



SDiD 1020 User Instructions
Preliminary Version
V 0.1

## **FCC Notice:**

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.

Any change or modification not expressly approved by the manufacturer could void the user's authority to operate the equipment.

#### Overview

The SDiD 1020 is a Radio Frequency Identification, RFID, Reader/Writer device in the form of a Secure Digital Input/Output, SDIO, card.

The SDiD 1020 card enables PDAs, cellular phones and other handheld devices to operate as Radio Frequency Identification Readers and Writers.

The SDiD 1020 is a complete Secure Digital, SD, Card design that incorporates the antenna, RFID transceiver, SDIO interface and all necessary software drivers.



#### Features

## Radio Frequency Identification Reader/Writer:

- ISO 14443A/B, ISO 15693 Compliant.
- Supports Philips' I-Code® SLI, Texas Instruments Tag-it<sup>TM</sup>HF.
- Data exchange speeds of 106, 212, 424 and 848 kbit/sec.

### Secure Data, SD, Card:

- SDIO compliant, version 1.10.
- SD-1, SP-4, SPI mode.

## Host Support:

- Utilizable on terminals with SDIO enabled SD card socket.
- Supports Microsoft® Pocket PC 2002/2003, Windows Mobile<sup>TM</sup> 2003.
- Supports Palm OS® 4.1 and more recent versions.

## Read and Write Range:

• Up to 8 cm, depending on tag.

## **Operating Frequency:**

• 13.56 MHz, license-free ISM band.

#### Integrated Antenna:

• Compact Antenna.

#### Low Power Consumption:

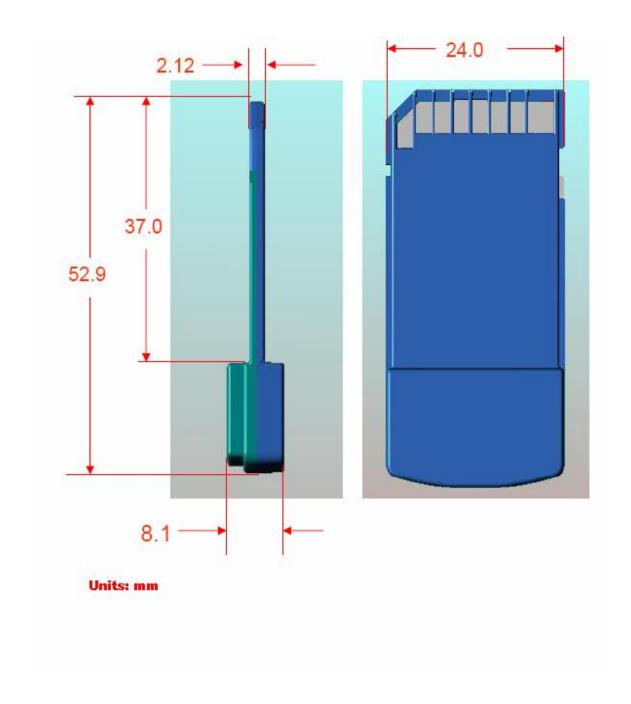
• 150 mA typical operational current.

#### Card Status LED Indicator:

• Standby, search and data communications indication.

# **Physical Dimensions**

Parameter	Nominal Value
Outline Dimensions (LxWxH):	52.9x24.0x2.1
Weight:	Less than 10g



# **LED Specification**

The SDiD 1020 has an integrated LED that is used to indicate the card status. The following table shows the different LED states and the corresponding card status:

LED Status Indicator	
Card Status	LED State
Standby Mode	OFF
Reader/Writer in 14443 Mode	Two blinks every two seconds
Reader/Writer in 15693 Mode	Three blinks every two seconds

# **Operating Instructions**

- Insert the SDiD 1020 card into the SD card slot of the host device. The integrated LED on the SDiD 1020 will initially be ON for two seconds and it will turn OFF after.
- 2) Start the application software in the host device.
- 3) When the card is configured to act as a reader/writer the LED will blink twice every two seconds. At this point the SDiD 1020 card is ready to read/write from/to a target.
- 4) When the SDiD 1020 card is in the Standby Mode, the LED will be OFF and the SDiD 1020 card will not be able to read/write from/to cards until the appropriate mode is selected in the Host Software Application.