



PMR & Critical Communications

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 150 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 over 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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Multifunction



5G Great White® 4G/5G 2x2 MiMo Dome



- 2x2 MiMo 5G/4G
- 617-960/1427-6000MHz
- Optional integrated GPS/GNSS
- Up to 6x6 MiMo WiFi 2.4/5.0-7.2GHz
- UN ECE R118 compliant cables
- IP69K and 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
- UN ECE R118 compliant cables
- IP69K and 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.



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



- 8x 4G/5G elements (2x 4x4 MiMo)
- Up to 8x8 MiMo dual-band WiFi 6e/7
- Up to 2 GPS/GNSS L1 or L1/L5 bands
- Meets IK10 and IP69K
- 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 2.4/5.0-7.2GHz (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.



Dual Sharkee® 4x4 MiMo 4G/5G Antenna



- 4x4 MiMo 4G/5G
- 617-960/1427-6000MHz
- Optional GPS/GNSS
- Up to 6x6 MiMo WiFi 2.4/5.0-7.2GHz
- UN ECE R118 compliant cables
- Mounting stud for comms whip (GPSD4)

The SHK/GPS[X]D4[X]-6-60[-X] is a dual sharkfin-style antenna combining 4G/5G, GPS/GNSS, and WiFi. It features a 4x4 MiMo antenna for 4G/5G, dual-band WiFi with up to 6x6 MiMo supporting WiFi 6e/7, and up to 4x active GPS/GNSS antennas.

Part no.*	MiMo 4G/5G	MiMo WiFi	GPS/GNSS	External Whip
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 discreet 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 2.4/5.0-7.2GHz 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			•



4G/5G MiMo Sharkee® 5G



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

The GPSD/SHK[G] Sharkee® range has become a byword for industry leading technology in a discreet OEM sharkfin housing. GPSD-6-60 adds 5G coverage.

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



MiMo Sharkee® Pro



- 2x2 MiMo 4G/5G
- 2x 698-960/1427-4200MHz vehicle antenna
- Optional L1 or L1/L5 GPS/GNSS,
- Up to 2x WiFi 2.4/5.0-7.2GHz
- Optional whip position
- UN ECE R118 compliant cables

The MiMo Sharkee Pro upgrades the best-selling MiMo Sharkee range for professional users. The MiMo Sharkee Pro offers the same compact footprint and low height as the original MiMo Sharkee but with higher performance, improved design, and extended cellular and WiFi coverage.

Part no.*	MiMo 4G/5G	MiMo WiFi	GPS/ GNSS	External Whip
SHKG-7-42	2x2		•	
SHKG-7-42-D	2x2	2x2	•	
GPSD-7-42	2x2		•	•
GPSD-7-42-D	2x2	2x2	•	•



MiMo Sharkee®



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

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
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	•	
GPSD-7-27	2x2		•	•
GPSD-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 Sharkee®



- SiSo 5G/4G/3G/2G
- Covers 698-960/1710-3800MHz
- 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 a 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.



GPS/GNSS and Whip Combination Antenna



- Integrated GPS/GNSS
- Single hole mounting
- Whip mounting stud for VHF, UHF or 7/800MHz whip

The GPSK antenna is a rugged combination base with a whip mounting stud. A wide range of antenna whips are available to fit the GPSK, including VHF,UHF, and 7/800MHz types.

Part no.	Whip (MHz)
GPSK-TET	380-430MHz
GPSK-S4	450-470MHz
GPSK-S5	806-870MHz

*Kits available to suit all TETRA terminals



Sharkfin Antenna Base



- OEM shark fin styling
- Panel mount base for VHF or UHF whip
- Mounts via 3/4inch (18mm) hole

The FINB range offers a panel mount base with discreet sharkfin styling and a whip mounting position designed to accept a large range of our single band and multi-band whips. The FINB is easy to install with an acrylic adhesive sealing pad which affixes the antenna during installation and seals the antenna mounting location during use. Supplied with an integrated 5m (17') or 6m (20') low loss coax cable, the FINB can be mounted through a single 19mm (3/4") hole and alternatively is available with FME plug termination.

