

**JUPITER TECHNOLOGY (WUXI) CO., LTD**

**MTI RFID RU-822 Series**

**Quick Guide**

**Version 1.00**

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# **Chapter 1**

## **Introduction**

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### **1.1 Purpose**

This guide will help you set-up and configure your RFID Reader. Following the installation instructions should be quick and easy. If you run into problems, please refer to the Software Description Document on the FTP site that MTI provided customers with account/password for download. If you need further technical support, please e-mail us at [RFID\\_Support@mti.com.tw](mailto:RFID_Support@mti.com.tw).

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## **Chapter 2**

# **Product Introduction**

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### **2.1 Package Contents**

With the MTI RFID RU-822 package, you will receive the following items:

Item	Description	Part Number	Qty
1	MTI RFID RU-822 Reader	RU-822 Series	1
2	AC/DC 5V 1.5A Power Supply and International Power Adapter Kit	0640-0127	1
3	MTI RFID RU-822 Series Quick Guide		1

Table 1      Package Contents

## 2.2 Setup

1. Connect RU-822 Series RFID Reader as shown below:

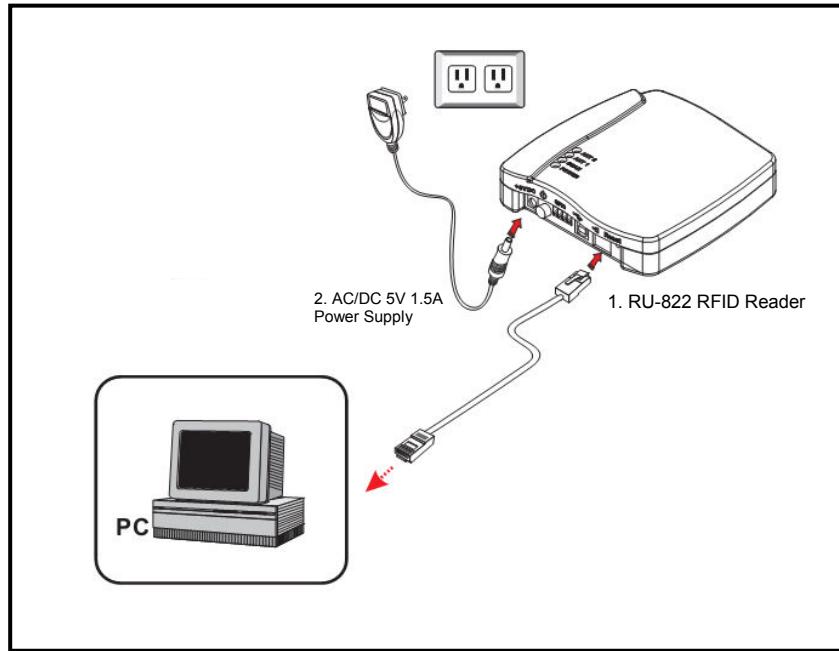


Figure 1      Setup

2. Connect the MTI Circular Antenna to RU-822 Reader as shown below:

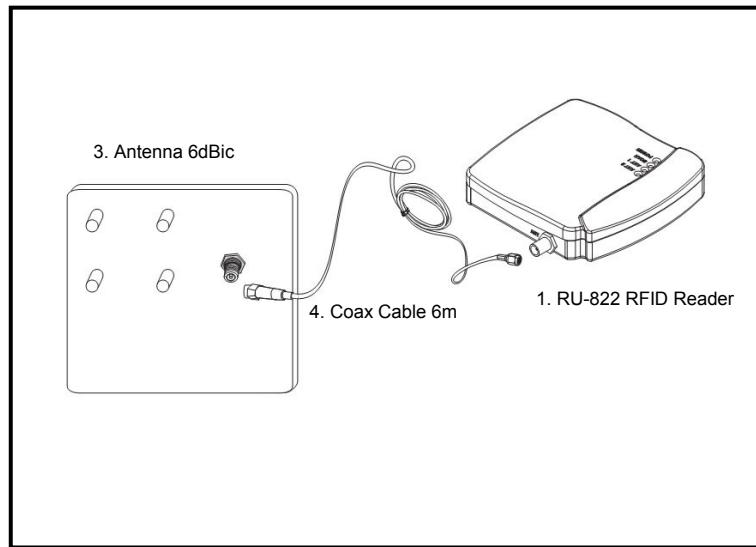


Figure 2      Antenna setup

## 2.3 Software Installation

Download the Software Description Document to the computer connected to the RFID Reader. Open the Software Description Document, and follow the instructions described in the Software Description Document to complete the software installation. Figure 3 shows the window you should see if the software has been installed properly.



Figure 3      Install software correctly

When installation is finished, open “MTI RFID Tracer” by selecting the following commands:

**START > All Programs > MTI RFID Tracer** and open the file **MTI RFID Tracer**.

Follow the steps described in Section 3.1 or 3.2 of the Software Description Document to open the connection to the reader. If the installation has been done properly, you should see the following display window.

