



## HIGH-DENSITY DUAL BAND BASE SECTOR ANTENNA

# WiBOX SA M4DBC245-120-8V

Wireless Instruments four element **MIMO 4x4 2.4/5 GHz dual-band** antenna for Wi-Fi is rugged and high-performance panel for outdoor and indoor applications. **WiBOX SA M4DBC245-120-8V** is 4-Element Patch Antenna predicted mainly for high-density installations where high gain and wide beamwidth is required. The system offers relatively high gain with wide horizontal beam and low F/B ratio, which makes it unique solution on the market. The antenna is designed to work with 2.4-GHz/5-GHz Access Points (like Cisco, Aruba, Huawei and others), offers IP67 for whole system and No. 4 of RP-SMA/U.FL/MMCX pigtailed in the installation box. The antenna is integrated with **WiBOX Medium** enclosure by Wireless Instruments which offers the installation compartment for electronic stuff. **WiMount** mounting system which comes with the antenna enables wall or mast mounting.

**NOTE: The installation compartment is limited to 4cm due to the antenna construction.**

ROHS



### Electrical specification

Frequency	<ul style="list-style-type: none"> <li>☒ 2.4 - 2.5 GHz</li> <li>☒ 4.6 - 6.4 GHz</li> </ul>
Gain	<ul style="list-style-type: none"> <li>☒ 8 dBi</li> <li>☒ 7 dBi ±1</li> </ul>
VSWR	<ul style="list-style-type: none"> <li>☒ &lt;1.60, max &lt; 1.80</li> <li>☒ &lt;1.60, max &lt; 1.80</li> </ul>
Beamwidth	<ul style="list-style-type: none"> <li>☒ 120°/60°</li> <li>☒ 120°/90°</li> </ul>
Polarization	<ul style="list-style-type: none"> <li>☒ V</li> <li>☒ V</li> </ul>
Cross-Polar Isolation	>25 dB
Front-to-Back	<ul style="list-style-type: none"> <li>☒ &gt; 20 dB</li> <li>☒ &gt; 20 dB</li> </ul>
Separation between Connectors	
Impedance	50 Ω
Max Input Power	50 W
Lighting Protection	No
DC Ground	Yes

### Mechanic specification

Dimensions	27.2 x 27.6 x 9.6 cm 10.71 x 10.87 x 3.78 inch
Weight	1.6 kg
Connector	RJ45 & 1xSMA/SMA RP/TNC RP/MMCX
Material	ABS
Waterproof level	IP67
Operating temperature	from -40°C to 80°C from -40°F to 176°F
Wind resistance	70km/h

### Mounting Kit

Dimensions	9.9 x 10.5 x 14.8 cm 3.9 x 4.13 x 5.83 inch
Regulation Range	+/- 30°
Weight	0.87 kg
Mast Dimensions Range	25 - 65mm
Material	Polyamide with fiberglass + galvanized steel U-Bolts

### Features

- › Gain for the frequency of 2400 - 2500 MHz 1x 8 dBi
- › Polarization V for the frequency of 2400 - 2500 MHz
- › Gain for the frequency of 4600 - 6400 MHz 1x 7 dBi ±1
- › Polarization V for the frequency of 4600 - 6400 MHz
- › 1 x Connector SMA/SMA RP/TNC RP/MMCX
- › Big, ergonomic and voluminous **WiBOX Medium** enclosure for radio equipment installation
- › Outdoor Waterproof Enclosure **WiBOX Medium**
- › Designed and resistant for any weather conditions
- › RJ45 Waterproof System
- › Grounding system protecting against lightning - DC Ground
- › 36 Warranty Months

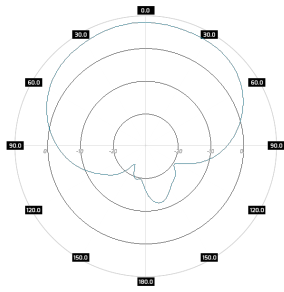
### Systems

- › LTE band - 40, 41
- › WLAN - 2.4 GHz, 5 GHz
- › WiMAX - 2.3 GHz, 2.5 GHz, 5 GHz
- › RFID - 2400 - 2483 MHz, 5725 - 5875 MHz
- › Bluetooth - 2400-2483 MHz
- › ISM - 2400-2483 MHz, 5725-5875 MHz

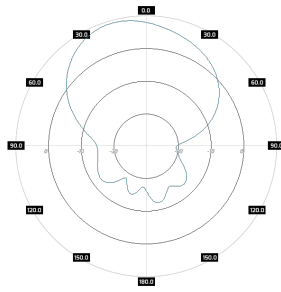
### Applications

- › Stadiums, Public Places
- › Hotspot
- › PtM Connections
- › System Integration

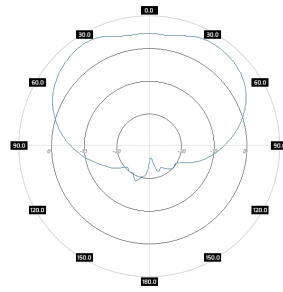
### Plots



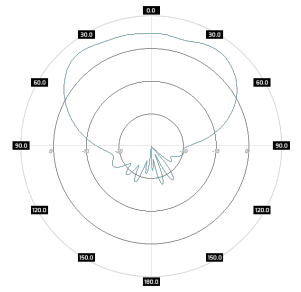
SA MDBC245-120-8V  
2.45GHz, azimuth



SA MDBC245-120-8V  
2.45GHz, elev.



SA MDBC245-120-8V  
5.5GHz, azimuth



SA MDBC245-120-8V  
5.5GHz, elev.