Part no.	Cable length	Termination
FINB	6m/20ft	Bare end
FINB-5F	5m/17ft	FME Jack (f)
FINB-5QMAP	5m/17ft	QMA Plug (m)



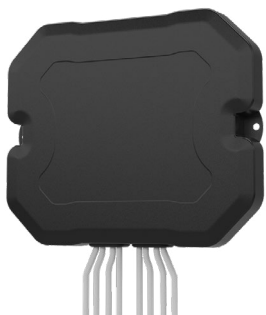
BAT Covert MiMo Antenna



- 2x2 MiMo 5G/4G
- 617-960 / 1427-6000MHz
- Optional GPS/GNSS
- Optional SiSo or 2x2 MiMo WiFi 2.4/5.0GHz
- UN ECE R118 compliant cables

The BAT range is an ideal 2x2 MiMo 4G/5G antenna for discreet internal 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).

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



4x4 MiMo 4G/5G BAT Antenna



- 4x4 MiMo 617-960/1427-6000MHz
- Up to 4x4 MiMo WiFi 6e/7 (optional)
- GPS/GNSS L1 or L1/L5 (optional)
- Adhesive or screw mount to any non-conductive surface
- Mount on or under vehicle dashboard or parcel shelf
- Suitable for mobility or enterprise/branch applications

The BAT[X]M4 range is a discreet 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/7. The 4G/5G antenna elements cover 617-960/1427-6000MHz to provide a robust communications link to ensure high data rates even in challenging network coverage areas.

Part no.	MiMo 4G/5G	MiMo WiFi	GPS/ GNSS
BATGM4-6-60-Q	4x4	4x4	•
BATGM4-6-60-T	4x4	3x3	•
BATGM4-6-60-D	4x4	2x2	•
BATGM4-6-60	4x4		•



Stingray SiSo Internal Antenna



- Cellular, WiFi and GPS/GNSS included
- Dashboard or windshield mount
- No-drill adhesive installation
- UN ECE R118 compliant cables

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

Part no.	Cable and connector
GPSCO-7-27-24-58	3m (10') SMA
GPSCOF-7-27-24-58	3m (10') FAKRA



The Fez 5G Antenna



- 5G/4G/3G/2G
- 617-960 / 1427-6000MHz SiSo element
- Optional 1x, 2x2 or 4x4 MiMo WiFi 2.4 / 5.0-7.2GHz
- Optional GPS/GNSS
- Works with or without a conductive 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/7 elements all in a robust compact housing.

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



GPS/GNSS Antennas



- GPS/GNSS antennas (L1 Band)

Vehicle positioning is an intrinsic part of vehicle and fleet management and is achieved by use of GPS/GNSS technology. An effective antenna with high performance filtering is required to provide reliable operation. The GPSP offers a permanent, panel mounted option, whilst the GPSME provides the convenience and flexibility of a temporary, no holes solution with a tough magnetic fixing. The GPSSV type is ideal for covert installation and is supplied with both adhesive and hook/loop pad fixings. A 3m (9.8') coax cable is supplied as standard, but a version with a 300mm (1') fly lead is available which can be used with an extension coax cable where required.

Part no.	Mounting type	Cable and connector
GPSME-6SP	Magnetic	6m (19.7') SMA (m)
GPSSV-3SMAP	Adhesive	3m (10') SMA(m)
GPSP-F	Panel	0.3m (1') FME (f)



GPS5 Antenna



- GPS/GNSS L1/L5
- 26/30dB LNA gain
- Compact, robust housing (Mag or Panel)
- Integrated FR rated RG174 coaxial cable

The GPS5 is a high-performance L1/L5 band GPS/GNSS antenna with 26/30dB gain LNA and excellent filtering. The antenna is housed within a low profile, robust enclosure and is suitable for use with GPS, GLONASS, Galileo and BeiDou systems requiring high accuracy for navigation and other precision applications. The GPS5MS has a magnetic base for temporary mounting, and an adhesive pad. GPS5P is a panel mount version for permanent installation.

Part no.	Cable and connector
GPS5MS-2SP	2m (6.6') SMA Male
GPS5MS-6SP	6m (19.7') SMA Male
GPS25P-6SP	6m (19.7') SMA male
GPS25P-6FAKCJ	6m (19.7') FAKRA C jack

Special Application



Low Profile UHF Antenna

UHF IP65 RATED

- 380-520MHz (tuned to 20MHz bands)
- Rugged low profile design
- Easy installation
- Versions available for metal or plastic panels

The L[G] range of antennas combines a UHF element with optional GPS/GNSS in a robust low profile housing. With a height of only 42mm (1.65") the antenna is ideal for low clearance situations or applications requiring a compact solution. The antenna can be tuned to a variety of UHF frequency bands and separate versions of the product are available optimised to non-conductive and conductive mounting panels.

