

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 Benefits

Series 204287 Balanced, 433MHz ISM Antenna

Topside of the poly-flexible antenna

Makes for easy peel-and-stick mounting anywhere within the device chassis

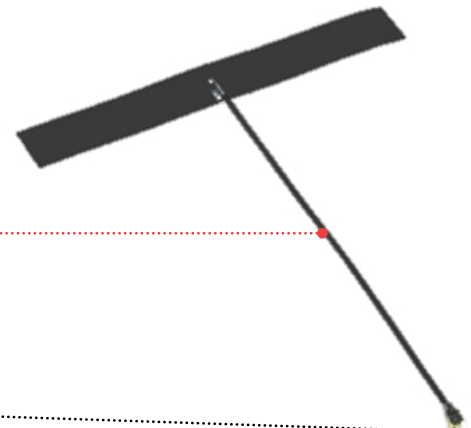
Double-sided adhesive on the antenna reverse

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

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



UFL-type connector

Secures to the application's device radio

Applications

Industrial

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

Scientific

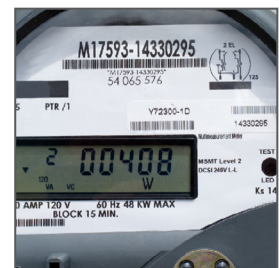
- Optical connectivity solutions Underwater sensor networks

Medical

- Diathermy therapeutic devices Microwave ablation machines



Drones



Smart Meters

*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.

Specifications

REFERENCE INFORMATION

Packaging: Tray (105262), PET Film (204287)
Reference Platform: PC/ABS material block of 2mm thickness (204287); PC material block of 2.5mm thickness (105262)
Designed In: mm
RoHS: Yes
Halogen Free: Yes
Ground Distance: 40mm for vertical ground, 50mm for parallel ground using antenna with 100mm cable (204287); 5mm from PCB to antenna flexible material for both vertical and parallel placement (105262)

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)
-40 to 85°C (105262)

Ordering Information

Series No.	Frequency Bands (MHz)	Dimensions (mm)
105262	868, 915	79.00 by 10.00 mm
204287	433	90.00 by 40.00 mm

www.molex.com/link/standard_antennas.html