM2G-6-60-5SP		5m (17') SMA Male
WMM2G-6-60-5NP		5m (17') N-Male
WMM2GG-6-60-05NJ	•	0.5m (1.6') N-Female
WMM2GG-6-60-5SP	•	5m (17') SMA Male



## 4x4 MiMo Directional Antenna

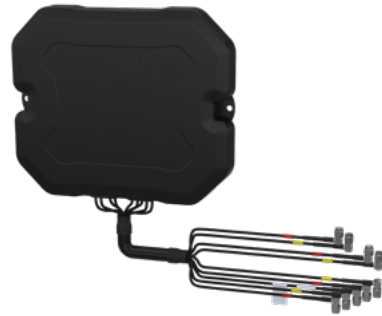


- 4x4 MiMo 4G/5G high band/S-band wall mount antenna 1710-4200MHz
- Low-profile and unobtrusive design
- Supplied with integrated low loss flame retardant cable
- Optional multi-tilt mast/wall bracket for adjustable vertical and horizontal tilt

The WMM48GB-17-42 range has been designed to provide directional 4x4 MiMo coverage for 4G & 5G including S-Band and CBRS networks in a low-profile wall or mast mount package. The compact, robust low-profile housing contains four antenna elements with effective isolation and low correlation covering 1710-4200MHz with over 7dBi peak gain.

The multi-tilt bracket supplied with the antenna is highly adjustable and provides for flexible installation.

Part no.	MiMo	Cable Length	Cable Length
WMM48GB-17-42-5SP	4x4	5m/16ft	SMA Male
WMM48GB-17-42-INP	4x4	1m/3.3ft	N Male



## 4x4 MiMo 4G/5G Case Mount Antenna



- 4x4 MiMo 4G/5G antenna solution for mounting in hard cases
- Optional L1 or L1/L5 GNSS and optional MiMo WiFi 6e
- Highly efficient elements
- Easy adhesive mounting
- Integrated flexible low loss cables loomed for easy routing

The CASEANT[[X]4-6-60-[X]] range is a 4x4 MiMo antenna solution designed for 4G/5G deployable cases. Covering 617-960/1427-6000MHz, it ensures reliable high data rates even in challenging environments, with efficient elements that operate whether the case is open or closed. Certain variants (CASEANTG[5]4) include GPS/GNSS modules with advanced filtering, and options with 2, 3, or 4 WiFi elements supporting WiFi 6e across 2.4-7.2GHz. It features low-loss flame-retardant cables, protective sleeving, and right-angled connectors for easy installation.

Part no.	MiMo 4G/5G	GPS/ GNSS	MiMo WiFi
CASEANT4-6-60	4x4		
CASEANT4G-6-60	4x4	•	
CASEANTG4-6-60-D	4x4	•	2x2
CASEANTG4-6-60-Q	4x4	•	4x4



# IoT



## Low-profile Panel Mount Antenna



- Cost effective 2G/3G/4G/5G antenna
- 617-960/1710-6000MHz
- Integrated ultra-low loss cable
- Robust, discrete design

The LPB-6-60 is supplied with integrated CS29 ultra-low loss coaxial cable and is available with various length and connectors fitted. This antenna is an ideal omnidirectional solution for use in industrial and domestic environments with cellular modems/routers and IoT & M2M wireless connectivity applications.

Part no.	Cable & Connector
LPB-6-60-05SP	0.5m (1'6") SMA Male
LPB-6-60-1SP	1m (3') SMA Male
LPB-6-60-2SP	2m (6'6") SMA Male
LPB-6-60-5SP	5m (17') SMA Male



## M2M & IoT SiSo LTE Antenna



- 2G/3G/4G LTE
- 698-960/170-2700MHz
- Discrete, vandal & tamper proof design
- Simple adhesive pad or screw fix installation
- Suitable for mounting on any surface

LPW provides a robust, effective antenna solution for M2M and IoT applications. The antenna is ground-plane independent, omnidirectional and covers all cellular and LTE bands, making it a universal and versatile solution. The efficient design of the antenna ensures a reliable network connection even in poor coverage areas.

Part no.	Cable & Connector
LPW-BC3G-26-2SP	2m (6'6") SMA Male
LPW-BC3G-26-2RSMAP	2m (6'6") R/A SMA Male*
LPW-BC3G-26-2FAKZJ	2m (6'6") FAKRA Z

\*R/A = Right Angle



## 4G/5G Bracket Mount Antenna



- Cost effective 2G/3G/4G/5G antenna
- 617-960/1710-6000MHz
- Wall or mast mount
- Integrated ultra-low loss cable

The B4BE-6-60 antenna is a cost effective omnidirectional multi-band antenna for 5G/4G/3G and 2G devices from 617-960/1710-6000MHz and is suitable for external or internal installation. The omnidirectional radiation pattern allows easy placement of the antenna in an elevated position.

Part no.	Cable & Connector
B4BE-6-60-05SP	0.5m (1'6") SMA Male
B4BE-6-60-2SP	2m (6'6") SMA Male
B4BE-6-60-5SP	5m (17') SMA Male



## 4G/5G Magnetic Mount Antenna



- Magnetic mount for 'no hole' installation
- 617-960/1710-6000MHz range (LPBEM)
- Covers 5G/4G/3G/2G LTE

The LPBEM-6-60 is a low cost high performance magnetic mount antennas for temporary fit applications. At only 95mm (3.7") high and protected by a robust high impact radome the LPBEM covers global cellular frequencies from 617-960 MHz and 1710-6000 MHz.

Although intended for magnetic mounting on a conductive ground plane the antenna can also be used for desk mounting applications with some impact on performance.

Part no.	Cable & Connector
LPBEM-6-60-2SP	2m (6'6") SMA Male
LPBEM-6-60-5SP	5m (17') SMA Male
MAR-7-21-2SP	2m (6'6") SMA Male



## Ultra Low-profile Puck Antenna



- Low-profile 'puck' design
- 698-960/1710-3800MHz
- Optional WiFi & GPS/GNSS function
- IP66 ingress & IK07 impact certified
- Mount on non-conductive (plastic) panel

The LP[G]P-7-38-[24-58] range is designed to provide a cost effective, robust, ultra low-profile antenna for M2M and IoT installations. Ideal for applications where low visibility to reduce risk of vandalism is required. The antenna includes a cellular element covering 698-960/1710-3800MHz and optional WiFi and GPS/GNSS elements. It is designed for mounting non-conductive panels.