Part no.	Frequency (MHz)
LP390-FR	380-400
LP420-FR	410-430
LP440-FR	430-450
LP460-FR	450-470

*LG versions available with GPS/GNSS ** White version upon request
*** Standard tuning free space – request for mounting on ground plane



Half-wave UHF Antenna

UHF

- Flexible whip
- Ground plane independent
- Moulded coaxial cable
- Suitable for vehicles or fixed site applications

The HM range of antennas can be mounted on any surface. The antenna is ideal for motorcycles but can also be used on other vehicles, boats or fixed sites. The HM antenna range has a rugged design with a flexible nylon covered whip. The base features a moulded cable entry and an M14 mounting bush.

Part no.	Frequency (MHz)
HM-S1	380-400
HM-S2	410-430
HM-TET	380-430
HM-433	430-450
HM-S4	450-470
HM-S5	806-870



Ratchet Mount NDRS-SL
Constructed from polished stainless steel, this ratchet mount is designed to endure the harshest marine environments.



UHF Marine Antenna



- 380-520MHz (tuned to 20MHz bands)
- Optional integrated GPS/GNSS
- Wall, mast, rail or 1" 14TPI marine mount
- IP67 rated
- For marine or coastal applications

The BS[X]SN-S[X] is a range of UHF omni-directional marine/fixed site antennas covering UHF frequencies from 380-5200MHz in banded variants. The weather and corrosion resistant design makes the antenna suitable for marine and costal applications and the antenna is supplied with a wall/mast mounting bracket and a 1"-14TPI adapter for fitment to standard marine bases like the NDRS-SL.

Part no.	GPS/GNSS	Frequency (MHz)
BSGSN-S1	•	380-400
BSGSN-S2	•	410-430
BSGSN-S4	•	450-470
BSSN-S1		380-400
BSSN-S2		410-430
BSSN-S4		450-470

Heavy Duty SiSo Transit Antenna

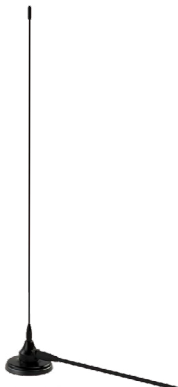


- 5G/4G/3G/2G LTE, GSM-R or UHF
- 698-6000MHz or 380-520MHz (banded)
- Optional integrated GPS/GNSS
- Certified to rail industry standards

The TRNC series antenna has been designed specifically to meet railway engineering standards and features a DC grounded radiating element.

The TRNC 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.

Part no.	LTE/ GSM-R	GPS/ GNSS	UHF
TRNC-7-60	•		
TRNCG-7-60	•	•	
TRNC-TET			380-430MHz
TRNCG-TET		•	380-430MHz
TRNC-S4			450-470MHz
TRNCG-S4		•	450-470MHz



Magnetic Mount Antenna



- Available in VHF and UHF bands
- Temporary fit
- Easy removal
- Strong magnetic retention

The MD range of antennas is a popular choice for vehicles that require a temporary mount antenna. The tough magnetic base allows secure retention on vehicle panels. Available in standard VHF and UHF bands, as well as customer-specific frequencies.

Part no.	Frequency (MHz)	Part no.	Frequency (MHz)
MDI46-5	141-151	MD420-5	410-430
MDI61-5	156-164	MD-TET-5	380-430
MDI68-5	162-174	MD-451-5	430-472
MD390-5	380-400	MD-S5-5	806-870



Rapid Deployment Clip Dipole



- Rugged construction
- Fast temporary clip-on installation
- Moulded in coaxial cable

The CDV/CDU clip dipole range is designed for quick and easy assembly and installation in the field. The antenna is available tuned to a variety of VHF and UHF frequencies.

Part no.	Frequency (MHz)	Part no.	Frequency (MHz)
CDV-H4	141-151	CDU-S2	410-430
CDV-H5	149-159	CDU-TET	380-430
CDV-H6	156-162	CDU-UI	410-470
CDV-H7	162-174	CDU-U	430-472
CDU-S1	380-400	CDU-U2	450-512



Rapid Deployment Clip ½ Wave

UHF

- Groundplane independent
- Fast temporary clip on installation
- Moulded coaxial cable

The performance of portable equipment can often be considerably improved by elevating the antenna to a more effective height. Clip antennas provide an easy way to do this. The CD series features a rugged single end fed ½ wave element. The jaws of the spring clip are moulded in nylon and are adjustable for any angle. The clip mount features a fully moulded coaxial connection for weather protection and resilience.

