USB Reader

SRR1356-001
SRR1356-003

The KTS USB Reader is a flexible 13.56MHz RFID reader and writer with support for both ISO15693 and ISO14443A/B RFID transponders. It uses a high performance RFID transceiver IC, combined with the proven, robust KTS RFID embedded software stack. The RFID transceiver includes a powerful RF front-end with up to +23dBm (200mW) of output power, along with a dual channel receiver for improved reading performance.

As a USB bus powered device, the USB Reader requires no additional power supply and can be used in conjunction with desktop/laptop computers as well as common mobile operating systems. Thanks to a user-selectable USB HID virtual keyboard interface, the reader can be used for reading of tags without the installation of additional drivers. The default CDC virtual serial port mode allows extensive manipulation of reading and writing paarameters, as well as integration into custom applications, using the flexible AT-style command set for KTS readers.

The USB Reader can also be used in conjunction with the KTS Tag2Image RFID Asset Management System, which allows a high degree of customization and configuration options, as well as an extensive graphical user interface for managing multiple RFID tags.

The reader is available with either an integrated ferrite rod antenna or an SMA connector for use with an external antenna. The integrated high performance antenna allows direct reading and writing of most standard RFID transponders, and even plug-type transponders embedded within metallic objects, with no additional equipment. The SMA connector can be used to connect a standard 50Ω antenna for differing requirements in reading range, area and physical constraints.

Technical Specifications

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Product type	USB RFID Reader/Writer with CDC & HID modes		
Operating frequency	13.56 MHz		
Antenna connection	Integrated ferrite rod antenna or SMA connector for 50Ω antenna		
RF output power	Up to +23dBm / 200mW		
Power supply	USB Bus Powered		
Power consumption	180mA avg.		
RFID standard support	ISO 15693, ISO14443A/B		
Anticollision	Supported		
Standard host interfaces	USB 2.0, UART w/ HW flow control		
USB connection modes	HID virtual keyboard mode (ISO15693 only) CDC virtual serial port mode		
CDC instruction set	Extensive AT-style command set for scanning, reading and writing tags as well as configuration		
UI	Signalling LEDS	Green	Run LED – Lights when reader is receiving power via USB and is on
		Yellow	Tag LED – Lights when RFID tag is detected within reading range
		Red	Data LED – Lights when data transfer to or from a tag is taking place
Product certifications	CE Certified		
Dimensions	90 x 21 x 14 mm [LxWxH] (SMA connector) 86 x 22 x 14 mm [LxWxH] (Integrated antenna)		
Weight	16g (SMA connector) 14g (Integrated antenna)		
Order number	SRR1356-001 – With SMA connector SRR1356-003 – With integrated antenna		

Typical Applications

- Stationary reader/writer applications
- Mobile reader applications