

**LOW-PROFILE WLAN ANTENNA
 FOR 2.4 AND 5 GHZ APPLICATIONS**

The BMLPVDB2458 antenna is a low-profile antenna from PCTEL® for WIFI applications. Its low height and the robust design provide even in demanding environments for safe operation. In Combination with the vandalism-proof mounting foot (MVPHP, see accessories) the antenna is also suitable for applications with occasional shocks in industrial environments environment. The antenna can be used both indoors and outdoor. Besides the mechanical characteristics, the BMLPVDB2458 also has excellent receiving characteristics in both WIFI bands and thus provides a secure connectivity of your WIFI applications.

Key Features

- Low-profile design for extremely stable mechanical properties
- Excellent reception and efficiency characteristics for stable WIFI connectivity
- Numerous accessory options allow the installation in any situation



CHARACTERISTICS OF THE ANTENNA

	BMLPVDB2458
Antenna elements	1 x WiFi (2.4 and 5 GHz)
Frequency range	2.4 - 2.5 GHz, 4.9 - 5.9 GHz
Antenna gain	3/4 dBi
Antenna cable	Flexible, see table of accessories or cable configurator
Antenna connector	Universal Plug, can be combined with mounting accessories (see table of accessory components)
Compatible with	WiFi (2.4 and 5 GHz), Bluetooth



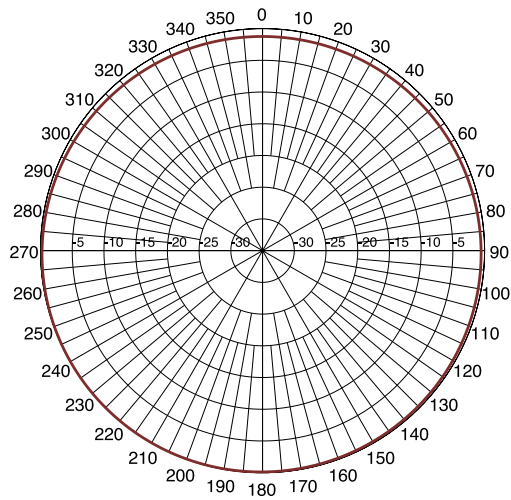
CAT-BMLPVDB2458-V1.0.EN ed. 06/2020 Welotec GmbH

TECHNICAL DETAILS

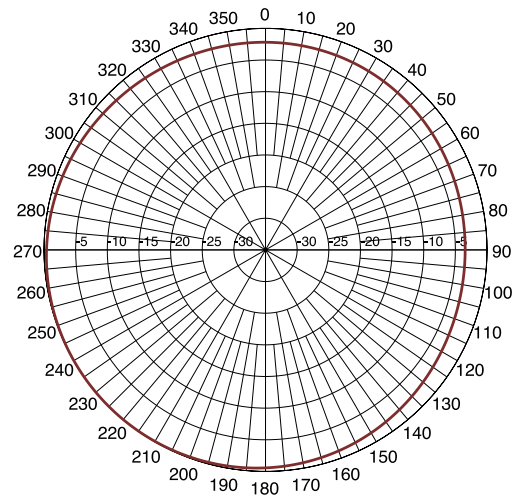
GENERAL INFORMATION	
Antenna type	WiFi-Antenna
Construction type	Low-Profile Antenna
Application area	Indoor/Outdoor
Radiation characteristic	Omnidirectional
Integrated Antenna elements	1 x WIFI (2.4 and 5 GHz)
Groundplane needed?	Yes
WiFi-frequencies	2.4 / 5 GHz
Gain (typical)	3/4 dBi
VSWR	<2.0:1
ELECTRICAL CHARACTERISTICS	
Transmission power (max)	100 W
Impedance	50 Ohm
Polarization	Vertikal
PHYSICAL CHARACTERISTICS	
Material	XENOY 5720U-7014, UV-Stable
Dimensions	36.53 x 45.34 mm (Diameter x height)
Protection class	IP67
Mounting options	Screw mounting, Wall mounting, Magnetic foot mounting, Pole mounting
Operating temperature range	-40 - +85°C

