

**KENETICS SHORT RANGE CONVEYOR BELT
READER : SR15-CBR1-0
USER MANUAL**



Table Of Content

| | |
|--|------------|
| AMENDMENT RECORDS | II |
| PURPOSE & SCOPE | III |
| DEFINITION & ACRONYMS | III |
| REFERENCES | III |
| SECTION 1: INTRODUCTION | 1-1 |
| 1.1 REGULATORY NOTES | 1-1 |
| 1.2 HARDWARE SPECIFICATION | 1-2 |
| 1.3 POWERING UP THE READER | 1-5 |

AMENDMENT RECORDS

| S/N | By | Description | Version | Date |
|-----|---------------|--------------------------|---------|------|
| 1 | Goh Kok Keong | Initial Draft | 001 | |
| 2 | Zhang Lijuan | Update Operation | 002 | |
| 3 | Ian Thng | Add FCC Regulatory Notes | 003 | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |
| 26 | | | | |
| 27 | | | | |
| 28 | | | | |
| 29 | | | | |
| 30 | | | | |
| 31 | | | | |
| 32 | | | | |
| 33 | | | | |
| 34 | | | | |

PURPOSE & SCOPE

The purpose of this document is to serve as a user manual for the RFID reader.

DEFINITION & ACRONYMS

| S/N | Abbreviation | Description |
|-----|--------------|-------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

REFERENCES

| S/N | Document | Source | Version | Date |
|-----|----------|--------|---------|------|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |

SECTION 1: INTRODUCTION

1.1 Regulatory Notes

An RFID system comprises an RF transmission device, and is therefore subject to national and international regulations. Prior to the powering and operation of the SR15-CBR1-0, relevant compliance certificate should be obtained from the associated watchdog agency. Sale, lease or operation in some countries may be subject to prior approval by the respective governmental body or other international compliance organization.

For countries requiring FCC certification, a typical system configuration containing the SR15-CBR1-0 reader has been tested and found to be compliant with the limits for a FCC Part 15C (intentional radiator) device. Nonetheless, it is still the responsibility of the customers to have their complete system tested and approved for use from the appropriate compliance agencies/authorities before operating or selling the system. As part of FCC part 15 compliance requirements, it should be noted that:

- Modifications not expressly approved by this company could void the user's authority to operate the SR15-CBR1-0 reader.
- The SR15-CBR1-0 reader complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) The SR15-CBR1-0 reader may not cause harmful interference, and (2) must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the 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.

The next section introduces you to the specifics of the SR15-CBR1-0 reader.

1.2 Hardware Specification

| Items | Information |
|------------------------|---|
| Electrical | |
| Supply Voltage | +5VDC +/- 5% |
| Current drawn | 220mA ± 10%(scanning) 45mA ± 10% (standby) |
| Operation RF Frequency | 13.56MHz |
| Mechanical | |
| Host Interface | RS 232 |
| Dimension | 54 X 54 X 7.5mm |
| Weight | 17 grams |
| Others | |
| Operation Temperature | 0 °C to + 50 °C |