Part no.	Frequency (MHz)
CD390	380-400
CD420	410-430
CD433	430-450
CD458	445-470
CD800	806-870



Elevated VHF/UHF Antenna

VHF UHF

- Mast mount
- VHF, UHF and 800MHz variants
- Ideal for fixed radio terminal applications
- Quick assembly and installation
- N socket

The BSV/BSU is an omnidirectional antenna suitable for temporary or permanent installation on a mast. The antenna has an N socket terminal which allows use of different types and lengths of coaxial cable, making it ideal for mounting in an elevated location as a range-extending or area coverage solution.

VHF

Part no.	Frequency (MHz)
BSV-H3	132-143
BSV-H4	141-151
BSV-H5	149-159
BSV-H6	156-162
BSV-H7	162-174

UHF

Part no.	Frequency (MHz)
BSU-TET	380-430
BSU-TETG5	380-430(5dB)
BSU-UT	406-472
BSU-U	430-472
BSU-S4	450-470
BS800	804-870(5dB)



Tri-band Elevated antenna

VHF UHF

- Tri-band VHF/UHF/7/800MHz
- Groundplane independent
- Mast mount
- N Socket

The Tri-band BSV is an omnidirectional antenna suitable for temporary or permanent installation on a mast. The antenna has an N socket terminal which allows use of different types and lengths of coaxial cable, making it ideal for mounting in an elevated location as a range-extending or area coverage solution. This version of the product presents a unique solution for some tri-band radios.

Part no.	Frequency (MHz)
BSV-I55-S4-821	145-174 / 420-480 / 764-894

Cellular & WiFi



Low Profile Panel Mount Antenna



- Cost effective 2G/3G/4G/5G antenna
- 617-960 / 1710-6000MHz
- Ultra low loss CS29 cable
- Robust, panel mount design

The LPB-6-60 is low profile omni-directional antenna intended for IOT devices. Designed for panel mounting with a robust radome and highly efficient cellular element the antenna is a one size fits all solution for cellular coverage. The LPB-6-60 is supplied with low loss CS29 cable and a variety of common connectors including SMA plug.

Part no.	Cable and 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



4G/5G Bracket Mount Antenna



- Cost effective 2G/3G/4G/5G antenna
- 617-960 / 1710-6000MHz
- Wall or mast mount
- Ultra low loss CS29 cable

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

Part no.	Cable and 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



LPBEM-6-60



MAR-7-21



EF-BC3G-26



EF-6-60



4G & 4G/5G Magnetic Mount Antennas



- 617-960 / 1710-6000MHz range (LPBEM)
- 698-960/1710-2700MHz range (MAR-7-21)
- Covers 5G/4G/3G/2G LTE
- Magnetic mount for 'no hole' installation

The LPBEM-6-60 is a new generation, high performance magnetic mount antenna that covers all global cellular and LTE frequencies.

The MAR-7-21 is a whip type compact magnetic cellular antenna for temporary mount use. It covers the main 4G cellular bands from 698-960/1710-2700MHz and provides a cost effective solution for applications where it is not possible to drill a hole.

Part no.	Cable and 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

Internal SiSo Cellular Antenna



- 5G/4G/3G/2G
- 698-960/1710-2700MHz (EF-BC3G-26 version)
- 617-960/1427-6000MHz (EF-6-60 version)
- Simple adhesive pad fitment
- Can be fitted on glass or plastic panel

The EF antenna range provides a low cost adhesive fitment option for cellular applications. Typically fitted on a window or plastic panel versions are available covering 4G only (EF-BC3G-26) or 4G/5G (EF-6-60) frequencies. All versions are fitted with flexible RG174 cable for easy installation.

Part no.	Cable and connector
EF-BC3G-26-3SP	3m (10') SMA Male
EF-6-60-3FAKDJ	3m (10') FAKRA D Jack
EF-6-60-3SP	3m (10') SMA Male

Ultra Low Profile MiMo WiFi Antenna



- 2x2, 3x3 or 4x4 MiMo WiFi 6e/7 antenna
- 2400-2485/5150-7125MHz
- Ultra low profile
- Meets IP69K and IK10

The LPM[X]-24-72-[X] range has been designed to provide an optimised antenna solution for applications requiring MiMo WiFi capability. The compact, robust low-profile housing contains up to four elements covering WiFi 6e frequencies from 2400-2485/5150-7125MHz with optimised isolation and low correlation co-efficient. The antenna is available in black or white and is supplied with ultra low loss CS32 cable fitted with a variety of connectors.