RADIATION PATTERN

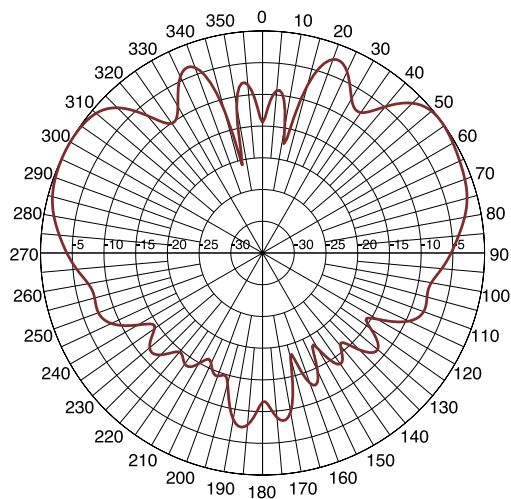
2450MHz - AZ



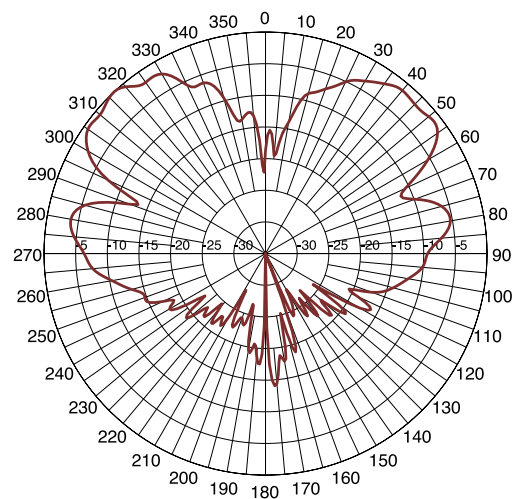
5400MHz - AZ



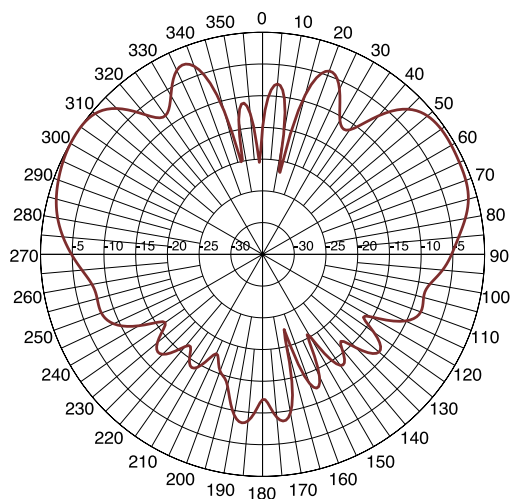
2450MHz - EL PHI90



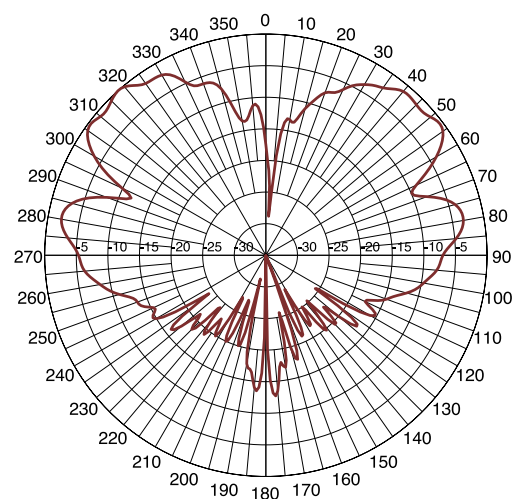
5400MHz - EL PHI90



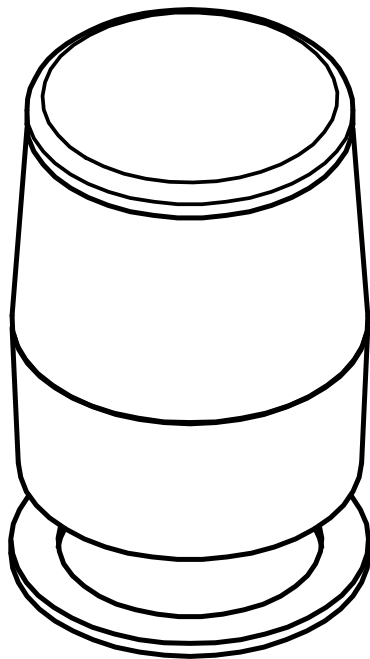
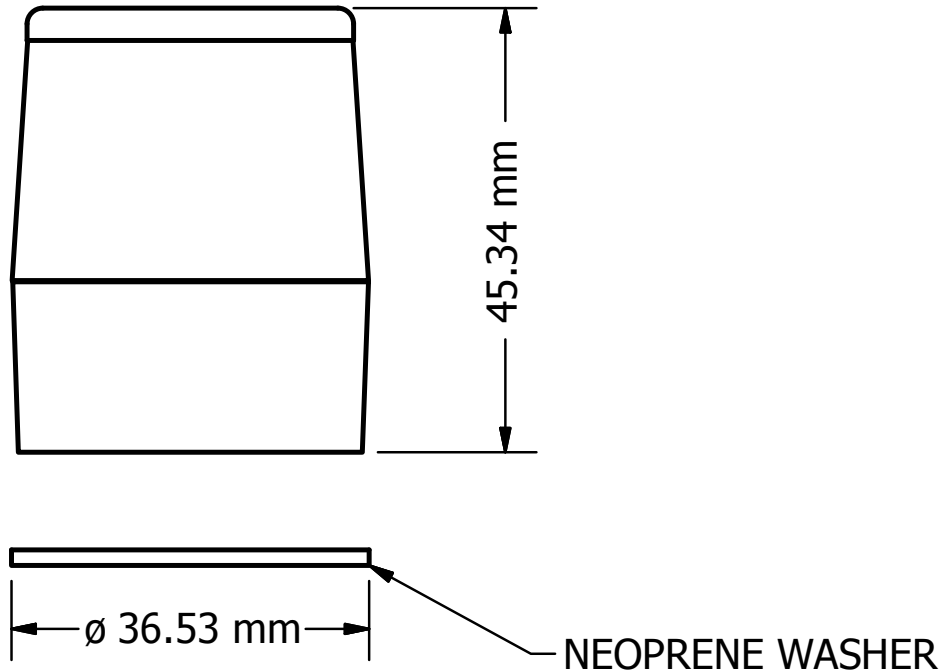
2450MHz - EL PHI0



5400MHz - EL PHI0



TECHNICAL DRAWING AND DIMENSIONS



VERSIONS

BASIC VERSION BMLPVDB2458

ANTENNA NAME	DESCRIPTION	ANTENNA CONNECTOR
BMLPVDB2458	Low-profile WIFI antenna with universal plug for different mounting methods using the accessories listed below	Universal Plug

ACCESSORIES FOR BMLPVDB2458

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
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-NF1
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-NF3

ACCESSORIES



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



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



MTPM800
Antenna Mount
Mounting foot for mounting antennas by means of a feed-through. Plug N (f)



WA-Mount-NF1
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-NF3
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.

ACCESSORIES ANTENNA CABLE

For 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-S0M00
RF195 / 100 cm	N (m)	SMA (m)	NOM00-1950100-S0M00
RF195 / 300 cm	N (m)	SMA (m)	NOM00-1950300-S0M00
RF195 / 500 cm	N (m)	SMA (m)	NOM00-1950500-S0M00
RF195 / 1000 cm	N (m)	SMA (m)	NOM00-1951000-S0M00
RF195 / 50 cm	N (m)	TNC (m)	NOM00-1950050-T0M00
RF195 / 100 cm	N (m)	TNC (m)	NOM00-1950100-T0M00
RF195 / 300 cm	N (m)	TNC (m)	NOM00-1950300-T0M00
RF195 / 500 cm	N (m)	TNC (m)	NOM00-1950500-T0M00
RF195 / 1000 cm	N (m)	TNC (m)	NOM00-1951000-T0M00



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