

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 ergonomically 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 Mount 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 increase 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 store 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 trigger 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 programmable 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 features a Universal Mount that is designed to attach to various types of consumer smartphones already used by your workers. For added convenience, we also offer Wireless Charging options for the Universal Mount, allowing customers to charge both the device and the Handheld Reader simultaneously. Additionally, you can select the mount for each Bluebird mobile computer, including future models like the S20, S50, S70 as well as Current models. If you're desiring to adopt RFID systems at 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 RFID reader. It supports 10-pin electrical connector, which allows Bluebird EF Series/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, which makes it easy to pair it with all mobile devices, including Bluebird current and future models and consumer smartphones via a real-time wireless connection. Furthermore, 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 have lower adoption costs.



**RFR901**  
Handheld RFID Reader  
with EF550



## • Proven Durability in Harsh Environments

The RFR901 has been tested with strict standards to withstand harsh conditions common with industrial sites. It features a 1.5 meter (5ft.) drop specification and a 1,000 cycle 0.5 meter/1.6ft. tumble specification. Additionally, it has a IP54 sealing that protects itself against dust and water, and a wide 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 also support connection to a host PC and a corporate network as they have a USB port and an Ethernet port. Therefore, you can easily manage your RFR901 in terms of firmware upgrades, configuration changes, and device control while charging.

## • Ultimate Benefits of SDKs

Shorten your developer's working hours with our well-built SDKs (Software Development Kits). Bluebird offers a lot of pre-built functionality for Android, Microsoft, and Xamarin developers to enable them to easily build applications and integrate with their services. You do not need to rewrite applications to use our latest model RFR901 because its SDKs are based off the current Bluebird RFID handheld reader RFR900's SDKs. The only thing you need to do is recompiling the current application 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. With a 4,900mAh battery (\*7,000mAh - optional), RFR901 provides plenty of time for the daily operation so that you can work over a long time without recharging. Also, a hot-swappable battery minimizes power-related downtime and interruptions.

## • Extra Battery Lock (Acc)

The RFR901 has an optional Extra Battery Lock that provides double protection from product damage 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 Traceability
- Inventory Management
- Field Service

#### Healthcare

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

#### Data Centers

- Asset management and tracking

#### Warehousing

- Inventory cycle counting
- Automatic replenishment
- Receiving/shrink control
- Item tracking/locationing
- Omni-channel order fulfillment

## RFR901 Specifications

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

## RFR901 Specifications (Continued)

<b>ACCESSORIES</b>	In-box	Battery, WristStrap
	Charging	<p>Adapter Mount</p> <ul style="list-style-type: none"> <li>- EF40x, EF50x, EF50xR Mount</li> <li>- HF550 Mount</li> <li>- Universal Mount (for Consumer Devices)</li> <li>- Standalone Mount</li> </ul> <p>Power Adapter, Adapter Plug / Cord, USB Cable</p> <p>1 Slot Charging Cradle</p> <ul style="list-style-type: none"> <li>- Universal &amp; Standalone Cradle</li> <li>- EF40x, EF50x, EF50xR, HF550 Cradle</li> </ul> <p>4-Slot Charging Cradle</p> <ul style="list-style-type: none"> <li>- Universal &amp; Standalone Cradle</li> <li>- EF40x, EF50x, EF50xR, HF550 Cradle</li> </ul> <p>4-Slot Battery Charger</p>

※ Specifications are subject to change without notice.

**Bluebird Inc.**  
(Corporate Headquarters)

3F, 115, Irwon-ro, Gangnam-gu, Seoul, Korea. Postal#06355 / Phone. +82.1577.0778 Fax. +82.2.6499.2242  
Copyright © Bluebird Inc. All rights reserved. Bluebird Inc. is the designer and manufacturer of Bluebird handheld mobiles.  
Bluebird logo is registered trademark of Bluebird Inc. All other trademarks are property of their respective owners.

[www.bluebirdcorp.com](http://www.bluebirdcorp.com)