S1853 UHF RFID Handheld Reader User Manual
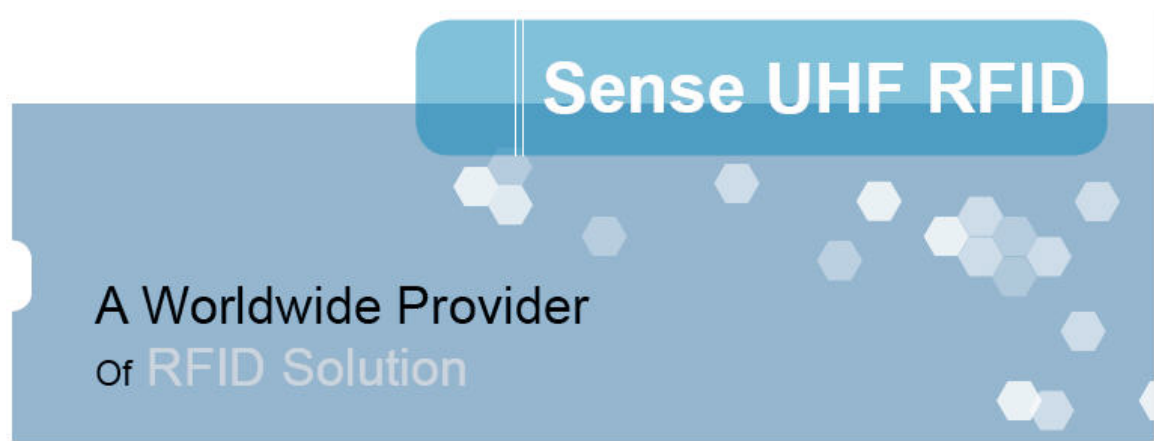
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July, 23th, 2008

Overview

The S1853 handheld reader is a RFID/Barcode dual-purpose industrial handheld reader with RS232 interfaces. Based on windows CE 5.0 and Freescale ARM9 microprocessor, it has multiple user-friendly interfaces which make it very easy to use and integrate. It can read or write EPC Gen2 tags.

Fig 1

Features

1) Ability to read and write EPC Class1 Gen 2 RFID and ISO18000-6B tags, capture 1D and 2D bar codes, and capture images.

2) Exceptionally rugged construction delivers an extraordinarily low total cost of ownership through reduced repair and downtime costs.

3) 3.5' large display LCD provides exceptional clarity and contrast for easy reading in a wide variety of lighting conditions.

4) Expansion battery in hand holder adds to the long working time of reader.

Application Field

The S1853 handheld computer designed to perform in the harshest conditions in your warehouse, manufacturing facility, yard, distribution centre or port.

Specifications

Physical Characteristics	
Dimensions	(Length) 238mm x (Width) 95 mm Thickness of Indicator : 30 mm
Weight	480g Battery with Handle: +140g
Display	3.5 in. QVGA color
Power	Removable, rechargeable 3.7volt Lithium Ion 3200 mAh battery pack
User Environment	
Operating Temperature	-15°C to 55°C
Charging Temperature	0°C to 40°C
Storage Temperature	-40°C to 70°C
Humidity	5% to 95% non-condensing
Drop Spec	Multiple drops to concrete: 1.2 m across the operating temperature range
Tumble	2,000 one-meter tumbles at room temperature (4,000 hits)
Electrostatic Discharge (ESD)	+/-15kVdc air discharge; +/-8kVdc direct discharge; +/-8kVdc indirect discharge
RFID	
Tag Standards supported	EPC CI Gen 2，ISO18000-6B
Nominal read range*	3.0cm to 150.0cm
Nominal write	10.0 cm to 50.0cm

range*	
Max Output Power	1W
Wireless Communications	
Peripherals and Accessories	
Cradles	15-slot charge in //RS232
Charger	15-Slot universal battery charger

User Interface	• TFT LCD and Touch Screen
	  - 3.5" VGA,240×320 TFT LCD
	  - 16 bit true color (64K) , adjustable and high reliability backlight and outdoor (sunrise) operation ability
	  - Standard Touch Screen
	• Keyboard & Button
	  - Shortcut Keys (to control the WiFi and Bluetooth interface)
	  - System Reset Button
	• Status Monitoring LEDs
	  - Battery charge status LED
	  - System operating status LED
	  - Bluetooth status LED
	  - RFID/BARCODE operation status LED
	  - Communication status LED
	• Mini Speaker
	  - Voice indication

Extension Interface	• One SD/IO slot to use SD Memory card, SD WiFi card, SDIO CPU card and HF RFID reader card optionally
Battery Management	• 3.7V 2500mAh Lithium–ion battery • Optional External Battery:3.7V 3600mAh Lithium–ion battery • Battery Capacity Indication • Three types of Power Supply: Battery、AC Adapter and Car Lighting Adapter • Internal charge management module
Power Supply	• AC Adapter(Rechargeable & Operating) • Battery Charger (Rechargeable Handheld Accessory & Battery) • Optional Charger: Car-mounted Lighting Adapter

Warning

- The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

- This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
    This device may not cause harmful interference, and this device must accept any interference received, including interference that may cause undesired operation.

- Do not attempt to disassemble the product and battery by yourself. Non-expert handling of the devices may damage them.

- Our reader is a radio transmitter and receiver. It is designed and manufactured not to exceed limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. To comply with FCC RF exposure compliance requirements, this product is applicable only in Mobile Configurations. The antennas of this product must be kept a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

- Some electronic devices are susceptible to electromagnetic interference sent by phone if inadequately shielded. Please use phone at least 20cm or as far as you can from TV set, radio and other automated office equipment so as to avoid interference.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television

reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/ TV technician for help.