

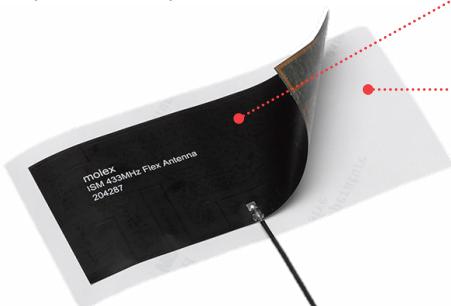
Industrial, Scientific and Medical (ISM) Antennas

molex

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

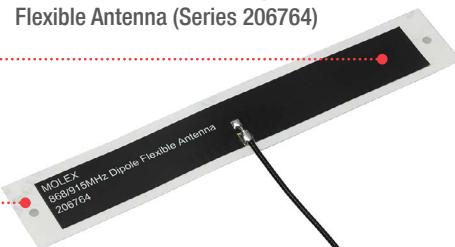
Double-sided adhesive on the antenna reverse

Enables instant application anywhere on the inner wall of the device chassis by just removing its tape liner

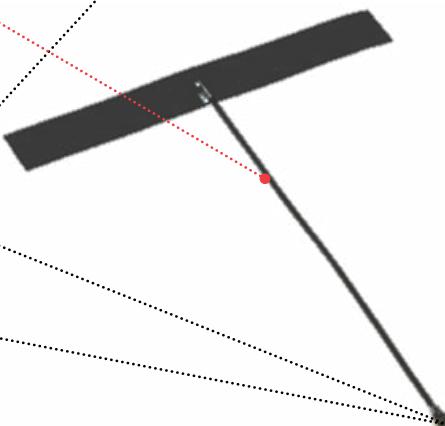
6 Micro-coaxial Cable

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



Low profile design

Offers space saving

UFL-type connector

Secures to the application's device radio

Cable and connector can be customized

Provides design flexibility

868/915 MHz ISM Flexible Antenna
(Series 211140)

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

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

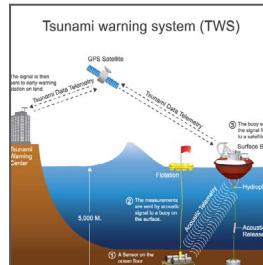
Medical

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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