

PCTEL® 5G/4G-Antennas - BMLPV5000 Series

BMLPV SERIES



Versatile high-performance 5G/LTE antenna for different mounting types

The BMLPV5000 low-profile vertical antenna from PCTEL® supports the high speed requirements of complex RF communication systems used for Intelligent Transportation Systems (ITS), and IIoT applications. This antenna supports the world's leading 5G NR devices supporting frequencies from 600 MHz to 6 GHz frequencies. It features an attractive, compact housing that makes the antenna ideal for indoor or outdoor applications requiring minimum visibility to the antenna. PCTEL's high efficiency permanent mount is recommended for most efficient performance.

- Versatile High-Performance 5G/4G Antenna for different mounting types
- 5G frequencies already integrated
- High broadband performance in all 4G bands in order to achieve 5G frequency range
- Can be used for mobile and fixed base applications
- Wide range of mounting, connector and cable accessories for flexible Installation

MODELS	DESCRIPTION	ANTENNA CONNECTOR	ANTENNA CABLE	MOUNTING VERSION
BMLPV5000	Basic version of the antenna with Universal Plug, mounting options via accessories	Universal Plug	See accessories table or cable configurator	Universal Plug for magnetic base or screw mounting
BMLPV5000-VP	Basic version with firmly attached mounting foot, antenna cable according to accessories list or use our cable configurator	N (f)	See accessories table or cable configurator	N (f) for angle or screwed mounting

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PRODUCT FEATURES



5G support

Supports the most used 5G frequency bands.



4G/LTE support

Supports all 4G/LTE frequency bands.



Omnidirectional antenna

Omnidirectional radiation characteristic ideal for most applications.



Frequency range

This antenna offers 618 - 5.985 MHz frequency range.



Antenna gain

1.6 dBi antenna gain.



IP67 protection

Suitable for outdoor use with IP67 protection against water and dust.

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SPECIFICATIONS

	BMLPV5000	BMLPV5000-VP
Antenna elements	1 x 5G/LTE	1 x 5G/LTE
Frequency range	618 - 5985 MHz	618 - 5985 MHz
Antenna gain	1.6 dBi	1.6 dBi
Antenna cable	See accessories table or cable configurator	See accessories table or cable configurator
Antenna connector	Universal Plug for magnetic base or screw mounting	N(f) for angle or screwed mounting
Compatible with	GSM/GPRS/EDGE, UMTS, 4G, 5G, WLAN (2,4 GHz), Bluetooth, Zigbee, LoRa, Sigfox, 869 MHz	GSM/GPRS/EDGE, UMTS, 4G, 5G, WLAN (2,4 GHz), Bluetooth, Zigbee, LoRa, Sigfox, 869 MHz

GENERAL INFORMATION

Antenna type	5G/4G-Antennas
Construction type	Low-Profile Antenna
Application area	Indoor/Outdoor
Radiation characteristic	Omnidirectional
Integrated Antenna elements	1 x 5G/4G
Groundplane needed?	Yes
GSM/GPRS/EDGE- frequencies	850 / 900 / 1800 / 1900 MHz
4G-frequencies	700 / 2100 / 3500 / 3600 / 3700 / 3800 MHz
5G-frequencies	2100 / 3600 / 3700 / 3800 MHz
WiFi-frequencies	2.4 / 5 GHz
License-free bands	869 MHz range
Gain (typical)	1.6 dBi
VSWR	<2.5:1

ELECTRICAL CHARACTERISTICS

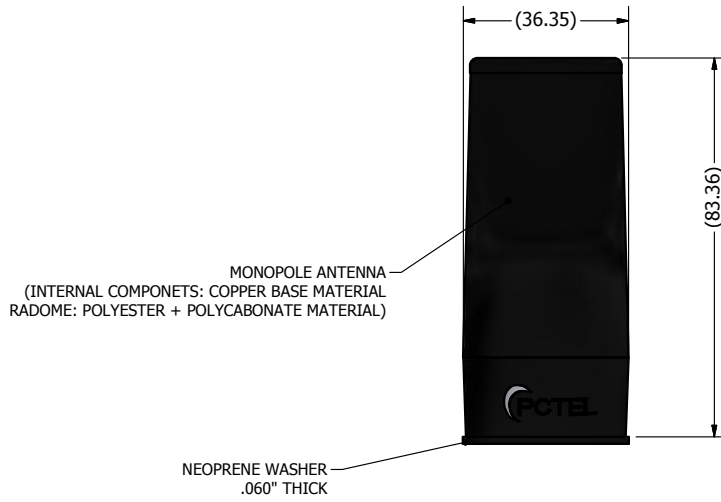
Transmission power (max)	150 W
Impedance	50 Ω
Polarization	Vertical, linear