Part no.	LTE	WiFi	GPS/GNSS	Cable Length
LPP-7-38-ISP	•			1m (3') SMA Male
LGP-7-38-ISP	•		•	1m (3') SMA Male
LPP-7-38-24-58-ISP	•	•		1m (3') SMA Male
LGP-7-38-24-58-ISP	•	•	•	1m (3') SMA Male*

\*WiFi cable has Reverse Polarity SMA



## Low-profile LTE Antenna



- 5G/4G/3G/2G
- 698-960/1710-3800MHz
- Optional 2.4/5.0GHz WiFi
- Optional integrated GPS/GNSS
- Ground plane independent
- Meets IK10, IP69K, UL94-V0, ECE R118, UL746C

The LP-7-38 antenna series is a range of very low-profile antennas incorporating a combination of wideband cellular element covering 4G/5G frequencies along with an optional active GPS/GNSS patch with 26dB LNA gain and an optional dual-band WiFi element all in a robust compact housing. The compact dome shaped housing is designed to minimise opportunities for vandalism and the antenna has an IK10 and IP69K rating when properly installed.

Part no.	Cable & Connector
LP-7-38-ISP	1m (3') SMA Male
LP-7-38-3SP	3m (10') SMA Male
LP-7-38-IFAK	1m (3') FAKRA D
LG-7-38-ISP	1m (3') SMA Male
LG-7-38-3SP	3m (10') SMA Male*
LG-7-38-24-58-ISP	1m (3') SMA Male*
LG-7-38-24-58-3SP	3m (10') SMA Male*

\*WiFi cable has Reverse Polarity SMA



## 4G Magnetic Mount Antenna



- Magnetic mount for 'no hole' installation
- Covers 4G/3G/2G LTE

The MAR-7-21 is a whip type compact magnetic cellular antenna for temporary mounting and no-drill installation. It covers the main LTE bands supporting 2G, 3G and 4G technologies. The stylish flexible design of the antenna whip gives a discreet appearance and resistance to damage.

Part no.	Cable & Connector
MAR-7-21-2SP	2m (6'6") SMA Male



## 4G/5G IoT SiSo Antenna



- SiSo Cellular IoT antenna
- 698-960/1710-4200MHz
- Robust and cost effective
- Low-profile and weatherproof housing

The LPA[L]-7-42 series is a range of highly efficient omnidirectional multi-band antennas for IOT devices suitable for external or internal installation. The design of the antenna enables simple wall mounting using the supplied screws and wall plugs, adhesive pad mounting or mast mounting using the supplied cable ties. The omnidirectional radiation pattern allows easy placement and flexible installation. The LPA versions are supplied with integrated flexible RG174 cable while LPAL versions are supplied with CS29 cable for longer cable runs up to 5m (16.4').

Part no.	Cable & Connector
LPA-7-42-2SP	2m (6.6') SMA Male
LPA-7-42-2RFDJ	2m (6.6') R/A FAKRA D
LPAL-7-42-5SP	5m (16.4') SMA Male

\*R/A = Right Angle





## MiMo 4G/5G + WiFi Panel Mount



- 2x2 MiMo 4G/5G 698-960/1710-3800MHz
- 2x2 MiMo WiFi 2.4/5.0GHz
- Optional integrated GPS/GNSS antenna
- Robust and cost effective solution
- Magnetic version available
- Low-profile fin design

The LPAM/LGAM range has a compact housing and is ideal for vending machines, payment terminals and other M2M type applications. It can be fitted on a metal or plastic mounting panel. A magnetic mount version is also available.

Part no.	GPS/ GNSS	Magnetic Base	Cable Length
LPAM-7-27-24-58			3m (10')
LPAM-7-27-24-58-IS			1m (3')
LPAMM-7-27-24-58-IS		•	1m (3')
LPAMM-7-27-24-58-3		•	3m (10')
LGAM-7-27-24-58	•		3m (10')
LGAMM-7-27-24-58-1	•	•	1m (3')
LGAM-7-27-24-58-IS	•		1m (3')
LGAMM-7-27-24-58-3	•	•	3m (10')

\*Antenna supplied with SMA Male (LTE & GNSS) and Reverse Polarity SMA (WiFi)



## MiMo LTE Panel Mount



- 2x2 MiMo 4G/5G 698-960/1710-3800MHz
- Optional integrated GPS/GNSS antenna
- Robust and cost effective
- Magnetic version available
- Low-profile and weatherproof housing

The LPAM/LGAM range has been designed to provide 2x2 MiMo LTE/Cellular antenna function for IoT and M2M applications. The compact, robust low-profile housing is weatherproof and contains two cellular LTE antenna elements with effective isolation. A magnetic mount version is also available.

Part no.	GPS/ GNSS	Magnetic Base	Cable Length*
LPAM-BC3G-26-ISP			1m (3')
LPAMM-BC3G-ISP		•	1m (3')
LGAM-BC3G-26-ISP	•		1m (3')
LGAMM-BC3G-26-ISP	•	•	1m (3')
LPAM-BC3G-26-3SP			3m (10')
LPAMM-BC3G-3SP		•	3m (10')
LGAM-BC3G-26-3SP	•		3m (10')
LGAMM-BC3G-26-3SP	•	•	3m (10')

\*SMA Male



## Low-profile MiMo 4G Antenna



- 2x2 MiMo 698-960/1427-2700MHz
- Ultra low-profile – 30mm high
- IP69K and IK10 rated
- UV protected and weatherproof

The LPM2-7-27 range has been designed to provide MiMo 4G/LTE, coverage in an ultra low-profile package. The compact, robust, low-profile, housing is weatherproof and contains two antenna elements with effective isolation and low correlation coefficient covering 698-960/1427-2700MHz.

Part no.	MiMo 4G/5G	Cable & Connector
LPM2-7-27-2SP	2x2	2m (6.6') SMA Male



## 4G/5G MiMo IoT Antenna



- 2x2 MiMo 4G/5G LTE antenna
- Low-profile combination product
- Up to 7 antennas in 1 housing
- Covers wideband 617-960/1427-6000MHz
- Optional GPS/GNSS and up to 4x4 MiMo WiFi
- Meets IP69K

The LP[G]AM[F]-6-60 platform contains a 2x2 MiMo antenna function for 4G/5G (617-960/1427-6000MHz) and the option of 2x2, 3x3 or 4x4 MiMo dual-band WiFi, which supports WiFi 6E. An optional active antenna for GPS/GLONASS/Galileo/BeiDou can be included, with 26dB gain LNA and advanced filtering for LTE Band 13/14 operation.