Table 1-1 RF Board Specification

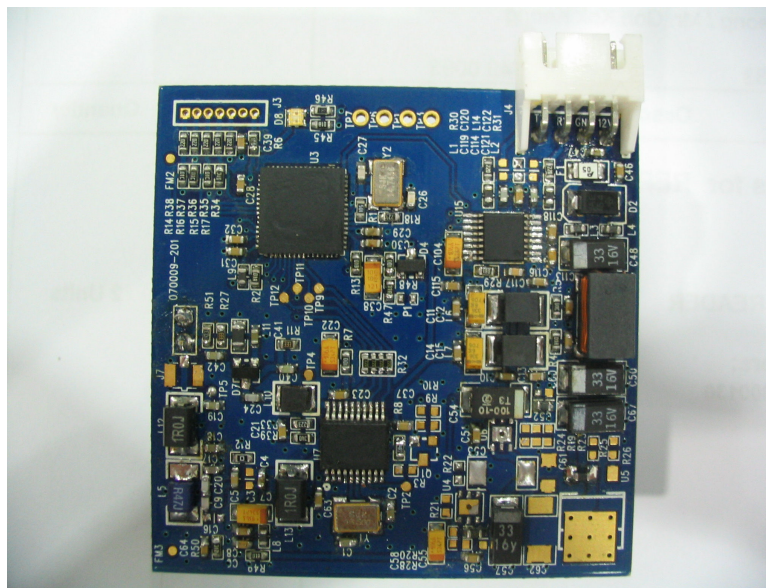


Figure 1-1 RF Board

| Items | Information |
|-----------------------|-----------------|
| Mechanical | |
| Host Interface | RS232 |
| Dimension | 54 X 54 X 3mm |
| Weight | 13 grams |
| Others | |
| Operation Temperature | 0 °C to + 50 °C |

Table 1-2 Antenna Board Specification



Figure 1-2 Antenna Board

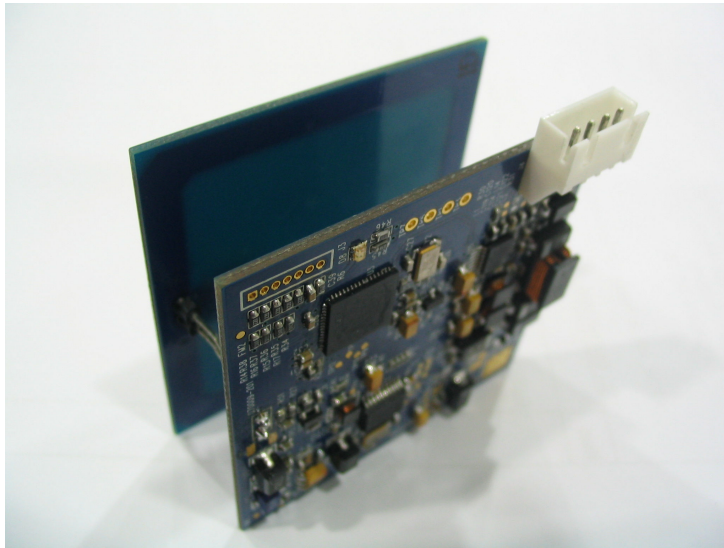


Figure 1-3 RF and Antenna Board

1.3 Powering Up The Reader

1.3.1 The connector on the RF board is used for powering up the reader and for serial-based RS 232 communications as shown in Fig. 1-4.

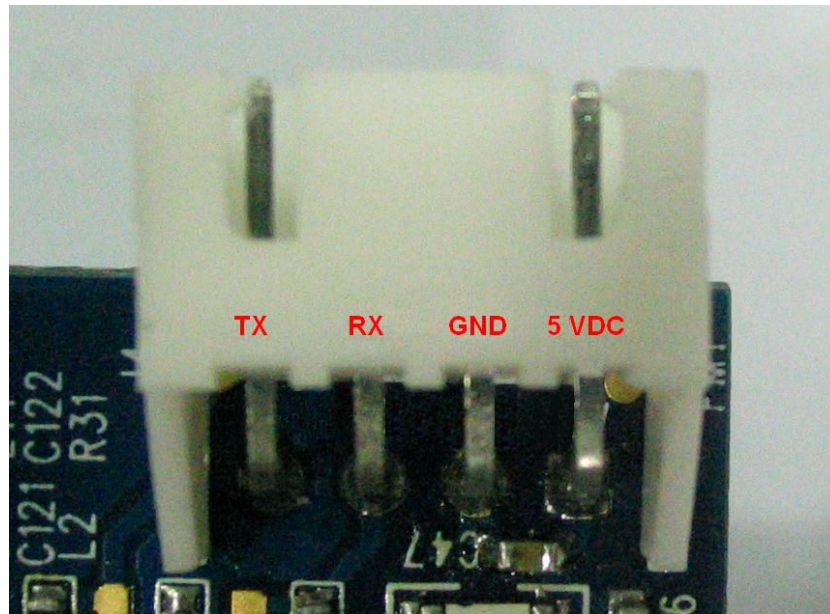


Figure 1-4 Power and RS 232 Connector

1.3.2 After powering up, the

- red LED will light for a long duration as illustrated in Figure 1.5, and then turn off.
- Thereafter, the green LED will light for a long duration as illustrated in Figure 1.6, and then turn off.
- Thereafter, the red LED and green LED will alternate blinking between each other to indicate normal operation.