Part no.*	MiMo WiFi	Cable and connector
LPM2-24-72-2RPSP	2x2	2m (6.6') Rev Pol SMA
LPM2-24-72-5RPSP	2x2	5m (17') Rev Pol SMA
LPM3-24-72-2RPSP	3x3	2m (6.6') Rev Pol SMA
LPM3-24-72-5RPSP	3x3	5m (17') Rev Pol SMA
LPM4-24-72-2RPSP	4x4	2m (6.6') Rev Pol SMA
LPM4-24-72-5RPSP	4x4	5m (17') Rev Pol SMA

*Part numbers shown are for black version only

WiFi 2.4/5.0GHz Easyfit Antenna



- Adhesive mount antenna
- Install on windows or plastic panels
- Dual band WiFi 2.4/5.0GHz
- Multiple 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.

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

Covert and Discreet



Vehicle Covert Dipole Antenna

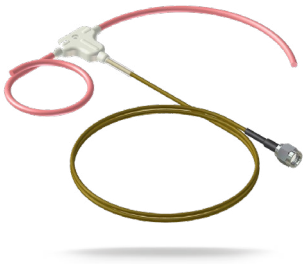
VHF UHF

- Dipole construction
- Covert bumper mounting
- Flexible wire elements for easy positioning

The covert vehicle dipole antenna is specifically designed for installations where the presence of an antenna must be undetectable. This specialist antenna is available in versions for VHF and UHF bands and requires tuning during installation to achieve optimal VSWR match.

A power divider (Part no. HPDPD[X]-550) is available separately which can be used to combine two units for a more omni-directional pattern around the vehicle.

Part no.	Frequency (MHz)
VCD-VL-5F	68-88
VCD-VH-5F	130-175
VCD-SI-5F	380-400
VCD-S2-5F	410-430
VCD-S4-5F	450-470



Bodyworn Dipole Covert Antenna

VHF UHF

- Dipole antenna
- Designed for mounting on the user's body
- Flexible wire elements for easy positioning

This bodyworn antenna can be incorporated in clothing or body armour/stab vests and should be oriented with elements on a vertical plane. Once in position, the antenna can be tuned to achieve the optimum VSWR/match.

Part no.	Frequency (MHz)
BWDT-H7	162-174
BWDT-TET	380-430
BWDT-S4	450-470
BWDT-815	806-870



UHF Bumper Antenna

UHF

- Fully covert application
- Mounted behind plastic bumper
- Flexible construction
- Does not require any tuning

The bumper mount antenna is designed for covert operations and other applications which require a vehicle antenna that is effectively invisible. Mounted in the vehicle's bumper, installation requires no drilling and is invisible from the outside of the car. A dual element version (BMP2) is available.

Part no.	Frequency (MHz)	Dual Version (MHz)
BMPI-S1	380-400	
BMPI-S2	410-430	
BMPI-S3	380-420	
BMPI-S4	450-470	
BMPI-7-27	700-2700	
BMP2-DPD-S1		380-400
BMP2-DPD-S2		410-430
BMP2-DPD-S3		380-420
BMP2-DPD-S4		450-470

Internal On-Glass UHF Antenna

UHF IP65 RATED

- Semi covert window mount antenna
- Install with no vehicle damage
- Flexible moulding to allow fitting to curved glass

The EF 'Easyfit' antenna provides an effective low visibility solution ideal for permanent or temporary installation. Available for UHF and 7/800MHz and bands.

Part no.	Frequency (MHz)
EF-S1	380-400
EF-S2	410-430
EF-S3	380-420
EF-S4	450-470
EFBAD	760-960

*Comes supplied with 3m (10ft) or 5m (17ft) of coax and a range of connectors to suit

In-building



Offset Dipole Wall Mount Antenna

VHF UHF

- Improves range
- Easy installation
- Light weight solution
- External and internal use

The ODP wall mount antenna range is a simple and cost efficient way of providing an antenna for fixed terminals. The offset mounting improves performance and omni-directionality and versions are available with 1/4 wave and gain whips.