Part no.	GPS/ GNSS	2G/3G/4G/5G MiMo LTE	MiMo WiFi
LGAM-6-60-Q24	•	2x2	4x4
LGAM-6-60-D24	•	2x2	2x2
LGAM-6-60	•	2x2	
LPAM-6-60		2x2	



## The Clam<sup>®</sup> 4x4 MiMo 4G/5G IoT Antenna



- Low-profile IoT antenna
- 4x4 MiMo 698-960/1427-4200MHz
- Up to 4x4 MiMo WiFi 6e (optional)
- GPS/GNSS L1/L5 or L1 only 30dB/26dB LNA (optional)
- Meets IK10 and IP69K

The L[X]A[X]M4-7-42[-X] MiMo antenna is designed to be a one size fits all solution for IoT applications. The robust low-profile housing contains 4x 4G LTE/5G NR elements covering 698-960/1427-4200MHz. Versions of the product also contain up to 4x optional WiFi elements supporting WiFi 6e 2.4/5.150-7.125GHz and optional L1 only or L1/L5 GPS/GNSS.

Part no.	GPS/ GNSS	MiMo 4G/5G	MiMo WiFi
LGAQM4-7-42	•	4x4	4x4
LGADM4-7-42	•	4x4	2x2
LGAM4-7-42	•	4x4	
LPAM4-7-42		4x4	



## The Clam<sup>®</sup> 4x4 MiMo Magnetic Mount 4G/5G IoT Antenna



- Low-profile IoT antenna
- 4x4 MiMo 698-960/1427-4200MHz
- Up to 4x4 MiMo WiFi 6e (optional)
- GPS/GNSS L1/L5 or L1 only 30dB/26dB LNA (optional)
- Meets IK10 and IP65

The L[X]A[X]MM4-7-42[-X] MiMo antenna is designed to be a one size fits all solution for IoT applications. The robust low-profile housing contains 4x 4G LTE/5G NR elements covering 698-960/1427-4200MHz. Versions of the product also contain up to 4x optional WiFi elements supporting WiFi 6e 2.4/5.150-7.125GHz and optional L1 only or L1/L5 GPS/GNSS. Designed for magnetic or adhesive mounting the magnetic Clam offers a cost-effective no-drill option for IoT installations.

Part no.	GPS/ GNSS	MiMo 4G/5G	MiMo WiFi
LGAQMM4-7-42	•	4x4	4x4
LGADMM4-7-42	•	4x4	2x2
LGAMM4-7-42	•	4x4	
LPAMM4-7-42		4x4	

# DAS



## Low PIM SiSo LTE Ceiling Antenna



- 5G/4G/3G/2G
- Low-profile antenna
- Flame retardant materials
- Low PIM (>-150dBc)
- Meets UL94-V0 requirements

The CMSLP-6-60 range has been designed to provide omnidirectional coverage for 4G & 5G networks in a low-profile package. The compact, robust low-profile housing contains an efficient low PIM element covering 617-960/1710-6000MHz. The antenna is designed to be ceiling mounted and can be fitted on a conductive or non-conductive panel.

## Low PIM MiMo LTE Ceiling Antenna



- 2x2 MiMo 5G/4G 617-960/1710-6000MHz
- Low-profile antenna
- Flame retardant materials
- Low PIM (>-150dBc)
- Meets UL94-V0 Requirements

The CMM-6-60 range has been designed to provide 2x2 MiMo coverage for 4G & 5G networks in a low-profile package. The compact, robust low-profile housing contains two antenna elements with effective isolation and correlation covering 617-960/1710-6000MHz.

Part no.	Connector	Part no.	Connector
CMSLP-6-60-05NJ	N-Female	CMM-6-60-05NJ	N-Female
CMSLP-6-60-054310J	4.3-10 Female	CMM-6-60-054310	4.3-10 Female



## Ultra-low-profile SiSo UHF/Cellular



- Covers 380-3800MHz
- Ultra low-profile omnidirectional ceiling antenna
- Flame retardant housing
- Low PIM design

The CMSLP-038-4 range has been designed to provide SiSo UHF/3G/4G & 3.8GHz 5G function for DAS networks in an ultra low-profile package. The compact, robust low-profile housing contains a highly efficient antenna element covering 380-520/617-960/1710-3800MHz. At <22mm (0.85") deep the antenna is extremely discreet and ideal for low height clearance deployment locations.

Part no.	Connector
CMSLP-038-4-05NJ	N-Female
CMSLP-038-4-054310	4.3-10 Female

## High Gain Directional SiSo LTE Antenna



- Covers 4G/3G/2G
- 698-960/1710-2700MHz
- Mast or wall mount
- Weather proof housing
- Low PIM (>-150dBc) & SAR 'Touchsafe' rated

The WM8 series is a high gain directional antenna with low PIM performance. Ideal for use as a donor antenna for in-building applications, it supports multi-service and multi-operator wireless systems. The antenna covers 4G, 3G & 2G technologies with max. 8dBi gain and has a N-socket connector. The antenna has a sealed, impact resistant, UV light stable and flame retardant plastic enclosure, and is supplied with mounting hardware to suit wall or mast mounting installation.

Part no.	Connector
WM8-BADEP3G-26-NJ	N-Female

# Mobility



## GPSD MiMo Sharkee®

## SHK[G] MiMo Sharkee®



- Covers 698-960/1710-3800MHz
- 2x2 MiMo 5G/4G/3G/2G
- Integrated GPS/GNSS antenna
- Optional 2x2 MiMo WiFi
- Mounting stud for comms whip

- Covers 698-960/1710-3800MHz
- 2x2 MiMo 5G/4G/3G/2G
- Optional 2x2 or 3x3 MiMo WiFi
- Optional integrated GPS/GNSS

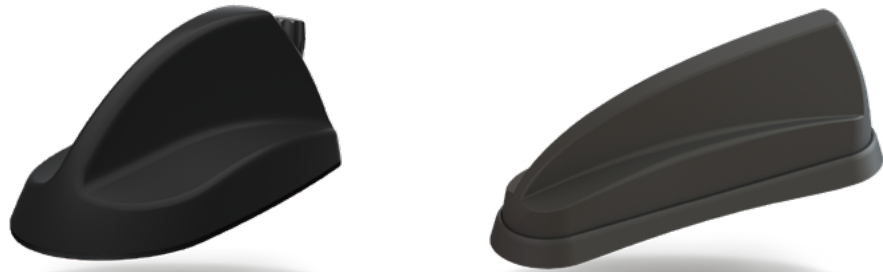
The GPSD range provides multiple functions in an OEM-style sharkfin housing with single-hole mounting, reducing vehicle damage, installation time, and visual impact. Available in black or white.

