

Ex10 USB RFID Desktop Reader



Model: RRU1612DK-E7U

RRU1612DK-E5U

RRU1612DK-E3U

160mmx120mmx17mm Size:



GENERAL DESCRIPTION

RRU1612DK-E7U/RRU1612DK-E5U/RRU1612DK-E3U are high-performance ultra-high UHF RFID desktop inventory platforms. Designed with fully independent intellectual property rights and proprietary efficient signal processing algorithms, these platforms maintain a high tag reading rate while enabling fast read/write processing of RFID tags. They can be widely used in various RFID systems such as retail, asset management, logistics, anti-counterfeiting, and production process control.

FEATURES

- Self-intellectual property;
- Designed with IMPINJ E710 E710/E510/E310 and support ISO18000-6C(EPC C1G2) protocol tag, featuring excellent multi-tag anti-collision functionality;
- 865~868MHz/902~928MHz frequency band(frequency customization optional);
- FHSS or Fix Frequency transmission;
- RF Output power up to 27dBm (adjustable);
- Maximum inventory speed* up to 1000pcs/s (using E710) or 600pcs/s (using E510) or 350 pcs/s (using E310);
- Built-in antenna, typical reading effective distance < 50cm*(optional ceramic antenna with a typical reading distance greater than 2m);
- Tag buffer size up to 1000PCS@96bits EPC;
- Supports USB 2.0 interface (virtual COM port mode and emulation keyboard mode), optional Bluetooth support;
- Low power dissipation with USB power supply;
- Provide DLL and Demonstration Software Source code to facilitate further development.
- Support RSSI;
- Supports firmware upgrades.

CHARACTERISTICS

Absolute Maximum Ratings

ITEM	SYMBOL	VALUE	UNIT
Power Supply	VCC	6	V
Operating Temp	T_OPR	-20 ∼ +60	${\mathbb C}$
Storage Temp	T_{STR}	-20 ∼ +70	${\mathbb C}$

^{*} Effective distance depends on antenna, tag and working environment.

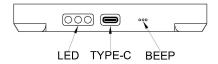


Electrical and Mechanical Specification

Under TA=25°C,VCC=+5V unless specified

ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Power Supply	VCC		5		V
Current Dissipation	Ic	400(5dBm)		750 (27dBm)	mA
Frequency	F_REQ	-	865~868 (ETSI) 902~928 (FCC)	-	MHz
RF Output Power	P_RF	5		27	dBm
Receive Sensitivity	SR		-74(using E310) -81(using E510) -87(using E710)		dBm

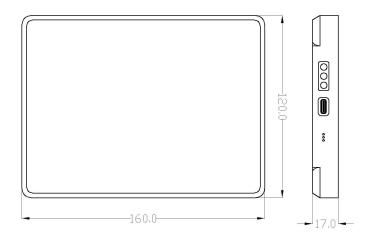
INTERFACE



ITEM (from left to right)	SYMBOL	DESCRIPTION	REMARK
Bluetooth LED	ВТ	Bluetooth detected indication	BLUE
Operation LED	WORK	Tag detected indication	GREEN
Power LED	PWR	Power on indication	RED
USB Interface	TYPE-C	Type-C USB2.0	
BUZZER	BEEP	Power on indication Tag detected indication	

Depending on the model and configuration, the power supply, communication, and indicator lights on the device may vary slightly. Please refer to the actual product for details.

MECHANICAL DATA (UNIT:mm)



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ACCESSORY





Type-C USB 2.0 cable * 1 piece

Remark:

- 1. Specifications are subject to change, please pay attention to our latest version.
- 2. Shenzhen RoyalRay Science and Technology Co., Ltd. reserves the right to the final interpretation of the above terms.