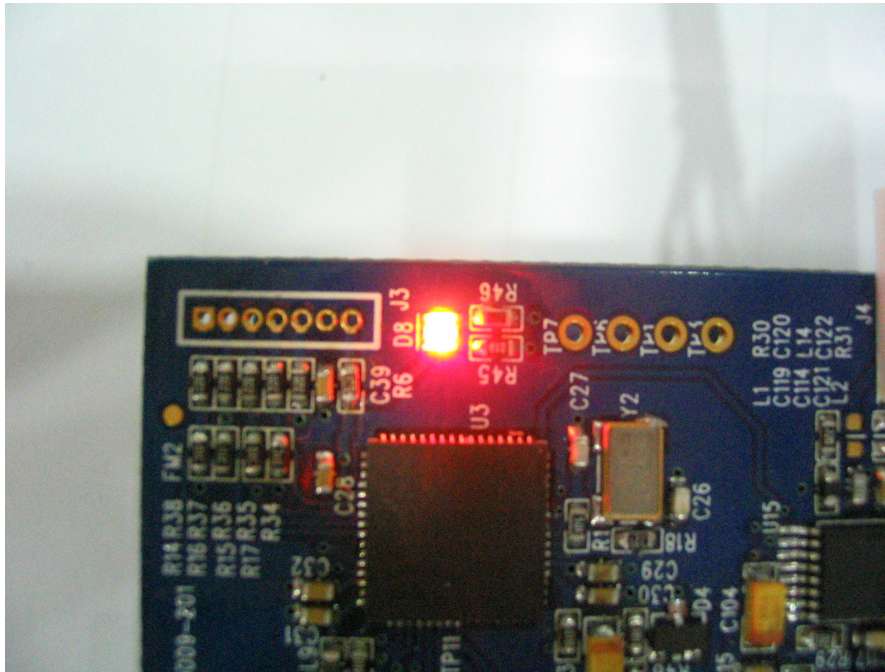


Figure 1-5 Active Red LED on power up.

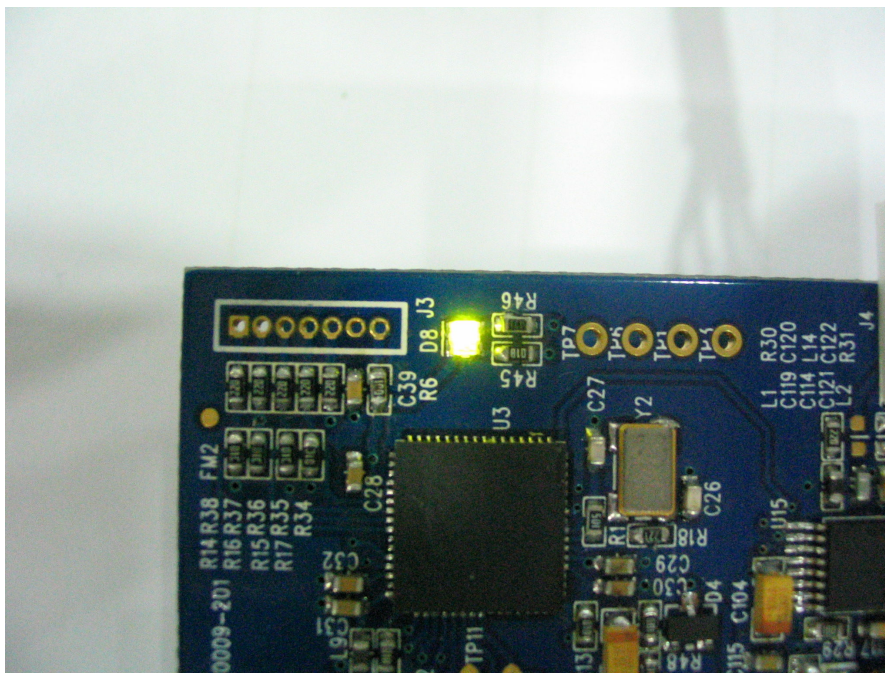


Figure 1-6 Active Green LED on power up.