The SHK[G] range is a version of the GPSD Sharkee® range without a whip position. The antenna range integrates 2x2 MiMo cellular with optional GPS/GNSS and up to 3x3 MiMo WiFi in a similar sleek OEM sharkfin style housing. Available in black or white.

Part no.	MiMo 4G/5G	MiMo WiFi	GPS/ GNSS	External Whip
GPSD-7-27	2x2		•	•
GPSD-7-27-24-58	2x2	2x2	•	•

Part no.	MiMo 4G/5G	MiMo WiFi	GPS/ GNSS
SHK-7-27	2x2		
SHKG-7-27	2x2		•
SHKG-7-27-24-58	2x2	2x2	•
SHKG-7-27-T24-58	2x2	3x3	•
SHKGW-7-27*	2x2		•
SHKGW-7-27-24-58**	2x2	2x2	•

\*White version \*\*Antenna only part number shown above. For antenna with full cable kit parts, contact your sales representative



## GPSB5G



- Covers 698-960/1710-3800MHz
- SiSo 5G/4G/3G/2G
- Integrated GPS/GNSS antenna
- SiSo WiFi 2.4/5GHz
- Mounting stud for comms whip

The GPSB5G is an OEM-style, shark fin antenna with three internal antenna systems, GPS/ GNSS, 2G/3G/4G/5G cellular, dual-band WiFi and an optional whip mounting for VHF or UHF whips. Requiring only a single-hole fixing, the GPSB5G reduces vehicle damage, cost of installation and visual impact whilst protecting vehicle resale value.

Part no.	SiSo 4G/5G	SiSo WiFi	GPS/ GNSS	External Whip
GPSB5G*	•	•	•	•

\*Antenna only part number shown above. For antenna with full cable kit parts, contact your sales representative.

## 4G/5G MiMo Sharkee® 5G

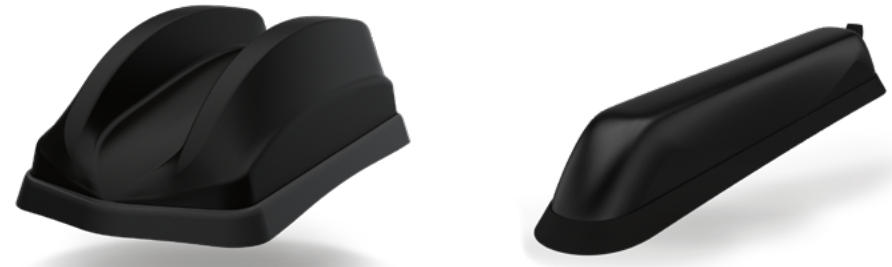


- 2x2 MiMo 5G/4G LTE
- 617-960/1427-6000MHz
- Optional integrated GPS/GNSS
- Up to 4x4 MiMo WiFi 2.4/5GHz
- External whip option (GPSD)
- ECE R118 compliant cables

The GPSD/SHK[G] Sharkee® range has become a byword for industry leading technology in a discrete OEM sharkfin housing. The 6-60 brings extended frequency 5G capability to the Sharkee® family.

Part no.*	MiMo 4G/5G	MiMo WiFi	GPS/ GNSS	External Whip
GPSD-6-60	2x2		•	•
GPSD-6-60-DW	2x2	2x2	•	•
GPSD-6-60-TW	2x2	3x3	•	•
GPSD-6-60-QW	2x2	4x4	•	•
SHKG-6-60	2x2		•	
SHKG-6-60-DW	2x2	2x2	•	
SHKG-6-60-TW	2x2	3x3	•	
SHKG-6-60-QW	2x2	4x4	•	

\*Part numbers refer to the black version only. Antenna only part number shown above. For antenna with full cable kit parts, contact your sales representative



## 4x4 MiMo 4G/5G Dual Fin Antenna



- 4x4 MiMo 4G/5G
- 617-960/1710-6000MHz
- Integrated GPS/GNSS
- Up to 6x6 MiMo WiFi 2.4/5.0-7.2GHz
- ECE R118 compliant cables
- Mounting stud for comms whip (GPSD4)

The SHK/GPS[X]D4[X]-6-60[-X] is an advanced antenna combining 4G/5G, GPS/GNSS, and WiFi in a dual sharkfin – style housing. Featuring a 4x4 MiMo antenna for 4G/5G and dual-band WiFi with up to 6x6 MiMo, supporting WiFi 6e, it can also accommodate up to four active GPS/GNSS antennas.

Part no.*	MiMo 4G/5G	MiMo WiFi	GPS/ GNSS
GPSD4-6-60	4x4		•
GPSD4-6-60-D	4x4	2x2	•
GPSD4-6-60-T	4x4	3x3	•
GPSD4-6-60-Q	4x4	4x4	•
SHKG4-6-60	4x4		•
SHKG4-6-60-D	4x4	2x2	•
SHKG4-6-60-T	4x4	3x3	•
SHKG4-6-60-Q	4x4	4x4	•

\*Part numbers refer to the black version only. Antenna only part number shown above. For antenna with full cable kit parts, contact your sales representative

## Reef Sharkee® 4x4 MiMo Antenna



- Sleek low-profile shark fin design
- 4x4 MiMo 698-960/1427-4900MHz
- Up to 4x4 MiMo WiFi 6e (optional)
- Optional GPS/GNSS L1/L5 or L1 only 30dB/26dB LNA
- IP69K rated
- Single hole installation

The Reef Sharkee® antenna is designed to be a discrete one size fits all solution for mobile applications. The robust low-profile housing contains 4x 4G LTE/5G NR elements covering 698 – 960/1427-4900MHz. Versions of the product also contain up to 4x optional WiFi elements supporting WiFi 6e 2.4/5.150-7.125GHz and optional L1 only or L1/L5 GPS/GNSS module. The optional whip position allows the use of a single, dual or tri-band whip operating across the VHF, UHF and 7/800MHz bands.