Part no.	Frequency (MHz)
ODP-H5	149-159 (2dBi)
ODP-H6	156-162 (2dBi)
ODP-H7	162-174 (2dBi)
ODP-TET	380-430 (2dBi)
ODP-433	410-450 (2dBi)
ODP-S4	450-470 (2dBi)
ODP-SIG6-4B	380-400 (6dBi)
ODP-S2G6-4B	410-430 (6dBi)
ODP-S4G6-4B	450-470 (6dBi)



Ceiling Mount UHF Antenna

UHF

- Easy installation
- In-building UHF coverage
- Suitable for airports and stadiums

The UHF ceiling antenna can be used to provide network coverage in large buildings for the public services. Used in airports, large campus sites and shopping centres, the antenna can help to reduce holes in coverage and improve signal strength.

Part no.	Frequency (MHz)
CM-SI-08NJ	380-400
CM-S2-08NJ	410-430
CM-S4-08-NJ	450-470



Bracket Mount

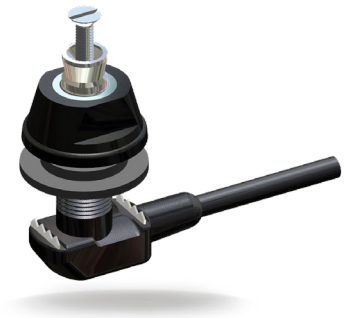
UHF

- Used with fixed radio terminals
- Wall mount or mast mount
- Improves range

The BM antenna range consists of a halfwave antenna fitted to a lightweight bracket. The bracket allows wall or mast mounting and provides an offset from the mounting surface improving performance. Supplied with fitted low loss cable the BM range is a flexible solution for fixed radio terminals.

Part no.	Frequency (MHz)
BM390	380-400
BM420	410-430
BM451	430-472
BM460	450-470
BM900	890-960

Modular Bases & Whips



Panel Mount

- Panel mount
- Rugged design
- Modular stud fitting
- Interchangeable whips

The M8 is the ‘industry standard’ panel mount base. It incorporates stainless steel earthing teeth and a fully moulded construction with high quality coaxial cable for low loss and long term reliability. The base is easy to fit and can be installed from above or below the panel. With the modular stud fitting, almost any antenna in our range can be fitted to the base.

Part no.	Panel thickness
M8	0-4mm
M8A	4-6mm



Magnetic Mount

- Temporary mount
- Rugged magnetic mount
- Modular stud fitting

The MMR is large secure magnetic base for professional use that supports a full range of antenna whips. It features a fully moulded construction with high quality coaxial cable.

Part no.	Cable and connector
MMR-5	5m (17') bare end
MMR-5F	5m (17') FME female
MMR-5B	5m (17') BNC male



NMO Panel Mount Base

- Panel mount
- Suitable for various whips (NMO)
- Stainless steel earthing teeth

The NMO 3/4 inch panel mount antenna base combines compatibility with NMO style antennas with rugged engineering and high quality construction.

This quality panel mount is made from nickel plated brass to resist corrosion, and the earthing teeth are stainless steel to provide excellent earthing with every installation.

Part no.	Cable and connector
MNMOM-5	5m (17') bare end
MNMOM-5F	5m (17') FME female
MNMOM-5MP	5.2m (17') mini UHF male
MNMOM-10F	10m (32.5') FME female



GPS NMO Combi Panel Mount

- Panel mount
- Rugged low profile design
- NMO whip mount
- Integrated GPS/GNSS

The GPSNMO is a GPS/GNSS combi antenna featuring a low-profile NMO mount and a high-performance GNSS antenna with 30dB gain LNA. Suitable for panels up to 6.5mm thick using a single hole, it is supplied with 5m (17') length cables.

Part no.	Cable and connector
GPSNMO	5m (17') CS23 & RG 174
GPSNMO-FF	0.3m (11") CS23 & RG 174



Non-hinged Hinged

Rigid ¼ Wave

VHF UHF

- 1/4 wave whip
- Removable for car wash
- Hinged and non-hinged versions
- Compatible with M8 and MMR bases

The AQ[H]B series is a slim design 1/4 wave whip for VHF, UHF and 7/800MHz. Available in hinged and non-hinged versions.