PHYSICAL CHARACTERISTICS

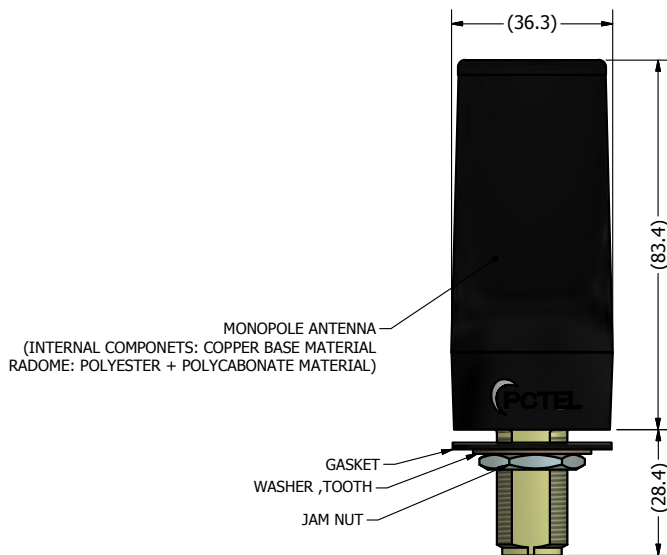
Material	XENOY 5720U-7014, UV-Stable
Dimensions	36.4 x 112 mm (BMLPV5000-VP) 36.4 x 86 mm (BMLPV5000) (diameter x height)
Protection class	IP67
Mounting options	Screw mounting, Wall mounting, Magnetic foot mounting, Pole mounting
Operating temperature range	-40 - +70 °C

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PRODUCT DIMENSIONS (MM) - BMLPV5000



PRODUCT DIMENSIONS (MM) - BMLPV5000-VP



PCTEL® 5G/4G-Antennas - BMLPV5000 Series

ACCESSORIES FOR BMLPV5000

DESCRIPTION	CHARACTERISTICS	ORDER CODE
Antenna mount for mounting the antenna on magnetic surfaces such as switch cabinets or on vehicle roofs	Antenna cable and connector: 360 cm Pro Flex Plus 195 with SMA(m), contact area 89.7 mm	GMLFML195C
Antenna mount for vandalism-proof installation of the antenna by screwing into housing or other surfaces	Vandalism-proof mounting foot for publicly accessible areas. Antenna connector N(f) directly on the mount	MVPHP
Standard antenna base for screw mounting	Mounting foot for screw mounting, antenna plug N(f) directly on the mount	MTPM80



GMLFML195C
Antenna Mount
Magnetic base for mounting antennas on metallic surfaces. 360 cm Pro-Flex Plus with SMA (m) connector



MVPHP
Antenna Mount
Mounting foot for the vandalism-proof installation of antennas by means of a feed-through. Plug N (f)



MTPM80
Antenna Mount
Mounting foot for mounting antennas by means of a feed-through. Plug N (f)

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ACCESSORIES FOR BMLPV5000-VP

DESCRIPTION	CHARACTERISTICS	ORDER CODE
Wall mounting bracket for mounting the antenna on vertical (outside) walls	Dimensions 60x80x50 mm, stainless steel bracket with holder for N(f) plug	WA-Mount-NF-1
Mast mounting bracket for mounting the antenna on steel tubes	Aluminium L-bracket for parallel or vertical mounting on pipes or masts. Suitable for pipes and masts with 38 - 60 mm outer diameter. Hole with 15.8 mm diameter for connectors	BAM1009
Magnetic base mounting bracket for vertical, metallic surfaces	Dimensions 60x80x50 mm, stainless steel bracket with holder for N(f) plug. Strong magnet included in the set	WA-Mount-NF-3



WA-Mount-NF-1 Antenna Mount

Stainless steel wall mounting bracket with 16.5 mm mounting hole for antennas. The holes for wall mounting can also be used for cable ties.



BAM1009 Antenna Mount

Aluminium L-bracket for horizontal or vertical mounting on pipes or masts. Suitable for pipes and masts with 38 - 60 mm outer diameter. Hole with 15.8 mm diameter for mounting with N(f) connectors.



WA-Mount-NF-3 Antenna Mount

Stainless steel wall mounting bracket with 16.5 mm mounting hole for antennas. Mounting on metallic surfaces via enclosed magnets. The holes for wall mounting can also be used for cable ties.

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ACCESSORIES ANTENNA CABLE

For the basic version with N(f) connector and the mounting bases MVPHP and MTPM800

ANTENNA CABLE TYPE / LENGTH	ANTENNAS-CONNECTION LEFT	ANTENNAS-CONNECTION RIGHT	ORDER CODE
RF195 / 50 cm	N (m)	SMA (m)	NOM00-1950050-SOM00
RF195 / 100 cm	N (m)	SMA (m)	NOM00-1950100-SOM00
RF195 / 300 cm	N (m)	SMA (m)	NOM00-1950300-SOM00
RF195 / 500 cm	N (m)	SMA (m)	NOM00-1950500-SOM00
RF195 / 1000 cm	N (m)	SMA (m)	NOM00-1951000-SOM00



Antenna cable - Configurator

With the Welotec cable configurator it is easy, to find the right coax cable for your needs.

Choose your desired cable from a large selection on cable types and combine it with the suitable connection.

Available connections:

SMA, RP-SMA, TNC, RP-TNC, BNC, N

Available cable types:

RG174, RF195, Aircell 5, RG58, RG223, H155 PE, Aircell 7