Part no.*	MiMo 4G/5G	MiMo WiFi	GPS/ GNSS	External Whip
GPSD4-7-49-Q	4x4	4x4	•	•
GPSD4-7-49-D	4x4	2x2	•	•
GPSD4-7-49	4x4		•	•
FIND4-7-49	4x4			•



## 5G Great White® 4G/5G 2x2 MiMo Dome



- 2x2 MiMo 5G/4G
- 617-960/1710-6000MHz
- Optional integrated GPS/GNSS
- Up to 6x6 MiMo WiFi 2.4/5.0-7.2GHz
- ECE R118 compliant cables
- IP69K & IK10 Rated

The LPMM/LGMM range provides effective 2x2 MiMo operation with excellent isolation and low correlation coefficient. Optional GPS/GNSS module incorporates advanced filtering. Available in black or white.

Part no.*	MiMo 4G/5G	MiMo WiFi	GPS/GNSS
LPMM-6-60	2x2		
LGMM-6-60	2x2		•
LGMDM-6-60-24-58	2x2	2x2	•
LGMTM-6-60-24-58	2x2	3x3	•
LGMQM-6-60-24-58	2x2	4x4	•
LGMHM-6-60-24-58	2x2	6x6	•

\*Part numbers refer to the black version only. Antenna only part number shown above. For antenna with full cable kit parts, contact your sales representative

## Mako® 5G 4x4 MiMo Dome



- 4x4 MiMo 5G/4G
- 617-960/1710-6000MHz
- Optional integrated GPS/GNSS
- Up to 6x6 MiMo WiFi 2.4/5.0GHz
- ECE R118 compliant cables
- IP69K & IK10 rated

The LPMM4/LGMM4 enables multiple antenna functions to be fitted using a single-hole mount. Designed for use with Advance Pro routers that require a 4x4 5G/4G LTE MiMo antenna system. Optional GPS/GNSS module incorporates advanced filtering. Available in black or white.

Part no.*	MiMo 4G/5G	MiMo WiFi	GPS/GNSS
LPMM4-6-60	4x4		
LGMM4-6-60	4x4		•
LGMDM4-6-60-24-58	4x4	2x2	•
LGMTM4-6-60-24-58	4x4	3x3	•
LGMQM4-6-60-24-58	4x4	4x4	•
LGMHM4-6-60-24-58	4x4	6x6	•

\*Part numbers refer to the white version only. Antenna only part number shown above. For antenna with full cable kit parts, contact your sales representative.



## Fez 5G Antenna



- 5G/4G/3G/2G
- 617-960/1427-6000MHz SiSo element
- Optional 2x2 or 4x4 MiMo WiFi
- Optional integrated GPS/GNSS antenna
- Does not require a ground plane

The Fez 5G antenna series is a range of low-profile antennas that features a wideband cellular element covering 617-960/1427-6000MHz with option to include an active GPS/GNSS antenna and up to four dualband WiFi 6e elements all in a robust compact housing.

Part no.	4G/5G	GPS/GNSS	WiFi	MiMo WiFi
LPE-6-60	•			
LGE-6-60	•	•		
LGE-6-60-SW	•	•	•	
LGE-6-60-DW	•	•		2x2
LGE-6-60-QW	•	•		4x4

\*Part numbers refer to the black version only. Antenna only part number shown above. For antenna with full cable kit parts, contact your sales representative.



## BAT Covert MiMo Antenna



- 2x2 MiMo 5G/4G
- 617-960/1710-6000MHz
- Optional integrated GPS/GNSS
- Optional SiSo or 2x2 MiMo WiFi 2.4/5GHz
- ECE R118 compliant cables

The BAT range is an ideal 2x2 MiMo 4G/5G antenna for covert installations with fall back capability to 3G/2G. It can also incorporate a GPS/GNSS antenna and single or 2x2 MiMo dual-band WiFi antenna(s). Designed for adhesive mounting on windows or on or under the dashboard this antenna is ideal for no-drill installation inside vehicles.

Part no.	MiMo LTE	GPS/GNSS	WiFi	MiMo WiFi
BATM-7-60	2x2			
BATGM-7-60	2x2	•		
BATGM-7-60-S24-58	2x2	•	•	
BATGM-7-60-24-58	2x2	•		2x2



## Internal LTE/GNSS Puck Antenna



- 4G/3G/2G LTE
- 698-960/1710-2700MHz SiSo
- Integrated GPS/GNSS
- Windscreen or dashboard mount
- Adhesive pad fixing
- Flexible mounting system

The GPSC series is a combined cellular/LTE + active GPS/GNSS antenna for internal or covert installation. This discrete antenna is an ideal solution for tracking or navigation systems and offers much improved performance over embedded antennas.

Part no.	Cable & connector
GPSC-7-27-3SP	3m (10') SMA Male
GPSC-7-27-3FAKRA	3m (10') FAKRA D (Cell) 3m (10') FAKRA C (GPS)



## Stingray SiSo Internal Antenna



- Cellular, WiFi and GPS/GNSS included
- Dashboard or windshield mount
- Suitable for M3 category vehicles (cables compliant with ECE R118)

This internal antenna offers a 3 in 1 solution ideal for telematics or other vehicle communications, where the antenna needs to be fitted discretely or for a no hole installation. The compact housing incorporates antennas for LTE/cellular, dual-band WiFi and GPS/GNSS. Supplied with cables meeting the requirements of UN ECE R118, the antenna is suitable for use in M3 category vehicles (transportation). The antenna housing is UV resistant and flame-retardant, while the integrated coax cables are flame-retardant, low smoke specification.

Part no.	Cable & connector
GPSCO-7-27-24-58	3m (10') SMA Male
GPSCOF-7-27-24-58	3m (10') FAKRA D (Cell) 3m (10') FAKRA C (GPS) 3m (10') FAKRA I (WiFi)



## Heavy Duty SiSo Transit Antenna



- 5G/4G/3G/2G
- 698-960/1427-6000MHz
- Optional integrated GPS/GNSS antenna
- Fully rail industry certified
- IP69K rated

The TRNC[G] series antenna can be used for either Cellular or WiFi applications. It has been specifically designed to meet railway engineering standards and features a DC grounded radiating element. The antenna has a heavy duty cast aluminium base and is housed in a high impact, flame-retardant radome moulded in Ultem which provides ingress protection to IP69K.

