

Handheld UHF RFID Reader

# **RFR901**

# Globally Proven Bluebird's Next-Gen RFID Solutions New Industry-Leading Handheld RFID Reader

Introducing the next generation of our World-Class handheld UHF RFID reader RFR900, which has been much loved by global retailers - INDITEX, H&M, UNIQLO and more. The RFR901 is packed with more advanced features to bring unparalleled value to our customers. Thanks to its lightweight and ergono mically shaped pistol grip, you can get higher comfort while using it. With the longest read range and the fastest read rate of the RFR901, make your worker 's life easier by improving their efficiency and productivity. And achieve the maximum flexibility you need and reduce the adoption costs with our Universal M ount that is designed to be attached to a wide range of consumer devices.

#### . The Best Lightweight, Ergonomic Design for Everyone

The RFR901 weighs only 353g, which is suitable for everyone whether you are a male or a female. Lightweight design does not strain your wrists during prolonged use and ergonomically shaped pistol grip of the RFR901 assists in correct finger placement and adaptation. These benefits will make you more comfortable and in crease productivity in your everyday work life.

#### Unmatched RFID Reading Performance

The RFR901 outperforms the competition with the longest read range of 10 meters and the fastest read rate of 1,300+ tags per second (40% longer read range and 30% faster read rate than the major competitors). This allows workers to detect RFID tag information much faster over greater distances without the use of ladders and other lift equipment, thus saving them a great deal of time and preventing safety incidents. Moreover, RFR901 is able to sto re over 60,000 RFID tags in batch mode.

#### User-Friendly Programmable Trigger

It is surprisingly easy to change the trigger mode. Just click twice on the tri gger button, then you could enjoy all three different modes of the reader - RFID tag reading, 1D/2D barcode scanning, and both at the same time. With extremely convenient one trigger button operation, users will have way more high flexibility and productivity than they used to be when it comes to handling their work performance. Plus, the trigger also has a programmabl e key that allows quick access to the functions that you want, such as Push -To-Talk (PTT).

#### Flexible Mount Options for Your Convenience

The RFR901 supports Universal Mount that is designed to be attached to various types of consumer smartphones that are already used by your workers. Also, you c an choose the mount of each and every Bluebird mobile computer, including futur e EF/VX/HF Series and current models. If you are desire to adopt RFID systems a t reasonable cost, the RFR901 is the smart choice.

#### Electrical and Bluetooth 5.0 Host Connection

The RFR901 is both electrical connection-enabled and Bluetooth®-enabled RF ID reader. It supports 10-pin electrical connector, which allows Bluebird EF Seri es/VX500/HF550 to be mounted on top of the RFR901 Sled and read data immediately. In addition to physical connection, it supports Bluetooth 5.0, wh ich makes it easy to pair it with all mobile devices, including Bluebird current and f uture models and consumer smartphones via a real-time wireless connection. Furt hermore, the RFR901 offers NFC OOB Pairing that allows you to achieve a quick connection to Bluetooth-enabled mobile devices with a split-second tap. So, you could keep downtime levels as low as possible and ha ve lower adoption costs.













#### **Proven Durability in Harsh Environments**

The RFR901 has been tested with strict standards to withstand harsh conditions common with ind ustrial sites. It features a 1.5 meter (5ft.) drop specification and a 1,000 cycle 0.5 meter/1.6ft. tumb le specification. Additionally, it has a IP54 sealing that protects itself against dust and water, and a wid e operating temperature range from -20°C to 60°C/-4°F to 140°F. The most robust design features of RFR901 offer maximum reliability and substantial efficiency.

#### Maximum-Efficiency in the Charging Process

The RFR901 comes with 1-slot cradle and 4-slot cradle which enable you to charge the RFR901 by itself, the mobile computer by itself, and both simultaneously. Its charging cradles a Iso support connection to a host PC and a corporate network as they have a USB port and an Ethe rnet port. Therefore, you can easily manage your RFR901 in terms of firmware upgrades, configura tion changes, and device control while charging.

#### Ultimate Benefits of SDKs

Shorten your developer's working hours with our well-built SDKs (Software Development Kits). Blu ebird offers a lot of pre-built functionality for Android, Microsoft, and Xamarin developers to enabl e them to easily build applications and integrate with their services. You do not need to rewrite app lications to use our latest model RFR901 because it's SDKs are based off the current Bluebird RF ID handheld reader RFR900's SDKs. The only thing you need to do is recompiling the current ap plication with our new SDK to get ready to meet the RFR901.