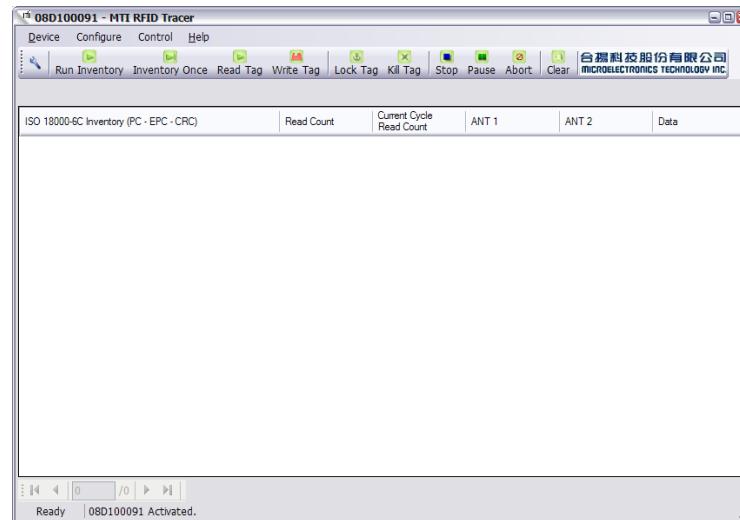


Figure 4 MTI RFID Tracer display when setup has been done correctly

## 2.4 Operational Graphical User Interface

Figure 6 below illustrates what the MTI RFID Tracer display looks like when tags are being read by the reader:

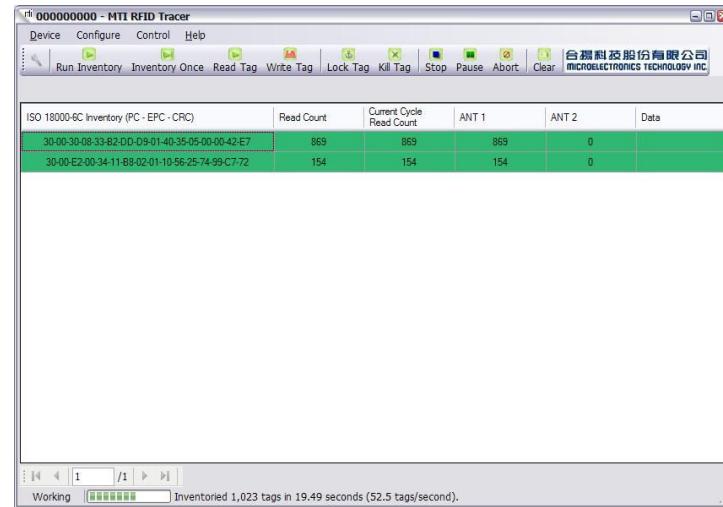


Figure 5 Operational MTI RFID Tracer display with two EPCglobal C1G2 tags being read by the reader

## 2.5 Contact information

Please refer to the MTI RU-822 Software Description Document for more detailed information regarding the GUI control, display and status features. If you need further technical support, please e-mail us at [RFID\\_Support@mti.com.tw](mailto:RFID_Support@mti.com.tw) and include a description of the issue you are encountering and require our assistance with.

## 2.6 Specification

Product Name	RU-822 Series
Frequency	FCC 902~928MHz / ETSI 865~868MHz NCC 922~928 MHz / SRRC 920~925MHz
Output Power	Adjustable +5 ~ +30dBm in 1dB step
Antenna	Internal: 3dBi monostatic antenna build in External: supporting one monostatic antenna with VSWR < 1.5:1 @ 50 Ω
Supply Voltage	5V
Current Consumption	Idle mode: 0.12A Scan mode: 0.5A@+27dBm; 0.6A@+30dBm
RFID Protocol	EPC Gen2; ISO 18000-6C
Host Communication Interfaces / Data Rates	USB 2.0 Full Speed: 12 Mb/s; Ethernet TCP/IP
Compliance	FCC 47 CFR CH. 1 part 15 / EN 302-208 / NCC LP002 / SRRC / RoHS
Effective Range	Over 30 feet (9 m) with 6 dBi antenna (36 dBm EIRP)
Transponder Supported	Alien, Avery Dennison, Hitachi, Impinj, NXP, Omron, Rafsec, Texas Instrument
Dimension	145 mm L x 142 mm W x 32 mm H
Weight	405g
RF Antenna Terminator	Female Reverse Polarity TNC Connector
Host Connector	USB female type B; LAN (RJ-45)
GPIO	1 Input/Output
Indicator	PWR / SCAN / ANT1 / ANT2
API	.Net API
Environment	Storage Temperature: -40°C to 85°C Operating Temperature: 0°C to 40°C

Table 2 Specification

## Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and radiates 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 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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

### IMPORTANT NOTE:

#### FCC RF Radiation Exposure Statement:

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

