

## Introduction

Contactless RF Card Writers of CR20 Series, including CR20E/CR20MW/CR20M, are developed based on an international standard protocol ISO/IEC 14443 for both card types A and B, and the 125K low frequency protocol.

The series adopts ZKTeco's self-developed high-performance RF card reader circuit. The mini card writers have high integration capability and strong anti-interference ability and offer stable and convenient performance with high cost-performance ratio. With USB communication interface, the series is applicable to access control, time & attendance, consumption and charging, anti-theft, patrol, and other RFID-related scenarios.

## **Features**

Model	Descriptions		
CR20E	<ul> <li>Card writers with antenna that actively searches for cards; working frequency is 125kHz</li> <li>Effective detection distance: 0cm ~ 8cm (depends on working environments and card types)</li> <li>Data receiving time within the effective distance: &lt;65ms</li> <li>Power supply: 5V USB port</li> <li>Working current: &lt;80mA</li> <li>Available to export to a USB; drive-free</li> </ul>		
CR20MW	<ul> <li>Card writers with antenna that searches for cards on requests; working frequency is 13.56MHz</li> <li>Effective detection distance: 0cm ~ 8cm (depends on working environments and card types)</li> <li>Data receiving time within the effective distance: &lt;90ms</li> <li>Power supply: 5V USB port</li> <li>Working current: &lt;80mA</li> <li>Available to export to a USB; drive-free</li> </ul>		
CR20M	<ul> <li>Card writers with antenna that actively searches for cards; working frequency is 13.56MHz</li> <li>Effective detection distance: 0cm ~ 3cm (depends on the IC card type and installation environment)</li> <li>Data receiving time within the effective distance: &lt;90ms</li> <li>Power supply: 5V USB port</li> <li>Available to export to a USB; drive-free</li> </ul>		

## **Specifications**

Model	CR20E	CR20MW	CR20M
Appearance	22CT-00		
Card Type(s) Supported	125kHz RFID Proximity Cards	Mifare One S70, Mifare One S50	Mifare One S70, Mifare One S50, 1208-CPU+MF, MF3-Desfire Ev1, Ultralight, Ntag213
Operating Frequency	125kHz	13.56MHz	13.56MHz
Power Supply	DC 5V (±5%)	DC 5V (±4%)	DC 5V (±4%)
Current	Stand-by: 25mA Normal: 80mA	Stand-by: <82mA Normal: <102mA	Stand-by: <40mA Normal: <60mA
Detection Distance	30 - 100mm	30 - 100mm	0 - 30mm
Communication Interface	USB Port	Keyboard Emulation Output (Read Only)	Keyboard Emulation Output (Read Only)
Operating Temperature	-10°C ~ 70°C	-10°C ~ 70°C	-10°C ~ 70°C
Storage Temperature	-20°C ~ 80°C	-20°C ~ 80°C	-20°C ~ 80°C
Dimensions (mm)	117.2 * 66.2 * 17	111 * 81 * 26.6	117.2 * 66.2 *17