The antenna is certified to EN50155, EN45545 and EN50124 (40Ka 100ms) making it ideal for rolling stock applications.

Part no.	GPS/GNSS	Cellular/WiFi
TRNC-7-60		•
TRNCG-7-60	•	•



## Internal MiMo 4G/5G Antenna



- 4G/5G MiMo 617-960/1427-6000MHz
- Optional 2x2, 3x3 or 4x4 MiMo WiFi 6e
- Active GPS/GNSS with advanced B13/14 filtering
- Covert/discrete adhesive internal antenna

The BAT[X]M4 range is a discrete or covert 4x4 MiMo antenna solution for 4G / 5G with the option of GPS/GNSS, and 2x2, 3x3 or 4x4 dual band 2.4/5.0-7.2GHz WiFi 6e. The antenna is designed for no-drill adhesive installation inside vehicles and is fitted with 3m (10') cables compliant with UN ECE R118.

Part no.	GPS/GNSS	MiMo 4G/5G	MiMo WiFi
BATGM-7-60-24-58	•	2x2	2x2
BATGM-7-60	•	2x2	
BATM-7-60		2x2	



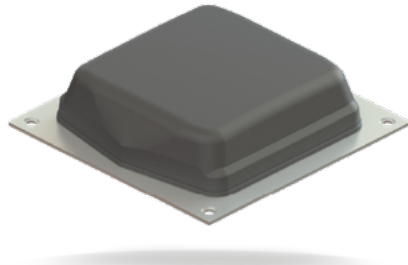
## Heavy Duty MiMo Transit Antenna



- 2x2 MiMo 5G/4G
- 698-960/1710-6000MHz
- Optional integrated GPS/GNSS with surge arrestor
- Fully rail industry certified
- IP69K rated

The TRNM[G]-7-60 2x2 MiMo antenna series is designed specifically for use on trains (under/overground), trams and buses. Incorporating two DC grounded wideband elements for 698MHz to 6000MHz, the TRNM(G) range is versatile and future-proof. The TRNM(G)-7-60 series is suitable for use with all cellular 4G/5G bands and 2.4/5GHz WiFi. The antenna is certified to EN50155, EN45545 and EN50124 (40Ka 100ms) making it ideal for rolling stock applications.

Part no.	GPS/GNSS	MiMo 4G/5G
TRNM-7-60-NJ		2x2
TRNMG-7-60-NJ	•	2x2



## 4x4 MiMo 4G/5G Transit Antenna



- Low-profile transit antenna
- 4x4 MiMo 617-960/1427-6000MHz
- Up to 4x4 MiMo WiFi 6e
- Up to 2x GPS/GNSS L1
- Meets railway standards EN50155, EN45545-2 and EN50124-1

The TRNM[X]4-6-60[-X] MiMo antenna series is designed specifically for use on trains (under/overground), trams and buses. Incorporating four wideband elements, covering 617MHz to 6000MHz the TRNM[X]4-6-60[-X] range is versatile and future-proof. The antenna is certified to EN50155, EN45545 and EN50124 (40Ka 100ms) making it ideal for rolling stock applications.

Part no.	GPS/GNSS	MiMo 4G/5G	MiMo WiFi
TRNMG4-6-60-Q	•	4x4	4x4
TRNMG4-6-60-T	•	4x4	3x3
TRNMG4-6-60-D	•	4x4	2x2
TRNMG4-6-60-S	•	4x4	SiSo
TRNMG4-6-60	•	4x4	
TRNM4-6-60		4x4	



## Megalodon® 8x 4G/5G Low-Profile Antenna



- 8x 4G/5G elements
- Up to 8x8 MiMo dual-band WiFi 6e/7
- Up to 2 GPS/GNSS L1 or L1/L5 bands
- Meets IK10 and IP69K
- Low height
- UN ECE R118 compliant cables

The industry leading Megalodon® range has been developed to provide 2x 4x4 MiMo 4G/5G antenna systems covering 617-960/1427-6000MHz within a robust low-profile package. Covering global cellular bands for future-proof performance, the antenna provides effective functionality for 2x 4G Cat 18/20 and/or 5G modems. This can be combined with a number of other functions including single/dual band GPS/GNSS and up to 8x8 MiMo WiFi elements covering 2.4-7.2GHz (WiFi 6e/7).

The antenna is designed to be panel mounted and can be fitted on a conductive or non-conductive panel. Supplied with integrated flame retardant low-loss CS30 cables (compliant to UN ECE R118) and a halogen free, flame retardant radome, the antenna is suitable for many environments and applications, including public safety and transportation.

The LGM variants have an integrated GPS/GNSS module supporting either L1 only or L1/L5 frequencies. This GPS module features advanced filtering for LTE B13/14 designed to minimise potential in band interference.

The antenna is available with a black or white radome which meets IK10 for vandal resistance and IP69K for ingress protection.

Part no.	GPS/GNSS	MiMo 4G/5G	MiMo WiFi
LGMOM8-6-60	•	8x8	8x8
LGMHM8-6-60	•	8x8	6x6
LGMQM8-6-60	•	8x8	4x4
LGMDM8-6-60	•	8x8	2x2
LGMM8-6-60	•	8x8	
LPMM8-6-60		8x8	

\*Part numbers refer to the white version only. Antenna only part number shown above. For antenna with full cable kit parts, contact your sales representative.





## Omnidirectional SiSo 4G/5G Antenna



- SiSo omnidirectional antenna for 4G/5G
- 617-960/1427-6000MHz
- Optional integrated GPS/GNSS
- Suitable for wall, mast & marine mount applications

The BS[G]M-6-60 antenna is a SiSo 4G/5G omnidirectional solution. It covers 617-960/1427-6000MHz and is IP67 certified making it suitable for indoor or outdoor use. Supplied with integrated low loss cable assemblies the antenna is suitable for wall or mast mounting and using the optional SAB-315 adaptor allows the antenna to mount to standard 1" 14TPI marine mounts. BSGS-6-60 versions include active GPS/GNSS.