#### Long-Lasting Battery Power with Hotswap Support

The battery performance is the most significant practical feature for those working in the field. W ith a 4,900mAh battery (\*7,000mAh - optional), RFR901 provides plenty of time for the daily oper ation so that you can work over a long time without recharging. Also, a hot-swappable battery mi nimizes power-related downtime and interruptions.

#### Extra Battery Lock (Acc)

The RFR901 has an optional Extra Battery Lock that provides double protection from product da mage and battery loss.

#### **Industry & Applications**

#### Retail

- Cycle Counting
- Item Finding
   Planogram Compliance
- Returns
- Inventory Management
- Warehouse Management - Backroom Management
- BOPIS/BOPAC
- Direct Store Delivery
- Route Accounting

#### Hospitality

- Check-in and Administration
- Ticketing: Concerts, sporting events and more
- Loyalty Cards
- Food Safety and TraceabilityInventory Management
- Field Service

#### Healthcare

- Patient Identification and Monitoring
- Medication Administration
- Specimen Collection
- Hospital Asset Management and
- RTLS (Real-Time Locating System)
- Pharmacy Management
- Medical Data Management

#### **Data Centers**

- Assetmanagement andtracking

#### Warehousing

- Inventory cycle counting
- Automaticreplenishment
- Receiving/shrink control
- Item tracking/locationing - Omni-channel orderfulfillment



## **RFR901 Specifications**

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PHYSICAL CHARACTERISTICS	Dimensions	133.6 x 85.4 x 144.5 mm
	(L x W x D)	252~
	Weight	353g User replaceable Battery
		Standard : 3.63V, 4,900 mAh
	Power	Extended: 7,000 mAh (Optional)
		BOS™ PowerManager
		Buzzer
	Notification	5 LED
		Trigger, 3 push button
	User Input	- Mode Change, Batchmode
	ooci input	- Power
		- BT
	Standards	EPC Class 1 Gen 2
	Supported	EPC GEN2 V2
	Fastest Read Rate	1,300+ Tags/sec
	Nominal	32.8+ ft./ 10+ m
	Read Range	02.07 1.07 101
RFID		US: 902-928MHz; 0 — 30 dBm
PERFORMANCE	Frequency	EU: 865-868MHz; 0 — 30 dBm
	Range	EU: 915-921MHz; 0 — 30 dBm
	/ RF Output	Japan: 916-921MHz; 0 — 30 dBm
	DEID Chinast	Japan: 916-923 MHz; 0 — 24 dBm
	RFID Chipset	Impinj E710
	Operating Temp.	-20°C to 60°C / -4°F to 140°F
	Storage Temp.	-40°C to 70°C / -40°F to 158°F
	Humidity	5% to 95% RH (non-condensing)
USER	Drop Spec.	Multiple 5ft./1.5 m drops to concrete at room temperature
ENVIRONMENT	Tumble Spec.	1000 drops (500 tumbles, 1.6 ft./0.5 m) at room temperature
	Sealing	IP54
	Electrostatic Discharge	+/-15kVdc air discharge +/-8kVdc direct discharge
	(ESD)	+/-8kVdc indirect discharge
	, ,	FCC Part 15 Subpart B Class B;
REGULATORY		ICES 003 Class B;
	EMI/EMC	EN 301 489-1;
	EMI/EMC	EN 301 489-3; EN 55024;
		EN 550224, EN 55032 Class B
	Electrical Safety	UL 60950-1, CAN/CSA C22.2 No. 60950-1, IEC 60950-1, EN 60950-1
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	RF	EU: EN 50364, EN 62369-1, EN 50566, EN 62311; USA: FCC Part 2. 1093 OET Bulletin 65 Supplement 'C';
	Exposure	Canada: RSS-102
	RFID	EU: EN 300 328, FCC Part 15 Subpart C;
	/Bluetooth	Canada: RSS-247
	/DIUEIOOM	Variaua. 1/00-247



### **RFR901 Specifications (Continued)**

	In-box	Battery, WristStrap
ACCESSORIES	Charging	Adapter Mount - EF40x, EF50x, EF50xR Mount - HF550 Mount - Universal Mount (for Consumer Devices) - Standalone Mount  Power Adapter, Adapter Plug / Cord, USB Cable  1 Slot Charging Cradle - Universal & Standalone Cradle - EF40x, EF50x, EF50xR, HF550 Cradle  4-Slot Charging Cradle - Universal & Standalone Cradle - Universal & Standalone Cradle - EF40x, EF50x, EF50xR, HF550 Cradle  4-Slot Battery Charger

<sup>\*</sup> Specifications are subject to change without notice.

#### Bluebird Inc.

(Corporate Headquarters)