MI-RFID MIAU UHF RFID SDK

Introduction To RFID

Radio Frequency Identification (RFID) is an advanced wireless communication system, consists of a wireless IC tag, an antenna, and a reader/scanner.

RFID is used in inventory control, logistics, supply chain management, production control, factory automation, security, door access systems, ticketing, ID cards, and prevention of counterfeits. RFID is recognized as the most reliable technology today for asset **identification** and **authentication**.

MDT, through financial and R&D collaboration with its partners in Malaysia and Japan has acquired intellectual property rights to the chip, scanner, antenna, as well as the software development tools.

The SDK Package

MDT's Mi4U UHF RFID system is functionally powerful but easy to use. Systems integrators and resellers are able to develop EPC Class 1 Gen 2 compliance applications with ease. The SDK package includes:

- Mi4U UHF RFID 4-channel Scanner (1 unit)
- Dever Adapter (1 unit)
- UHF Circular Polarization RFID Antennae (2 units)
- □ RF Cable (3 meter)
- □ RFID Tags (50 pieces)
- □ RS232C Cable (2 meter)
- Demo Software/Sample Source Code
- Command Set Manual

Using Mi4U UHF RFID SDK

MDT's RFID SDK package contains components for system testing and tools for applications development. It includes RFID IC tags, RFID scanner and RFID antenna. They can be fully integrated into computers and initiated by sample software or API functions:

- To control the scanner in each scanner command level
- □ For the command execution test
- □ For the parameter change test
- □ For utilization or modification of tags
- □ To successive read tags
- □ To perform RFID tag related database registration and modification.



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Hardware Specifications

Reader Specifications

Frequency	902~928MHZ
Carrier	Frequency Hopping Spread Spectrum
Max RF Power Output	32dBm
Power Control	27~32dBm~~1dBm per step
Protocol	ISO-18000-6
Antennas	4 ports
Power Supply	5VDC, 4A
Power Consumption	<12Watts
Communication Interface	RS232/RS485;1 Wiegand26/34
Indicators	Power, RF, Communication
Operating Temperature	-10°C +55°C
Storage Temperature	-20°C +80°C
Tag Read Rate	>20 tags per second
Read Range	>6m tag and antenna dependent



Tag Specifications

Integrated Circuit (IC)	EPC Class 1 Gen 2 compliant	
Total memory	96 bits	
Operating Frequency	860-960MHz	
Read Sensitivity	Min 2.3 V/m	
Operating Temperature	-40°C/+60°C	
Bending Diameter (D)	>50mm, tension <10N	
Static pressure (P)	<10MPa (10N/mm²)	

Mi4U Reader Demo		EN English (Uniter	(States) 😰 😳	
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Sample Software Reduce the learning curve. Learn the API quick and efficient through this sample software. Demonstrate the use of all API functions in Visual Basic Development.

* Specification and product availability subject to change without prior notice.

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SOFTWARE DEVE COMPONENTS	ELOPMENT
Туре:	RS232 or TCP/IP Command functions and API
OS:	Windows ME, 2000, XP, Windows 7.
Interface:	RS232, RJ45 interface
Platform:	Any API/Serial Port & network command set supported development tools
Sample Code:	Visual C++ 6.0
Manual:	Included