Part no.	GPS/GNSS	Cable & Connector
BSGS-6-60-5SP	•	5m(16.4') SMA plug
BSGS-6-60-05Nj	•	0.5m(1.6') N Jack
BSS-6-60-5SP		5m(16.4') SMA plug
BSS-6-60-05Nj		0.5m(1.6') N Jack



## Omnidirectional 2x2 MiMo 4G/5G Antenna



- 2x2 MiMo omnidirectional antenna for 4G/5G
- 617-960/1427-6000MHz
- Optional integrated GPS/GNSS
- Suitable for wall, mast & marine mount applications

The BSM-6-60 antenna is a 2x2 MiMo 4G/5G medium gain omnidirectional solution. It covers 617-960/1427-6000MHz and is IP67 certified making it suitable for indoor or outdoor use. Supplied with integrated low loss cable assemblies the antenna is suitable for wall or mast mounting and using the optional SAB-315 adaptor allows the antenna to mount to standard 1" 14TPI marine mounts. BSGM-6-60 versions include active GPS/GNSS.

Part no.	GPS/GNSS	Connector
BSM-6-60-5SP		5m (17') SMA Male
BSM-6-60-5FKj		5m (17') FAKRA D
BSM-6-60-5NP		5m (17') N-Male
BSM-6-60-05Nj		0.5m (1.6') N-Female
BSGM-6-60-5SP	•	5m (17') SMA Male
BSGM-6-60-5NP	•	5m (17') N-Male
BSGM-6-60-5FKj	•	5m (17') FAKRA D
BSGM-6-60-05Nj	•	0.5m (1.6') N-Female

# Private Networks



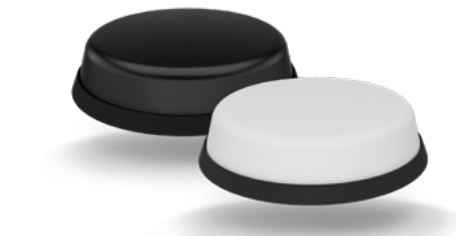
## Low-profile MiMo Private LTE/CBRS Antenna



- Low-profile antenna
- Cost effective solution
- Covers CBRS, 3.5GHz LTE band & 5GHz private LTE bands
- Up to 4x4 MiMo covering 3.4-3.8GHz and 4.9-6GHz
- IP66 rated for outdoor use
- Ultra compact antenna profile

The LPPM[X]-36-55-[VAR] range has been designed to provide MiMo dual-band private LTE/CBRS coverage in an ultra compact package. The compact, low-profile housing contains up to four antenna elements with effective isolation and low correlation covering 3.4-3.8/4.9-6GHz.

Part no.	MiMo	Cable Length & Connector
LPPM4-36-55-2SP	4x4	2m SMA Male



## Ultra Low-profile WiFi/5G MiMo Antenna



- Ultra Low-profile
- Covers WiFi, 4G and 5G frequencies from 2.3-7.2GHz
- 2x2, 3x3 or 4x4 MiMo
- IP69K and IK10

The L[X]M[X]-24-72-[X] range has been designed to provide an optimised antenna solution for LTE and 5G private networks applications using S-band, C – band and CBRS frequencies, requiring 2x2, 3x3 or 4x4 MiMo capability in a very low-profile package.

The antenna is ideal for private LTE and 5G networks especially for endpoints requiring a robust omnidirectional antenna.

Part no.	MiMo	Cable Length & Connector
LPM2W-24-72-2SP	2x2	2m SMA plug
LPM3W-24-72-2SP	3x3	2m SMA plug
LPM4W-24-72-2SP	4x4	2m SMA plug



## Directional MiMo Antenna



- High gain directional antenna
- Up to 4x4 MiMo capability
- Wide band 2.3-7.2GHz
- Compact solution
- Easy to install

The WMM[X]9G-24-72-NJ is a high directional gain 2x2, 3x3 or 4x4 MiMo antenna for WiFi, 5G and P-LTE networks operating in S-band C-band and at CBRS frequencies. Incorporating two, three or four separately fed gain element assemblies in a single housing the WMM[X]9G-24-72-NJ is equipped to provide client-side MiMo support for modern networks.

The antenna is fitted with N bulkhead jacks for easy installation of low loss cable runs.

Part no.	MiMo WiFi
WMM[X]9G-24-72-NJ	2x2
WMM39G-24-72-NJ	3x3
WMM49G-24-72-NJ	4x4



## 4x4 MiMo Directional Antenna



- 4x4 MiMo 4G/5G high band/S-band wall mount antenna
- Low-profile and unobtrusive design
- Supplied with integrated low loss flame retardant cable
- Optional multi-tilt mast/wall bracket for adjustable vertical and horizontal tilt

The WMM48GB-17-42 range has been designed to provide directional 4x4 MiMo coverage for 4G & 5G including S-band and CBRS networks in a low-profile wall or mast mount package. The compact, robust low-profile housing contains four antenna elements with effective isolation and low correlation covering 1710-4200MHz with over 7dBi peak gain.

Part no.	MiMo 4G/5G	Cable Length & Connector
WMM48GB-17-42-INP	2x2	1m/3ft N Male
WMM48GB-17-42-5SP	2x2	5m/16ft SMA Male



WiFi



## WiFi 2.4/5.0GHz Easyfit Antenna



- Adhesive mount antenna
- Install on window or plastic panel
- Dual-band WiFi 2.4/5.0GHz
- SMA or FAKRA I connector options

EF-24-58 is an efficient and easy to install antenna for providing WiFi connectivity. The compact antenna can be easily positioned on a device plastic housing or vehicle windscreen using the supplied automotive industry grade adhesive pad. Versions are available with rev pol SMA plug, standard SMA plug or FAKRA I jack connectors.

Part no.	Cable & connector
EF-24-58-3RPSP	3m (10') Rev Pol SMA
EF-24-58-3SP	3m (10') SMA Male
EF-24-58-3F1J	3m (10') FAKRA I



## Dual Band WiFi Terminal Paddle Antenna



- Dual-band 2.4/5.0-7.2GHz WiFi
- Suitable for routers and terminals
- Articulated connector

The PWB-24-58-72 antenna is a ground plane independent, efficient antenna covering 2.4/5.0-7.2GHz WiFi bands and is fitted with an articulated reverse polarity SMA plug. Ideal for use where only a device mounted WiFi antenna is required, the PWB-24-58 offers a flexible solution with an aesthetic paddle styling and is compatible with most router devices.

