



1311 *Bluetooth*[®] UHF RFID Reader

High Performance, *Bluetooth*[®] wireless technology enabled UHF RFID reader

Designed to read and write to EPC Class 1 Gen 2 (ISO18000-6C) UHF transponders and communicate with a variety of host devices via *Bluetooth*[®] wireless technology. With its Impinj R2000 core and range of interchangeable high performance antennas the 1311 performs like no other reader, giving the user the highest levels of flexibility currently available in today's market. The reader can be configured with class leading high performance 2D data scanning to bring unparalleled data collection capabilities.

Integrate With Ease

The 1311 *Bluetooth*[®] UHF RFID Reader incorporates ASCII protocol for faster and easier application development. ASCII protocol provides the developer a powerful set of commands that carry out multiple actions locally within the reader. This approach enables multiple tag operations executed using simple pre-configured ASCII commands which speeds integration of the reader into applications.



1D Barcode, 2D Barcode Imager, ASCII 2 Compatible, Lithium-Polymer Battery, Ultra High Frequency RFID Reader

Features:

High Performance *Bluetooth*[®] Multi-modal Data Capture

UHF RFID and 2D barcode data capture in one integrated *Bluetooth*[®] device

Hardware Platform Independence

Operates with wide variety of *Bluetooth*[®] wireless technology enabled host devices including touchscreen MP3 players, phones, tablets, Enterprise Handhelds and PC's

OS Independence

Operates with Windows Mobile, WinCE, Windows XP, 7, 8, Android, iOS

Batch Data Collection

Removable high capacity Micro SD data card and real time clock for extended batch data collection independent of host connection

Flexible Configuration

Unique interchangeable high performance antennas including optional 2D scanning and trigger handle with a range of device specific mounts for holding phones and MP3 players

High Performance barcode scanning

Integrated Motorola SE4500 imaging engine provides class leading barcode scan performance via its unique patent pending fast pulse illumination which delivers outstanding motion tolerance and class leading 1D and 2D data capture

1311 Bluetooth® UHF RFID Reader Specifications:

PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

DIMENSIONS (WITH TRIGGER HANDLE):	16.0cm × 7.7cm × 16.9cm (LxWxH)
DIMENSIONS (WITH SLIMLINE GRIP):	16.0cm × 7.7cm × 9.7cm (LxWxH)
WEIGHT (INCLUDING BATTERY & TRIGGER HANDLE):	380g (13.4 oz.)
USER INPUT:	Trigger button
USER FEEDBACK:	Speaker, vibration motor, LED
POWER:	Removable, rechargeable 4.2 volt Lithium Polymer 2200 mAh battery pack, 8.4 watt hrs.
ENCLOSURE MATERIALS:	Black Lexan EXL9330 PC Yellow Lexan 943A PC

PERFORMANCE CHARACTERISTICS

RFID ENGINE:	RMS custom module with embedded Impinj R2000
COMMUNICATION PROTOCOLS:	RMS ABC (Parameterized ASCII command set) Impinj binary
MEMORY:	Supports up to 32 GB Micro SD/SDHC card
COMPATIBLE HOST DEVICES (BLUETOOTH®):	Android, iOS, Windows CE, Windows Mobile 5/6.1/6.5 or Windows XP/Vista/7. Host device must have Bluetooth® functionality.
COMPATIBLE HOST DEVICES (USB):	Any USB host with FTDI VCP driver support (Windows, Linux, Mac, Android)

ENVIRONMENTAL

OPERATING TEMPERATURE:	-4°F to 140°F / -20°C to 60°C
CHARGING TEMPERATURE:	41°F to 104°F / 5°C to 40°C
STORAGE TEMPERATURE:	-40°F to 158°F / -40°C to 70°C
HUMIDITY:	5% to 95% non-condensing
DROP SPECIFICATION:	Multiple drops to concrete: 4 ft./1.2 m ambient, 3ft / 0.9m across the operating temperature range
TUMBLE:	500 0.5 meter tumbles at room temperature (1,000 cycles)
ENVIRONMENTAL SEALING:	IP54
ELECTROSTATIC DISCHARGE:	± 15kVdc air discharge; ± 8kVdc contact discharge
MIL-STD 810F:	Meets and exceeds applicable MIL-STD 810F for drop, tumble and sealing

RFID PERFORMANCE

STANDARDS SUPPORTED:	EPC Class 1 Gen 2
NOMINAL READ RANGE²:	up to 13 ft. / up to 4 m
NOMINAL WRITE RANGE²:	up to 4 ft. / up to 1.22 m
FIELD:	150-degree forward facing (approx.) measured from front of device
ANTENNA:	Detachable, Circularly Polarized with optional 2D scanner
FREQUENCY RANGE:	EU: 865-868MHz; US: 902-928MHz
OUTPUT POWER:	10mW to 800mW
ANTENNA OPTIONS:	High Performance CP High Performance CP with 2D Imager Custom antennas available

BARCODE SCANNING

IMAGER:	Motorola SE4500 2D imager																
SENSOR RESOLUTION:	752 x 480 pixels																
FIELD OF VIEW:	Horizontal: 40°, Vertical: 25°																
FOCAL DISTANCE:	SR: 8 in. DL: 5.3 in. HD: 2.9 in.																
AIMING LED (VLD):	655 ±10nm Laser																
ILLUMINATION ELEMENT:	625 ±5nm LEDs (2x)																
MIN. PRINT CONTRAST:	Minimum 25%																
SYMBOLOGIES SUPPORTED:	1D: All major codes 2D: PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode Postal Codes: US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal Dutch Postal (KIX)																
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BLUETOOTH

BLUETOOTH¹:	Bluetooth Version 2.1 SPP profile HID Profile (future) Apple iAP
BLUETOOTH CLASS:	Class 2
BLUETOOTH RANGE⁴:	10m
BLUETOOTH PAIRING:	PIN, Simple Secure Pairing, NFC OOB Pairing (TBA)

PERIPHERALS AND ACCESSORIES

EXTERNAL INTERFACE:	MicroUSB connector for battery charging and USB connectivity.
USB OPERATING MODES:	Tethered for real time data capture in conjunction with SmartWedge software. Download of stored scan data.
OPTIONAL DESKTOP CHARGER:	RMS 1136 4-Slot battery charger
OTHER ACCESSORIES:	Adapter mounts for a variety of smartphones, handheld terminals and touchscreen MP3 players Slimline Grip, Trigger Handle

REGULATORY

GENERAL:	Approved for use in the US, Canada, Europe
ELECTRICAL SAFETY:	Certified to UL60950-1, CSA C22.2 No. 60950-1, IEC 60950-1, EN 60950-1
EMI/RFI:	USA: FCC Part 15 Canada: ICES 003 Class B EU: EN 301 489-3, EN 301 489-1, EN 301 489-17, EN 302-208, EN55022 Class B, EN55024
LASER SAFETY:	IEC Class2/FDA Class II in accordance with IEC60825-1/EN60825-1, 21CFR1040.10

WARRANTY

The RMS 1128 reader is warranted against defects in workmanship and materials for a period of one year (12 months) from date of shipment, provided the product remains unmodified and is operated under normal and proper conditions.

NOTES

1 Compatible Bluetooth stack required in the Host device
2 Tag Read/Write performance is dependent on tag type, items tagged, number of tags in the field and other radio and environmental factors
3 Artificial lighting can affect scanning performance
4 Open field
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