PRELIMINARY
Version: 4/08/2016

JADAK JDK-2254 RFID READER-USER'S MANUAL

The JDK-2254 RFID Reader utilizes one RFID Transceiver Board and two RFID Antenna Boards. The antenna boards are connected to the transceiver board utilizing coax cables with MMCX type connectors. The function of this system is to read and write RFID data from and to two ISO 15693 RFID tags located in the host system. The separation between the antennas and the tags is approximately 0.5 inches.

For FCC compliance, the label on the final system must include a statement: "Contains FCC ID: 2AAVI-JDK2254"

The JDK-2254 RFID modular radio should not be installed within a system operating simultaneously with other transmitters.

FCC Compliance

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.

Changes or modifications not expressly approved by JADAK LLC (the party responsible for compliance) could void the user's authority to operate the equipment.

Installation Instructions

The JADAK JDK-2254 module is intended for installation in a system that provides the correct mechanical mounting hole pattern and mating electrical connector that contains power and communication signals. There should be no metallic surfaces placed in front of either antenna.

The JDK-2254 RFID module should be installed by authorized and trained service personnel.

Step 1-attach the JDK-2254 RFID module connector to a mating connector (SAMTEC ZLTMM-105-65-G-D-512) with the following connections:

Pin	Use	Description
1	GROUND	GROUND
2	RS-422 DATA OUT	HOST_TX_A
3	GROUND	GROUND
4	RS-422 DATA OUT	HOST_TX_B
5	POWER INPUT	+28V
6	GROUND	GROUND
7	RESERVED	GPIO
8	RS-422 DATA IN	HOST_RX_B
9	GROUND	GROUND
10	RS-422 DATA IN	HOST_RX_A

The power supply voltage must be a minimum of 24.0 VDC for proper operation.

The JDK-2254 RFID module is designed to communicate using a RS-422 hybrid bidirectional communication interface. Communication is achieved using a Texas Instrument's SN65176BD differential bus transceiver. It communicates at 115,200 baud, no parity, 8 data bits, and 1 stop bit.

Step 2-Install the main board by connecting it to the mating connector in the host system and securing it at the four corner screw locations.

Step 3-Apply power to the host system. Install a plug containing an appropriate HF (13.56 MHz) RFID tag to ensure that the host system reads the tag contents.