

SL500D Reader Description

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The SL500D RFID reader unit consists of one PC board mounted into an ABS plastic enclosure. The board is secured to the enclosure by means of threaded fasteners. The reader unit operates from power supplied from an external PC USB port.

Main Circuit Board – The Main board consists of the following sub-systems: Microcontroller (8 bit), USB Protocol Controller, Loop Antenna on PC board, Tank Circuit, ISO15693 Protocol Controller, indicator LED, and Audio Transducer. The Main board provides all of the functions required to interface with the USB communication port and read the external RFID tag. The purpose of the loop antenna, Tank Circuit, and ISO15693 Protocol Controller is to provide the RF link between the reader and the external RFID tag. The ISO15693 Protocol Controller demodulates and converts the RF signal to a CMOS level clocked serial data stream for use by the microcontroller. The microcontroller formats the data from the RFID protocol controller and sends it to the USB protocol controller for transmission to an external PC device.

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