iDTRONIC

UHF Long Range Reader
ID BOX

PRODUCT DESCRIPTION

Powered by the innovative Impinj E710 reader chip, the UHF Long Range Reader ID BOX is able to read up to 900 RFID tags per second.

The compact design, multiple communication interfaces, and a PoE power supply mode facilitate the installation and allows for rapid deployment, high performance, and long reading distances.

The durable housing is made of all-aluminum alloy, which has good heat dissipation and is resistant to rough and demanding environments in the industrial sector.

The four-corner installation method is stable and reliable. The front panel is designed with multiple indicators to clarify prompt information. RJ45, RS232, and other communication modes can meet the needs of various industrial applications.

Through these communication channels, it is also possible to configure the functional parameters and to upgrade the firmware. We offer a software development kit especially for our UHF Reader series.

APPLICATIONS

- Machine Authentification
- Automotive Production
- Logistics Applications
- Data Collection (IoT)
- Robotics

FEATURES

- Based on IMPINJ Reader IC E710
- 33dBm RD Power Output
- 4/8/16 External Antennas
- GPIO (4x Input / 4x Output)
- TCP/ IP, WIFI, RS232, Ethernet

RFID OPTIONS

- UHF
  (EPC C1 GEN2 | ISO 18000-63)

iDTRONIC

TECHNICAL DATA

ELECTRICAL SPECIFICATIONS

Power Supply	DC 12V / 3A / PoE
Power Rating	Standby 2.5W Work 13.5W (MAX) @+30 dBm
PoE Power Supply	802.3af or 802.3at
Operating Frequency	840 – 960 MHz, software programmable
Output Power	5dBm-33dBm (±1dB) adjustable
Operating Distance	up to 12 meters*
Antennas	**TNC-Male**: 4 external (50 Ω) **SMA - Male**: 8 external (50 Ω) 16 external (50 Ω)
Chipset	Impinj E710
Max. Reading Rate	≥900 tags/s
Status	Power Indicator, Status Indicator Antenna Indicator
Connector Interfaces	RS232 | RS485 Ethernet 10 – 100 M GPIO (4 IN and 4 OUT) Reserved WIA Antenna Interface
Communication Interface	UART serial port (RS232), Baud rate 9600~115200bps

MECHANICAL CONDITIONS

Dimensions	183 × 174 × 25.5 mm
Material	Aluminum / Plastic
Protection Class	IP40

ENVIRONMENTAL CONDITIONS

Operating Temperature	-20°C up to +60°C
Storage Temperature	-40°C up to +8°C
Humidity	up to 90%, non-condensing

SUPPORTED STANDARDS / TAGS

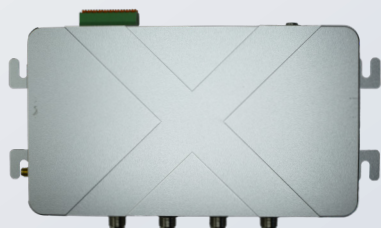Standard ISO 18000-6C, EPC Class 1 Generation 2

APPLICABLE STANDARDS

EMC	EN 301 489-3
Radio Regulation	EN 302 208-2
Safety	CEI EN 60950-1 CEI EN 50364

SUPPORTED STANDARDS / TAGS

Supported OS	Windows 7 or higher
Supported Languages	C, C#/.NET, Java

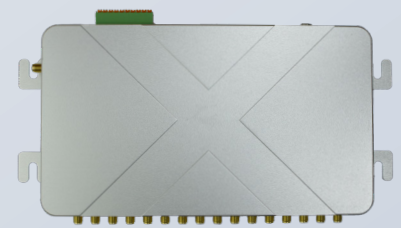*Reading distance depends on tag, antenna and environmental conditions*

PRODUCT IMAGES

ID BOX 4

ID BOX 8

ID BOX 16

ORDER CODES

VERSIONS	ORDER CODES
UHF Long Ranger Reader - ID BOX 4	R-IN-UHF-LR4C
UHF Long Ranger Reader - ID BOX 8	R-IN-UHF-LR8C
UHF Long Ranger Reader - ID BOX 16	R-IN-UHF-LR16C