

**FCC Part 15.225
Transmitter Certification**

13.56MHz RFID Reader/Writer

Test Report

FCC ID: UEJRFIDRW01

FCC Rule Part: 15.225

ACS Report Number: 06-0215-15C

Manufacturer: AIONEX
Model: RFID Reader/Writer

Installation and Operators Guide



13.56MHz RFID Reader/Writer

Operator's Guide



Model: UEJRFIDRW01

Version: 1.0

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FCC Class A:

“Note: This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.”

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

FCC ID: UEJRFIDRW01

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 THAT MAY CAUSE UNDESIRE OPERATION.

Product Overview

The following sections provide an overview of the AIONEX RFID Reader/Writer.

General description

The AIONEX RFID Reader/Writer is a multi-protocol desktop, wall mount, or handheld radio frequency identification (RFID) data collection device. The Reader is designed to communicate with most industry standard 13.56 MHz RFID tags and smart labels. The Reader has an internal antenna with a typical read/write range of several inches.

The Reader has an attached interface cable with a PS2 jumper cable for power. An asynchronous RS232 interface provides for host communication to a PC or terminal.

The Reader is ideal for use in a variety of medical, industrial, commercial, and field service environments.

Technical data

| | |
|----------------------------|---|
| Frequency | Host Communication Interface/Data Rate |
| 13.56 MHz +/- 7 kHz | UART (RS232): 9600 bps/8/n/1 |
| Physical | Compliance |
| Length: 143 mm | FCC Part 15.225 |
| Width: 63.5 mm | Transponder Communication Rate |
| Height: 31.75 mm | 26 kbps ISO 15693 |
| Current Consumption | 106 kbps ISO 14443A |
| Scan Mode: 100 mA | Effective Range |
| Standby: 17 mA | 70 mm ISO 15693 |
| Antenna | (Individual results may vary with environment) |
| Internal PCB | Tag Compatibility |
| Supply Voltage | ISO 15693, ISO 14443A, Tag-It HF, ICode 1, ICode SLI, my-d, LR1512, Pico Tag, GemWave, Mifare |
| +5VDC | |

Assembly and Wiring

The following sections describe the interface cable and PS2 power connection.

PS2 power connection

Plug the Reader's PS2 connector into an available PS2 port. If no PS2 port is available then an alternative power source must be provided.

PS2/M

Pin 4 +5VDC

Pin 3 Ground

Asynchronous interface RS232

Plug the Reader's DB9/F connector into an available RS232 serial port on a PC or other terminal. A standard three-wire interface (Rx, Tx, and Gnd) is used. Secondary power connections are provided for added flexibility.

RS232 port configuration

9600, N,8,1

DB9/F

Pin 2 Tx

Pin 3 Rx

Pin 5 Ground

Pin 6 +5VDC

Pin 9 Ground

Audio and Visual Elements

Bi-color LED

The Reader's Bi-color LED is configured and controlled through software.

Typical Bi-color LED usage

| | |
|-----------|---|
| LED green | Turns on when a label is detected and read. |
| LED red | Turns on when a read error has occurred. |

Signal buzzer

The Reader's signal buzzer is configured and controlled through software.

Typical signal buzzer usage

| | |
|-----------|---|
| Buzzer ON | Active when a label is detected and read. |
|-----------|---|

Accessories

The following accessories are available for the AIONEX RFID Reader/Writer.

Smart L - Wall Holder

AIONEX RFID RS232/485 Wall Plate Adapter