Non-hinged	Hinged	Frequency (MHz)
AQB-H4A	AQHB-H4A	138-155
AQB-H6A	AQHB-H6A	155-174
AQB-TET	AQHB-TET	380-430
AQB-U	AQHB-U	430-472
AQB-W	AQHB-W	470-512
AQB-S5	AQHB-S5	806-870



ACUB-SI ACUHB-SI A5GH

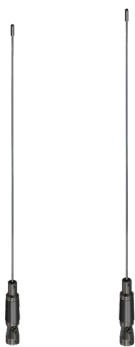
High-gain Whips

VHF UHF

- High-gain
- Removable for car wash
- Hinged and non-hinged versions
- Compatible with M8 base

The A5G series is a 5dBi broadband colinear antenna. The phasing coil is over-moulded to provide a rugged antenna for demanding applications. The ACU series is a 7dBi gain antenna for use where network coverage is poor.

Hinged	Non-hinged	Frequency (MHz)
A5GH-TET	A5GM-TET	380-470
ACUHB-SI	ACUB-SI	380-400
ACUHB-S2	ACUB-S2	410-430
ACUHB-U	ACUB-U	430-472
ACUHB-460	ACUB-460	450-470
ACUHB-W	ACUB-W	470-512



Gain Whips

VHF UHF

- Gain whips
- Rugged construction
- Hinged base and removable whip
- Compatible with M8 and MMR bases

The AVGHB/AUGHB range is a durable solution for vehicle installations requiring a medium gain antenna. The antennas feature a fully encapsulated impedance matching coil and a 17-7PH stainless steel whip.

Part no.	Frequency (MHz)
AVGHB-H4	141-151
AVGHB-H5	149-159
AVGHB-H6	156-162
AVGHB-H7	162-174
AUGHB-S1	380-400
AUGHB-S2	410-430
AUGHB-TET	380-430
AUGHB-U	430-472



VHF Wideband Antenna

VHF

- Wideband VHF antenna
- Integrated shock mount

The AVWB is a rugged wide band VHF antenna, suitable for users who operate over the full range of VHF frequencies. The AVWB is compatible with all of the modular bases in the Panorama range. Supplied with an integrated shock mount, the antenna is protected from impact and damage in low clearance situations.

Part no.	Frequency (MHz)
AVWB-SM-39-68	138-169

Sharkee® & GPSK Base Whips



VHF ¼ Wave Flexible Whip

VHF

- OEM bee-sting style
- Wideband ¼ wave
- Flexible overmoulded base

The AFBQ is a rugged VHF ¼ wave whip for use on GPSK and GPSB base types. This antenna whip is styled to resemble an OEM 'bee sting' type design and is both discreet and durable, featuring an overmoulded shock spring and stainless steel rod.

Part no.	Frequency (MHz)
AFBQ-H4A	138-155
AFBQ-H6A	155-174
AFBQ-H5	149-159
AFBQ-H7	162-174



UHF 5dBi Flexible Whip

UHF

- OEM bee-sting style
- High peak gain
- Flexible overmoulded construction

The AFBG offers omni-directional performance with 5dBi peak gain. The antenna whip is styled to look similar to an OEM 'bee-sting' antenna and is both discreet and durable featuring an overmoulded coil and stainless steel rod. The antenna base is flexible for added damage resistance and can be mounted on a range of Panorama GPS combination bases.

Part no.	Frequency (MHz)
AFGB-395	380-410
AFGB-S2	410-430
AFGB-S4	450-470
AFGB-832	760-870
AFGB-BI	745-806
AFGB-S5	806-870



¼ Wave Flexible Whips

VHF UHF

- 1/4 wave whip
- Removable for car wash
- Rugged and flexible

AFM type features a flexible multi-strand element inside a durable TPU overmoulding and is ideal for general use. AFNT type features an ultra-flexible nickel-titanium whip which is almost impervious to damage and ideal for low clearance scenarios.

Part no.	Frequency (MHz)	Part no.	Frequency (MHz)
AFNT-H4A	138-155	AFM-S1	380-400
AFNT-H6A	155-174	AFM-S2	410-430
AFNT-TET	380-430	AFM-TET	380-430
AFNT-S4	450-470	AFM-U	430-472
AFNT-U2	450-512	AFM-UT	406-472
		AFM-S4	450-470
		AFM-W	470-520



Tri-band Whips

VHF UHF

- Tri-band function
- Flexible rod with wound element
- Fits our Sharkee® base

The ASF whips are stylish, discreet and durable, featuring a flexible overmoulded base section and a black jacketed flexible wound rod element. Designed to be mounted on the GPSB, GPSD range of bases, and used with a Panorama Antennas Triplexer.

