

BMLPV5000 5G NR (FR1) Low-Profile Antenna

The BMLPV5000 low-profile vertical antenna 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.



BMLPV5000

Features

- Attractive, low-profile design
- Multiple band coverage with no tuning required
- Can be used for mobile and fixed base applications
- Environmentally tested to MIL-STD-810-G, SAE J1455 and IEC 68-2-32
- N female termination option (-VP) available



GMLFML195C
high efficiency magnetic
mount (sold separately)



MLFML195C
MLF high efficiency mount
(sold separately)

STANDARD CONFIGURATION

Model	Cable	Connector	Mount
BMLPV5000	Pro-Flex™ Plus 195 or PFP240 high frequency cables are recommended with this antenna. Cable assemblies or mount/cable assemblies are sold separately.	Various connector options are offered with PCTEL high frequency mounts (sold separately)	For optimal performance, use higher frequency rated mounts (e.g. MLFML195C or GMLFML195C). Mounts sold separately.
BMLPV5000-VP		N Female	Built-in N connector accommodates surfaces up to 1/2-in thick

ELECTRICAL SPECIFICATIONS (ALL FREQUENCIES)

Frequency Range (MHz)	Max. Gain*	Maximum Power	Polarization	Nominal Impedance	VSWR*	Average Efficiency
618-960	2.6 dBi	150 watts	Vertical, linear	50 ohms	< 2.0	60%
1427-1518	-0.2 dBi				< 2.5	30%
1710-2170	1.0 dBi				< 2.5	46%
2300-2700	1.6 dBi				< 3.0	61%
3300-4200	2.3 dBi				< 1.5	31%
4400-5000	1.2 dBi				< 3.0	26%
4900-5985	3.1 dBi				< 2.5	40%

MECHANICAL & ENVIRONMENTAL SPECIFICATIONS

Model	Dimensions	Weight (Mass)	Temperature Range	Ingress Protection	Housing Color
BMLPV5000	3.38 H x 1.43 in OD in (8.59 x 3.63 cm)	0.29 lbs (0.13 kg)	-40°F to +158°F (-40°C to +70°C)	IP67**	Black
BMLPV5000-VP	4.40 H x 1.43 in OD in (11.18 x 3.63 cm)	0.31 lbs (0.14 kg)			

* Measured on a 1x1 ft ground plane, when installed on GMLFML195 high frequency magnetic mount with 12-ft Pro-Flex Plus 195 cable. Gain is ground plane dependent.

** When installed per PCTEL installation instructions on a roof top surface.