



LPWA & ISM Antennas

Guide for 169MHz, 433MHz
& 868/915MHz Bands

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 5 international sales offices, as well as operating 4 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 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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An aerial night view of a city, likely New York City, with a river and bridges. The city lights are visible, and a network of glowing blue circuit lines is overlaid on the image, extending from the bottom towards the center. A white rectangular box is positioned in the upper middle section of the image, containing the text.

169 MHz

Antenna Solutions



Bracket Mount 169MHz



- Robust low profile design
- Bracket mount (Wall/Mast)
- Tuned to 169MHz

The LPBV-169 antenna is a low profile, fixed site VHF antenna. Easy to install, its robust design ensures it is weather and vandal resistant as well as being a cost effective antenna solution.

Part no.	Cable & Connector
LPBV-169-NJ	'N' Type Female



Wall Mount 169MHz



- Discrete low profile design
- Vandal resistant
- Tuned to 169MHz

The LPW-169 antenna is an easy to install, discrete and robust VHF antenna in a sleek housing which is weather resistant. This high performance product is also a cost effective antenna solution.

Part no.	Cable & Connector
LPW-169-2SP	2m/6ft SMA Plug
LPW-169-2SMBBUC	2m/6ft SMB Buccaneer Plug



Mini Magnet 169MHz

VHF

- No hole installation
- Magnetic mount
- Tuned to 169MHz

For rapid deployments or when there are installation constraints, the MAR-169 is a small and lightweight VHF antenna solution. Cost effective and low visibility.

Part no.	Cable & Connector
MAR-169-2SP	2m/6ft SMA Plug



Magnet Mount 169MHz

VHF

- No hole installation
- Midi magnet mount
- Tuned to 169MHz

For temporary or permanent mounting, the MD-168 is a durable magnetic mount antenna solution that is tuned to 169MHz.

Part no.	Cable & Connector
MD168-5SP	5m/16ft SMA Plug



Offset Dipole 169MHz

VHF

- Easy to install
- Suitable for indoor or outdoor use
- Tuned to 169MHz

A light weight, compact and efficient antenna, the ODP-H7 is an extremely versatile solution that can be wall or pole mounted.

Part no.	Cable & Connector
ODP-H7-8BP	8m/26ft BNC Male
ODP-H7-8SP	8m/26ft SMA Male
ODP-H7-8TP	8m/26ft TNC Male



Mast Mount 169MHz

VHF

- Mast or pole mountable
- Temporary or permanent installation
- Tuned to 169MHz

A unique and highly efficient antenna solution for certain applications. This base station type antenna is weather resistant, durable and ideal for any pole or mast mount installations.

Part no.	Cable & Connector
BSV-H7	'N' Type Female



Helical Antenna 169MHz

VHF

- Durable
- Fully over-moulded
- Tuned to 169MHz

Durable and compact, our range of helical antennas for devices are fully over-moulded in high quality plastic and tuned for optimal performance.

Part no.	Cable & Connector
MFX-BNC-H7	BNC Plug
MFX-SMAFR-H7	SMA Female
MFX-SMAMO-H7	SMA Plug
MFX-TNC-H7	TNC Plug



Half Wave Antenna 169MHz

VHF

- Durable
- Fully over-moulded
- Tuned to 169MHz

Our range of ¼ wave antennas for use with terminal radios and telemetry devices are ideal if you require a highly efficient, flexible and robust antenna solution.

Part no.	Cable & Connector
MVQ-BNC-H7	BNC Plug
MVQ-SMAFR-H7	SMA Female
MVQ-TNC-H7	TNC Plug



433MHz

Antenna Solutions



Bracket Mount 433MHz

IP65
RATED **UHF**

- Robust low profile design
- Bracket mount (Wall/Mast)
- Tuned to 433MHz

The LPBU-433-NJ antenna is a low profile, fixed site UHF antenna. Easy to install, its robust design ensures it is weather and vandal resistant as well as being a cost effective antenna solution.

Part no.

LPBU -433-NJ

Wall Mount 433MHz

IP66
RATED **UHF**

- Discrete low profile design
- Vandal resistant
- Tuned to 433MHz

The LPW-433 antenna is an easy to install, discrete and robust VHF antenna. In a sleek housing which is weather resistant, this high performance product is also a cost effective antenna solution.

Part no.

LPW-433-2SP



Mini Magnet 433MHz

UHF

- No hole installation
- Magnetic mount
- Tuned to 433MHz

For rapid deployments or when there are installation constraints, the MAR-433 is a small and lightweight UHF antenna solution ideal for various different deployment scenarios.

Part no.	Cable & Connector
MAR-433-2SP	2m/6ft SMA Plug



Half-Wave 433MHz

UHF

- 5dBi Gain
- Ground Plane Independent
- Flexible Whip

The HM-433 and PUG-433 are robust yet flexible 5dBi antennas, perfect for UHF telemetry devices without a ground plane, that also require more gain.

