

FCC Integration Instructions:

As the Module Integrator, you must provide the information below in the host device users manual.

FCC Part 15: Class B Digital Device Statement

FCC ID: EF400150

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept interference received, including interference that may cause undesired operation.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one (1) or more of the following measures:

- » Reorient or relocate the receiving antenna.
- » Increase the separation between the equipment and receiver.
- » Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- » Consult the dealer or an experienced radio/TV technician for help.

NOTE: Any changes or modifications made to this device that are not approved by 2GIG may void the authority granted to the user by the FCC to operate this equipment.

IMPORTANT

To satisfy FCC/IC RF exposure safety requirements, a separation distance of 10 mm or more should be maintained between this device and person's body (excluding extremities: hands, wrists, feet and ankles).

As the Module Integrator, you must provide the following information on the host device label:

- » Contains FCC ID: EF400150

If space permits, include the following statement:

- » This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules.
- » Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept interference received, including interference that may cause undesired operation.

Limited Warranty

This product is warranted against defects in material and workmanship for one (1) year. This warranty extends only to wholesale customers who buy directly from Nortek Security & Control LLC or through Nortek Security & Control's normal distribution channels. Nortek Security & Control LLC does not warrant this product to consumers. Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any.

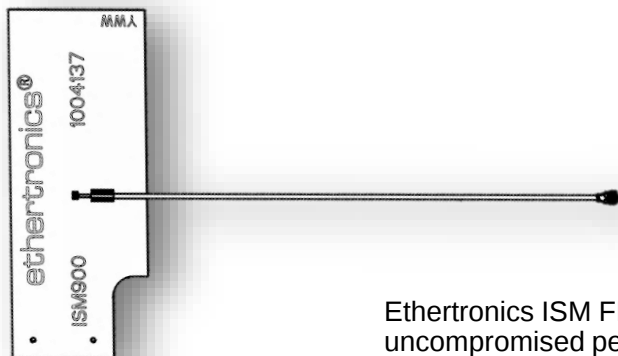
There are no obligations or liabilities on the part of Nortek Security & Control LLC for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or re-installation. All implied warranties for functionality are valid only until the warranty expires. This Nortek Security & Control LLC Warranty is in lieu of all other warranties, expressed or implied.

All products returned for warranty service require a Return Authorization Number (RA#). Contact Returns at 1-855-546-3351 for an RA# and other important details.

Part No.1004137

Embedded ISM FPC Antenna

915MHz



ISM Embedded Antennas based on Flexible PCB

ISM 915MHz

KEY BENEFITS

Reduced Costs and Time-to-Market

Standard antenna eliminates design fees and cycle time associated with a custom solution; getting products to market faster.

Greater Flexibility with Unique Form Factors

Ethertronics' technology helps you deliver more advanced ergonomic designs without adverse impact on product performance.

RoHS Compliant

Ethertronics' antennas are fully compliant with the European RoHS Directive 2002/95/EC.

APPLICATIONS

- M2M
- Automotive
- Healthcare
- Point of Sale
- Smart Metering

Ethertronics ISM FPC antenna 1004137 is specifically designed to offer uncompromised performances in a small environment for great coverage. the 1003476 supports the long range/low power ISM/LoRa band 915 MHz.

Stays in Tune

Ethertronics antenna technology provides superior RF field containment, resulting in less interaction with surrounding components. Ethertronics antennas providing a robust radio link regardless of the usage position.

Electrical Specifications

Typical Characteristics on customer unit,
Antenna is mounted directly on plastic material

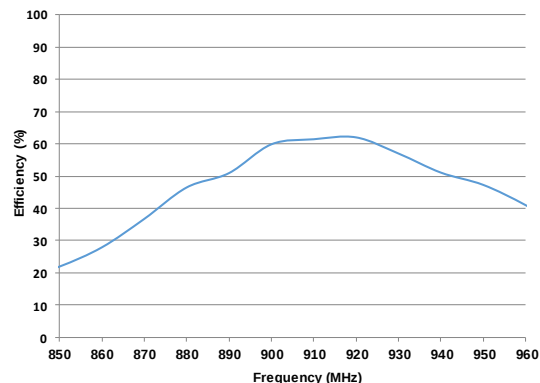
	902-928 MHz
Average Efficiency	60.1%
VSWR Match	2:1 Max
Peak Gain	1.98 dBi
Feed Point Impedance	50 ohms unbalanced
Polarization	Linear
Power Handling	2 Watts CW

Mechanical Specifications

Maximum Dimensions	85.4x32.8x1.25 mm (1.25mm high at cable solder connection)
Cable / Connector	MHF connector Coax Cable diameter, 1.13mm, 112mm length
Mounting	using 3M Adhesive, and positioning holes