Part no.	Frequency (MHz)
ASFC-155-U2-BI	150-160 / 450-512 / 745-806
ASFC-155-U2-S5	150-160 / 450-512 / 806-876
ASF-155-S4-821	150-160 / 450-470 / 764-876

Accessories



VHF/UHF Diplexer

VHF UHF

- Allows a dual band antenna to be used with two single band radios
- Allows two single band antennas to be used with a dual band radio
- Low insertion loss
- High port to port isolation

Panorama diplexers are housed in a compact, robust die cast case for reliability and easy mounting. The diplexers use a stripline design to provide low insertion loss with high port to port isolation and high power handling capability. These diplexers offer the opportunity to utilise a single multiband antenna with two radios. This conserves valuable vehicle real estate and saves on antenna installation costs.. Versions are available diplexing VHF and UHF (DPX-210-270) and VHF/UHF and 7/800MHz. The diplexers are compact enough to locate in a vehicle headliner and are fitted with FME (m) connectors.

Part no.	Frequency (MHz)
DPX-210-270	VHF: 50-210
	UHF: 270-1000
DPX-500-700	VHF/UHF: 50-500
	UHF: 700-2500



VHF/UHF/7-800MHz Triplexer

VHF UHF

- Allows a tri-band antenna to be used with three single band radios
- Allows three single band antennas to be used with a tri-band radio
- Low insertion loss
- High port to port isolation

The TPX-VH-UHF-BA-TNC can either combine the signals from three antennas to a single multiband radio or split the signal from a tri-band antenna to three separate radios. This compact unit requires no power and can easily be installed in the roof lining of any vehicle or mounted next to the radio.

Part no.	Frequency (MHz)
TPX-VH-UHF-BA-TNC	VHF: 136-174
	UHF: 380-520
	7/800: 760-896



Low/High Pass Filter

VHF UHF

- Low insertion loss
- High out of band rejection
- F-HP270-F (High Pass Filter)
- F-LP210-F (Low Pass Filter)

The F-HP270-F offers an ideal solution for protecting UHF radios from out of band interference and the F-LP210-F provides the same capability for VHF radios. The F-HP270-F can be used with the F-LP210-F to protect co-located VHF/UHF systems from interfering with each other. The filter is compact enough to locate in a vehicle headliner and is fitted with FME (m) connectors on all ports.

Part no.	Pass frequency band (MHz)
F-LP210-F	0-210
F-HP270-F	270-1000



UHF Antenna Combiner

UHF

- Combines two UHF radios to one antenna

When you can only fit one antenna on a vehicle, then this combiner is the solution providing >26dB isolation over 380-430MHz with an antenna match at 1.2:1 and low insertion loss.

Technical Note: The isolation provided by this device is dependent on the antenna VSWR. An antenna match of 1.5:1 VSWR will result in a reduction of isolation to 20dB. Higher VSWR on the antenna port will result in a further reduction in isolation between the TX ports. Ensure antenna VSWR does not exceed 1.5:1 during use.

Part no.	Pass frequency band (MHz)
DBLC-TET-N	380-430



GPS Splitter



- Reduce installation costs
- Run two GPS receivers from a single antenna
- DC block on one port

The DPD-GPS allows you to run two GPS receivers from a single antenna. The DPD-GPS splits the received signal from the antenna to two receivers while only allowing one of the receivers to feed voltage to the antenna, ensuring that the antenna is able to function correctly.

Part no.	Frequency (MHz)
DPD-GPS	1559-1612



VHF/UHF Power Divider

VHF UHF

- Optimise antenna performance
- Connect two antennas to one radio

The HPDPD-550 series is a range of power dividers are designed to split the power from a radio to distribute it to two separate antennas. Configured to support Panorama Antennas' covert VCD (VHF) and BMP (UHF) bumper/fender mount antennas the HPDPD-550 range comes in three variants for up to 15W, 60W and 150W Input Power respectively, Covering a frequency range from 50-550MHz the HPDPD efficiently distributes power to two antennas with low insertion loss allowing users to install covert antennas at opposite ends of a vehicle to ensure maximal coverage.

Part no.	Max input power (W)	Frequency (MHz)
HPDPD15-550	15	50-500
HPDPD60-550	60	50-550
HPDPD150-550	150	50-550

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 150 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 over 75 years experience in delivering world-class antenna products, Panorama's current product range reflects our unparalleled expertise in providing high-quality performance antennas.



MAKING THE CONNECTION

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