Part no.	Cable & Connector
HM-433-5BP	5m/16ft BNC Plug
HM-433-SP	5m/16ft SMA Plug
PUG-TNC-433 (Whip only)	TNC Plug



Low Profile Dome 433MHz

UHF IP65
RATED

- Rugged
- Heavy duty
- Ground-plane independent

A high performance, robust antenna solution ideal for any application that requires a low profile UHF antenna that is easy to install and durable.



Mast Mount 433MHz

UHF

- Mast mount
- Rugged
- Tuned to 433MHz

A unique and highly efficient antenna solution for certain applications, this base station type antenna is weather resistant, durable and ideal for any pole or mast mount installations.

Part no.	Cable & Connector
LP430-5BP	5m/16ft BNC Plug
LP430-5SP	5m/16ft SMA Plug
LP430W-5BP*	5m/16ft BNC Plug
LP430W-5SP*	5m/16ft SMA Plug

*White housing.

Part no.	Cable & Connector
BSU-T2	'N' Type Female



Helical Antenna 433MHz

VHF

- Durable
- Fully over-moulded
- Tuned to 433MHz

Durable and compact, our range of helical antennas for devices are fully over-moulded in high quality plastic and tuned for optimal performance.

Part no.	Cable & Connector
MFXU-BNC-433	BNC Plug
MFXU-SMAFR-433	SMA Female
MFXU-SMAMO-433	SMA Plug
MFXU-TNC-433	TNC Plug

Half Wave Antenna 433MHz

VHF

- Durable
- Fully over-moulded
- Tuned to 433MHz

Our range of $\frac{1}{4}$ wave antennas for use with terminal radios and telemetry devices are ideal if you require a highly efficient, flexible and robust antenna solution.

Part no.	Cable & Connector
MQ-BNC-433	BNC Plug
MQ-SMAFR-433	SMA Female
MQ-SMAMO-433	SMA Plug
MQ-TNC-433	TNC Plug



Offset Dipole 433MHz

UHF

- Easy to install
- Suitable for indoor or outdoor use
- Tuned to 433MHz

A light weight, compact and efficient antenna, the ODP-433 is an extremely versatile solution that can be wall or pole mounted.

Part no.	Cable & Connector
ODP433-8BP	8m/26ft BNC Plug
ODP433-8SP	8m/26ft SMA Plug



Bracket Mount 433MHz

UHF

- 4dBi Gain
- Improves Range
- Wall or Mast mount options
- Indoor or Outdoor

The ideal antenna solution for a fixed radio terminal, the BM433 is easy and simple to install, discrete, and very reliable to offer improved coverage performance for your radio.

Part no.	Cable & Connector
BM433-5BP	5m/16ft BNC Male
BM433-5SP	5m/16ft SMA Male



Rapid Deployment 433MHz

UHF

- 4dBi Gain
- Clip Mount Design
- Simple Installation
- Half Wave Antenna

The CD433 antenna features an end fed half-wave antenna element on a spring clip with fully over-moulded cable for weatherproofing and resilience.

Part no.	Cable & Connector
CD430-3BP	3m/10ft BNC Male
CD430-3SP	3m/10ft SMA Male
CD430-3TP	3m/10ft TNC Male



Rapid Deployment Clip Dipole 433MHz

UHF

- Rugged construction
- Fast installation
- Adjustable angle

Quick and easy to assemble and deploy in the field, this is a unique antenna solution that is ideal where coverage needs to be improved.

Part no.	Cable & Connector
CDU-T2-5BP	5m (17') BNC Male
CDU-T2-5SP	5m (17') SMA Male
CDU-T2-5TP	5m (17') TNC Male



868/915 MHz

Antenna Solutions



Panel Mount 868/915MHz

IP65
RATED

- Robust low profile design
- Vandal resistant
- 868MHz or 915MHz

The LPBE range is an extremely popular, low profile, cost effective antenna solution. With a robust design, its a great weather and vandal resistant fixed site antenna solution.

Part no.	Freq	Cable & Connector
LPBE-868-2SP	868	2m/6ft SMA Plug
LPBE-915-2SP	915-923	2m/6ft SMA Plug



Wall Mount 868/915MHz

IP66
RATED

- Discrete low profile design
- Vandal resistant
- 868MHz or 915MHz

The LPW antenna is an easy to install, discrete and robust antenna in a sleek housing which is weather resistant. This high performance product is also a cost effective antenna solution.

Part no.	Freq	Cable & Connector
LPW-868-2SP	868	2m/6ft SMA Plug
LPW-915-2SP	915-923	2m/6ft SMA Plug



Ultra Low Profile 868/915MHz

- Ultra low profile antenna
- Mounting bush or screw fitment
- Robust, tamper proof design

The LPAB range of antennas combine ergonomic style along with sophisticated engineering. The low profile housing gives a high degree of vandal resistance making it perfect for vending machines or other telemetry devices in exposed locations that require reliable communications.

