

Industrial, Scientific and Medical (ISM) Antennas

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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 Advantages

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

868, 915 MHz Balanced, Dipole ISM Flexible Antenna (Series 206764)

868, 915 MHz ISM Flexible Antenna with MobliquA* Technology (Series 105262)

Poly-flexible antenna
Enables easy peel-and-stick mounting anywhere within the device casing

UFL-type connector
Secures to the application's device radio

Low profile design
Offers space saving

868/915 MHz ISM Flexible Antenna (Series 211140)

Cable and connector can be customized
Provides design flexibility

U.FL-type connector
Secures to the application's device radio

High efficiency (up to 70%)
Provides cost savings

High operating temperature (Up to 125°C)
Enables use in challenging environmental conditions

ISM 868/915MHz Ceramic Antenna (Series 208142)

Low profile design
Offers space saving

*The MobliquA 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. MobliquA technology enables simple mechanical and robust antenna designs that minimize efforts needed for iterative retuning during each build cycle.

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Applications

Industrial

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

Scientific

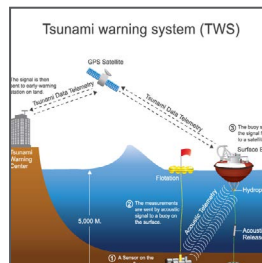
- Optical connectivity solutions
- Underwater sensor networks

Medical

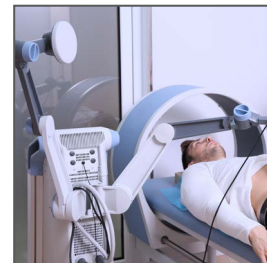
- Diathermy therapeutic devices
- Microwave ablation machines



Drones



Underwater Sensor Networks



Diathermy Therapeutic Device

Specifications

REFERENCE INFORMATION

Packaging: Tray (105262)
PET Film (204287, 206764, 211140); Bag (208142)
Reference Platform: PC/ABS material block of 2mm thickness (211140, 204287, 206764); PC material block of 2.5mm thickness (105262); PCB material block of 0.80mm thickness (208142)
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, 211140)
-40 to 125°C (208142)

Ordering Information

Series No.	Frequency Bands (MHz)	Dimensions (mm)
<u>206764</u>	868, 915	87.40 by 12.40
<u>105262</u>	868, 915	79.00 by 10.00
<u>204287</u>	433	90.00 by 40.00
<u>211140</u>	868, 915	38.00 by 10.00 by 0.10
<u>208142</u>	868, 915	9.00 by 3.00 by 0.63

www.molex.com/link/standard_antennas.html

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