Industrial, Scientific and Medical (ISM) Antennas

ISM Standalone Antennas combine high RF performance with ease of integration over 433, 868 and 915 MHz bands for advanced industrial, scientific and medical devices.

Features and Benefits

433 MHz ISM Flexible Antenna (Series 204287)

Topside of the poly-flexible antenna
Makes for easy peel-and-stick mounting anywhere within the device chassis

Double-sided adhesive on the antenna reverse
Enables instant application anywhere on the inner wall of the device chassis by just removing its tape liner

6 Micro-coaxial Cable Length options (50, 100, 150, 200, 250, 300mm)
Extends connectivity for maximum design flexibility

Applications

Industrial
- Smart homes (security, alarm)
- Smart meters
- Remote keyless entry systems
- Drones

Scientific
- Optical connectivity solutions
- Underwater sensor networks

Medical
- Diathermy therapeutic devices
- Microwave ablation machines

868, 915 MHz ISM Flexible Antenna (Series 206764)

868, 915 MHz Balanced, Dipole ISM Flexible Antenna (Series 105262)

*The MobiliQua antenna technology incorporates proprietary bandwidth enhancing technologies, which have been used successfully in Molex standard and custom antenna designs. The technology is designed to improve impedance bandwidth in any application with a wireless interface antenna, including mobile phones, smart phones, portable TVs, and standard antennas in industrial applications. Traditional passive antenna structures are based on meandered antenna patterns, with limitations on manufacturing tolerances and mechanical properties. MobiliQua technology enables simple mechanical and robust antenna designs that minimize efforts needed for iterative retuning during each build cycle.
Specifications

REFERENCE INFORMATION
Packaging: Tray (105262), PET Film (204287, 206764)
Reference Platform: PC/ABS material block of 2mm thickness (204287, 206764); PC material block of 2.5mm thickness (105262)
Designed In: mm
RoHS: Yes
Halogen Free: Yes

ELECTRICAL
RF Power (Watt): 2
Return Loss (dB): Refer to Product Specifications
Average Total Radiation Efficiency(%): Refer to Product Specifications
Peak Gain (dBi): Refer to Product Specifications
Input Impedance (ohms): 50

MECHANICAL
Refer to Product Specifications

PHYSICAL
Housing: FPC
Flammability: UL 94V-0
Plating: Refer to Sales Drawings
Operating Temperature:
-30 to 85°C (204287, 206764)
-40 to 85°C (105262)

Ordering Information

<table>
<thead>
<tr>
<th>Series No.</th>
<th>Frequency Bands (MHz)</th>
<th>Dimensions (mm)</th>
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</thead>
<tbody>
<tr>
<td>206764</td>
<td>868, 915</td>
<td>87.40 by 12.40mm</td>
</tr>
<tr>
<td>105262</td>
<td>868, 915</td>
<td>79.00 by 10.00mm</td>
</tr>
<tr>
<td>204287</td>
<td>433</td>
<td>90.00 by 40.00mm</td>
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