Part no.	Freq	Cable & Connector
LPAB-868-2SP	868	2m/6ft SMA Plug
LPAB-915-2SP	915-923	2m/6ft SMA Plug



Low Profile 868/915MHz

- Low profile puck design
- Built for IoT applications
- Covers both 868 & 915MHz frequencies

Designed for IoT applications, the antenna utilises a ruggedized low profile housing. A ground plane independent antenna that has cost at the heart of its design.

Part no.	Cable & Connector
LPP-7-38-ISP	1m/3ft SMA Plug
LPP-7-38-IFAK	1m/3ft FAKRA D Jack



Magnetic Mount 868/915MHz

- No holes installation
- Cost effective
- Magnetic base

As a temporary or permanent, no-hole discrete antenna solution for internal or external use, the product is ideal for many different applications especially when cost is a sufficient factor.

Part no.	Freq	
MAR-868-2SP	868	2m/6ft SMA Plug
MAR-915-2SP	915-923	2m/6ft SMA Plug



DIN Rail Mount 868/915MHz

- Easy 'click' fit
- EN50022 Mount
- Supplied with right angle FAKRA D

The perfect solution for certain IoT scenarios, this ground plane independent, highly efficient rail mount antenna is a unique design that's also very easy to install.

Part no.	Cable & Connector
IN2216	1m/3ft FAKRA D



Internal 868/915MHz

- 868/915MHz 2dBi
- Simple adhesive pad fitment
- Can be fitted on glass or plastic panel

The EF-BC3G-26 antenna is a low cost single 4G/3G/2G product that can be fitted on any non-conductive surface. It is typically fitted on a window.

Part no.	Cable & Connector
EF-BC3G-26-3SP	3m/10ft SMA Plug



Half-Wave 868/915MHz

- 4dBi Gain
- Ground Plane Independent
- Flexible Whip

The HM-S5 and HM-D are robust yet flexible whip antenna products perfect for telemetry devices with no ground plane that also require more gain.

Part no.	Freq	Cable & Connector
HM-S5	868	5m/16ft
HM-D	915-923	5m/16ft



Rapid Deployment 868/915MHz

- Clip mount design
- 4dBi Gain
- Simple installation
- Half Wave antenna

The CD800/900 antenna features an end fed half-wave antenna element with a spring clip and a fully over-moulded cable for weatherproofing and resilience.

Part no.	Freq	Cable & Connector
CD800	868	3m/10ft BNC Plug
CD900	915-923	3m/10ft SMA Plug



Mast Mount 868/915MHz

- Mast mount
- 5dBi Gain
- 800MHz/900MHz

A unique and highly efficient antenna solution for certain applications, this base station type antenna is weather resistant, durable and ideal for mast mount installations.

Part no.	Freq	Cable & Connector
BS800	868	'N' Type Female
BS900	915-923	'N' Type Female



Wall Mount Base Station 868/915MHz

- 6dBi Gain
- Wall mounted with brackets supplied
- Robust construction

An omni-directional, 6dBi gain antenna solution that can be wall mounted to offer improved coverage. Weatherproof and supplied with mounting brackets, it's an ideal IoT antenna.

Part no.	Cable & Connector
B6SE-868-03NJ	0.3m/1ft 'N' Type Female
B6SE-915-03NJ	0.3m/1ft 'N' Type Female



Bracket Mount 868/915MHz

**IP65
RATED**

- Cost effective wideband LTE / Cellular
- Easy installation
- Wall or Mast mounting
- Compact design

The B4BEE antenna is fully weather proof and is omni-directional, providing simple installation in an elevated or external location to achieve optimum network signal.

Part no.	Freq	Cable & Connector
B4BEE-868-2SP	868	2m/6ft SMA Plug
B4BEE-915-2SP	915-923	2m/6ft SMA Plug



Directional Panel Mount 868/915MHz

- 3dBi Gain
- Weatherproof housing
- Mast or wall mountable

A versatile, 8dBi gain directional antenna ideal for indoor or outdoor areas, it allows the user to improve their coverage.

Part no.	Cable & Connector
WM8E-BADEP3G-26-NJ	'N' Type Female



1/4 Wave Antenna 868/915MHz

- Durable
- Fully overmoulded
- 868 or 915MHz

Our range of 1/4 wave antennas for use with terminal radios and telemetry devices are ideal if you require a highly efficient, flexible and robust antenna solution.

Part no.	Cable & Connector
MQ-SMAMO-868	SMA Plug
MQ-SMAMO-915	TNC Plug
MQ-TNM-868	SMA Plug
MQ-TNM-915	TNC Plug

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