Part no.	Connector
PWB-24-58-72-RSMARV	SMA Male (Rev. Pol.)
PWB-24-58-72-RF1J	Fakra I Jack



## SiSo WiFi Panel Antenna



- Covers 2.4 & 5GHz dual-band WiFi
- SMA-Female connector
- High gain directional antenna
- Ideal WiFi coverage extender

The W24-58-CP-9 is a 9dBi gain dual-band WiFi antenna covering 2.4 & 5GHz bands. The antenna can be used internally or externally and has 60° beam width in both azimuth and elevation planes.

Part no.	WiFi
W24-58-CP-9	•



## Directional MiMo Antenna



**IP66 RATED**

- High gain directional antenna
- Up to 4x4 MiMo capability
- Wide band 2.3-7.2GHz
- Compact solution
- Easy to install

The WMM[X]9G-24-72-NJ is a high directional gain 2x2, 3x3 or 4x4 MiMo antenna for WiFi, 5G and P-LTE networks. Incorporating two, three or four separately fed gain element assemblies in a single housing the WMM[X]9G-24-72-NJ is equipped to provide client-side MiMo support for modern networks. The antenna is fitted with N bulkhead jacks for easy installation of low loss cable runs.

Part no.	MiMo WiFi
WMM[X]9G-24-72-NJ	2x2
WMM39G-24-72-NJ	3x3
WMM49G-24-72-NJ	4x4



## Ultra Low-profile WiFi/5G MiMo Antenna



**IP69K RATED**

**IK10 RATED**

- Ultra Low-profile
- Covers WiFi, 4G and 5G frequencies from 2.3-7.2GHz
- 2x2, 3x3 or 4x4 MiMo
- IP69K and IK10

The L[X]M[X]-24-72-[X] range has been designed to provide an optimised antenna solution for WiFi 6e/7 and some 5G applications requiring 2x2, 3x3 or 4x4 MiMo capability in a very low-profile package. The antenna is approved to EN50155 and EN45545 and with cables approved to UN ECE R118 the antenna is ideal for WiFi distribution for mass transit applications.

Part no.	MiMo WiFi	Cable Length & Connector
LPM2W-24-72-2RPSP	2x2	2m Rev Pol SMA
LPM3W-24-72-2RPSP	3x3	2m Rev Pol SMA
LPM4W-24-72-2RPSP	4x4	2m Rev Pol SMA



## Dashboard/Windshield MiMo WiFi Antenna



- Supports 2x2 MiMo WiFi 2.4/5.0GHz
- Mount on or under the dashboard on the windshield
- Integrated double shielded low loss cables compliant to UN ECE R118
- Optional GPS/GNSS

The RAYM2-24-58 range has been designed as a cost effective solution for telematics/asset tracking applications MiMo WiFi. The compact, robust low-profile housing contains two elements providing MiMo WiFi 2.4/5.0GHz coverage. The antenna can be fitted on or under a vehicle dashboard or on a windshield using the supplied acrylic adhesive sealing pad. Supplied with integrated 3m (10') cables that are compliant with UN ECE R118 and fitted with Rev Pol SMA Plug connectors, the antenna will offer plug and play connectivity with many different devices. The GPSCOM2 variant adds GPS/GNSS functionality to this versatile product line.

Part no.	GPS/GNSS	MiMo WiFi	Cable Length & Connector
RAYM2-24-58		2x2	3m Rev Pol SMA
GPSCOM2-24-58	•	2x2	3m Rev Pol SMA Plug for GPS/GNSS

# Accessories

## Magnetic mounting adaptors

Magnetic adapters for temporary fitment and drive testing of mobility antennas



### SAB-224

Compatible with MiMo Sharkee® range [page 23](#).



### SAB-333

Compatible with Dual Sharkee® range [page 25](#).



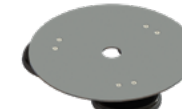
### SAB-350

Compatible with Reef Sharkee® range [page 25](#).



### SAB-254

Compatible with 4G/5G MiMo Sharkee® 5G range [page 24](#).



### SAB-225

Compatible with 5G Great White® and Mako® ranges [page 26](#).



### SAB-344

Compatible with Megalodon® range [page 31](#).

## Ribbed roof gaskets

Gaskets designed to allow Panorama mobility products to fit to the roof of the Ford Explorer or Interceptor



### SAB-312

Compatible with Dual Sharkee® range [page 25](#).



### SAB-326

Compatible with 5G Great White® and Mako® ranges [page 26](#).



### SAB-353

Compatible with Megalodon® range [page 31](#).

## Mounting brackets

Mounting bracket assemblies for wall and mast mounting



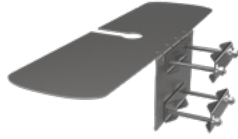
### SP5-0577

Compatible with MiMo 4G/5G WiFi and MiMo LTE panel mount ranges [page 15](#).



### SAB-309

Compatible with 5G Great White® and Mako® ranges [page 26](#).



### SAB-345

Compatible with Megalodon® range [page 31](#).



### SAB-316

Compatible with ultra low-profile WiFi/5G MiMo antenna range pages [34](#) and [39](#).



### SAB-342

Compatible with 5G Great White® and Mako® ranges [page 26](#).



### SP5-0097-C

Compatible with low-profile panel mount range [page 12](#).

## Marine adaptors

Adaptors for marine and coastal applications



### SAB-315

Compatible with SiSo and MiMo 4G/5G antennas [page 32](#).



### NDRS-SL

1" 14TPI ratchet mount adaptor for use with SAB-315.

## Splitters and combiners

Passive components for splitting and combining antennas



### DPD-GPS

GPS splitter combiner – allows one GPS/GNSS antenna to be used for two receivers fitted with FME plugs.



### DBLC-C3G-2SJ

Cellular splitter /combiner with SMA sockets.

## Surge arresters

Protect radio equipment installations from power surges with coaxial surge arresters



### SAMS-NP-NBJ

Multi-strike surge arrester N plug to N bulkhead socket.



### SAMS-SP-SMABJ

Multi-strike surge arrester SMA plug to SMA bulkhead socket.



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Important notice: The data provided above serves as an indication of the products' performance under specific conditions and does not constitute a guarantee of performance. This document is provided on an 'as is' basis and is subject to change without prior notice.

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