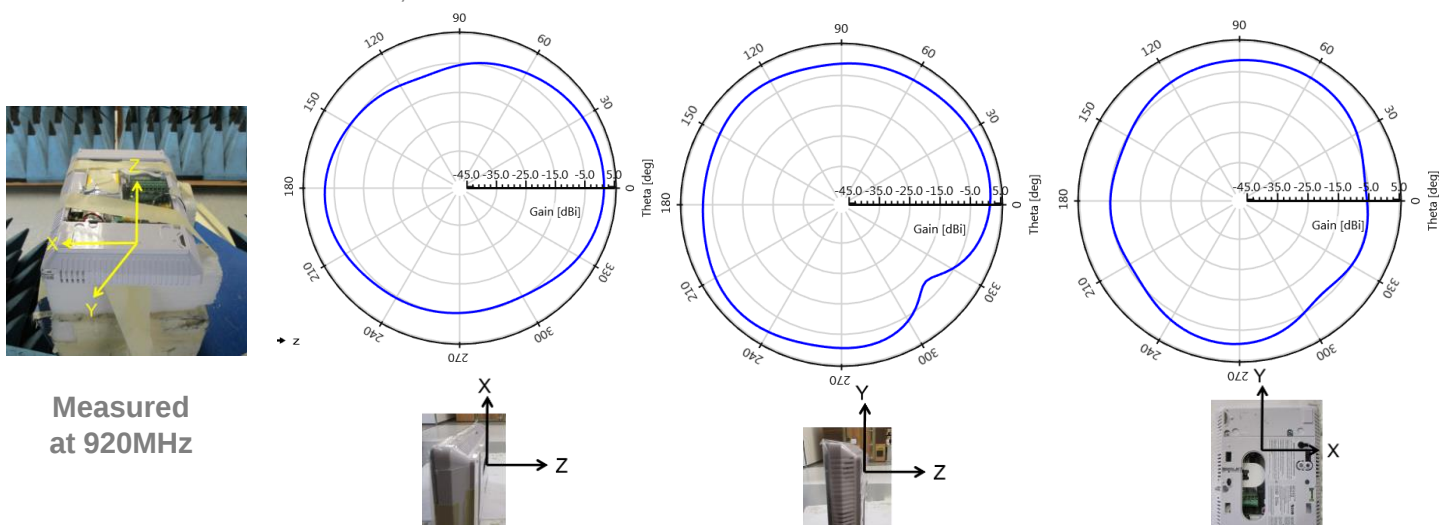
Typical VSWR and Efficiency

VSWR



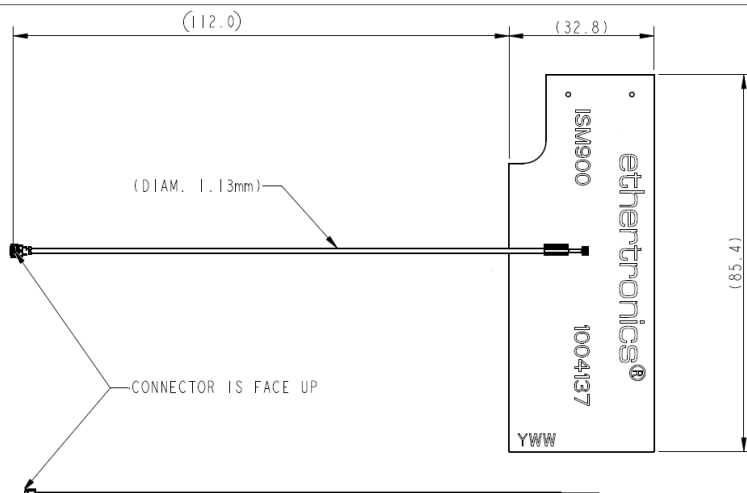
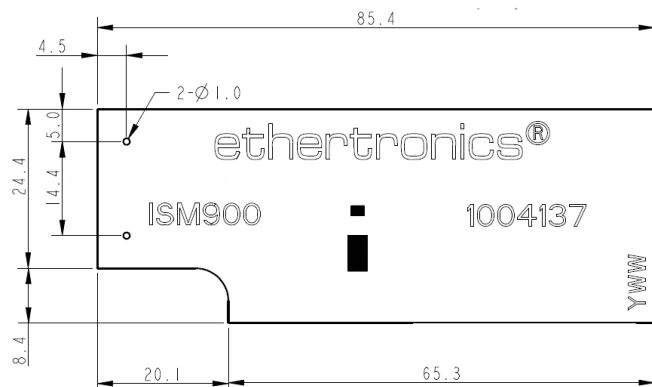
Typical Radiation Pattern

Antenna located in custom unit, **measured at 920MHz**



Mechanical Dimensions

Dimensions for reference only, in mm



*All dimensions provided in this document are for informational purposes only.