

# UHF RFID Desktop Reader



**Model No.: QSF4100**

## GENERAL DESCRIPTION

QSF4100 is a high-performance UHF desktop reader, which with built-in antenna and reading distance can reach 1m. Combined with a unique high-efficiency signal processing algorithm, it achieves high reading rate while achieving electronic labeling. Fast read and write processing, can be widely used in logistics, access control systems, anti-counterfeiting systems and production process control and other radio frequency identification (RFID) systems.

## FEATURES

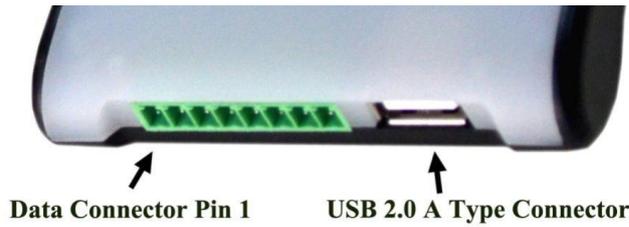
- Self-intellectual property;
- Support ISO18000-6C(EPC C1G2) protocol tag;
- 902~928MHz or 865~868MHz frequency band(frequency customization optional);
- FHSS or Fix Frequency transmission;
- Effective range from 10~300cm (adjustable according to real application need);
- Multiple tag anti-collision>50pcs/s;
- Multiple tag inventory speed>50pcs/s;
- Tag buffer size: 370PCS@Max.128bitsEPC or 120PCS@Max.496bitsEPC;
- Low power dissipation with USB power source or external single +9 DC power supply;
- Support RSSI and 2 GPIO;
- Support USB (VSP mode), RS232, Wiegand (optional) and USB HID (keyboard emulation)

- High reliability design without extra heat-sinking measure;
- Support on-the-site firmware upgrading.

**Electrical Characteristics:**

<b>Input Voltage</b>	DC 3.5V – 5 V.	
<b>Standby Current</b>	<80mA.	
<b>Working Current</b>	180mA @ 3.5V (26 dBm Output,25°C).	
	110mA @ 3.5V (18 dBm Output,25°C).	
<b>Starting Time</b>	<100mS.	
<b>Operating Temperature</b>	- 20 °C - + 70 °C	
<b>Storage Temperature</b>	- 20 °C - + 85 °C	
<b>Operating Humidity</b>	< 95% (+ 25 °C)	
<b>Air Interface Protocol</b>	EPC global UHF Class 1 Gen 2 / ISO 18000-6C	
<b>Spectrum Range</b>	902Mhz – 928Mhz, 865MHz – 868MHz (Optional)	
<b>Supported Regions</b>	US, Canada and other regions following U.S. FCC	
	Europe and other regions following ETSI EN 302 208	
	Mainland China	
	Japan	
	Korea	
	Malaysia	
	Taiwan	
<b>Output Power</b>	10dBm, 18-26 dBm	
<b>Output Power Precision</b>	+/- 1dB	
<b>Output Power Flatness</b>	+/- 0.2dB	
<b>Receive Sensitivity</b>	< -70dBm	
<b>Peak Inventory Speed</b>	> 50 pcs/s	
<b>Tag Buffer Size</b>	200 pcs @ 96 bit EPC	
<b>Tag RSSI</b>	Supported	
<b>Antenna</b>	D-100	2dbi Circular Polarization Antenna.
		Read range:80cm-200cm (Tested with Impinj E41b tag)
	D-101	0dbi Circular Polarization Antenna.
		Read range:10cm-50cm (Tested with Impinj E41b tag)
<b>Host Communication</b>	USB 2.0, RS-232, Wiegand 26, Wiegand 34	
<b>Baud Rate</b>	115200 bps ( default and recommended)	
	38400 bps	

**3.PIN Assignments**



PIN	Interface	Description
1	+ 9V	External 9V power supply.
		(Note: Don't connect an external power supply and USB power supply both.)
2	GND	Common ground with +9V external power.
3	RS-232 TXD	RS-232 data output.
4	RS-232 RXD	RS-232 data input.
5	GND	Common ground with RS-232 interface.
6	GPIO3	GPIO3 or Wiegand Data 0.
7	GPIO4	GPIO4 or Wiegand Data 1.
8	GND	Common ground with Wiegand data.

#### 4. Structure Dimensions



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