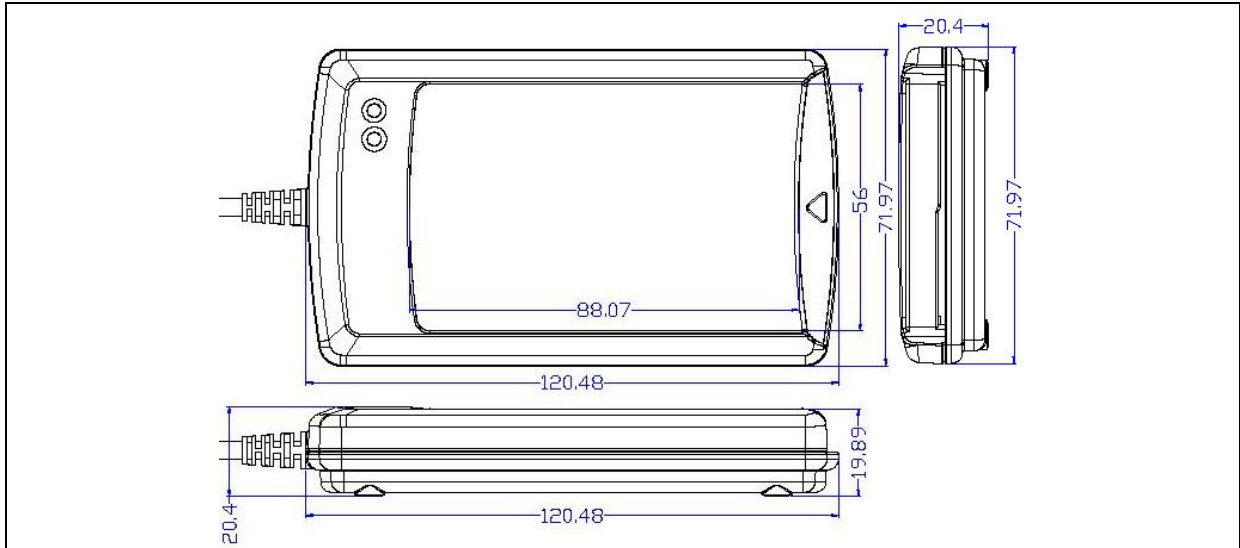


4.0. Technical Specifications



Physical Characteristics

Dimensions	120.5 mm (L) × 72.0 mm (W) × 20.4 mm (H)
Weight	150 g
Color	Black

Serial Host Interface

Protocol	Serial RS-232
Connector Type	DB9 Connector
Power Source	From USB port
Speed	9.6 Kbps (default), 19.2 Kbps, 38.4 Kbps, 57.6 Kbps, 115.2 Kbps, 230.4 Kbps
Supply Voltage	5 V
Supply Current	Max. 200 mA
Cable Length	1.5 m, Fixed (DB9 + USB)

Contactless Smart Card Interface

Standard	ISO 14443 A and B Parts 1-4
Protocol	ISO 14443 T=CL for ISO 14443-4-compliant cards
.....	T=CL Emulation for MIFARE Classic
Operating Frequency	13.56 MHz
Operating Distance	Up to 50 mm (depends on tag type)
Smart Card Read/Write Speed	106 Kbps, 212 Kbps, 424 Kbps, 848 Kbps
Antenna Size	65 mm × 60 mm

Contact Smart Card Interface

Number of Slots	1 Full-sized Card Slot
Standard	ISO 7816, Class A, B, C (5 V, 3 V, 1.8 V)
Protocol	T=0; T=1
Supply Current	Max. 60 mA
Smart Card Read/Write Speed	9.6 Kbps – 344 Kbps
Short Circuit Protection	(+5) V/GND on all pins
Clock Frequency	4.80 MHz
Card Connector	ICC Slot: Landing
Card Insertion Cycles	Min. 200,000

SAM Card Interface

Number of Slots	1 Standard SIM-sized Card Slot
Standard	ISO 7816 Class A (5 V)
Protocol	T=0; T=1
Smart Card Read/Write Speed	9.6 Kbps – 420 Kbps
Card Connector Type	SAM Slot 0: Contact

Built-in Peripherals

LED	2 single-color: Red and Green
Buzzer	Monotone

Other Feature

Firmware Upgrade	Supported
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Operating Conditions

Temperature 0 °C - 60 °C
 Humidity Max. 90% (non-condensing)
 MTBF 500,000 hrs

Certifications/Compliance

ISO 14443, ISO 7816, CE, FCC, RoHS 2

Device Driver Operating System Support

Windows® XP, Windows Vista®, Windows® 7, Windows® 8, Windows® 8.1, Windows® 10,
 Windows® Server 2003, Windows® Server 2008, Windows® Server 2008 R2, Windows® Server 2012,
 Windows® Server 2012 R2, Windows® Server 2016
 Linux®



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