



# UHF RFID READER

## **UHF RFID READER**

## **A Simple Snap Increases Efficiency and Productivity to the Max**

Software utilities of EZConfig and EZEdit provide different settings to best fit user's individual needs.



Long battery life.



The large touch screen applies to retail and T&L



## RS35/RS36 UHF RFID reader



#### **Comprehensive Mode**

The ability to read multiple types of tags displayed in various direction with high accuracy and elimination of duplication, suitable for replenishment in a store.



Modular design. Simply attach the handheld computer onto the dedicated UHF RFID reader





Tag Locating The ability to identify the location of a specific tag when encountering missing a specific item.







Triggerless - the alternative software trigger option, in addition to the hardware trigger, enables continuous RFID scans.



Lock/Unlock Data on tag is encrypted and locked for security to prevent threats such as information leakage.





meters.

700<sup>+</sup> tags / per second

8<sup>+</sup> meters

900<sup>+</sup> tags/ per second





### Multi-tag Mode

Power save and the ability to read large amount of tags laid on the same plane at a high speed, suitable for warehouse inventory management.

The keypad-equipped applies to warehousing and where the large input data is required

#### RK25/RK26 UHF RFID reader

High performance RFID reading capability. Reading range over 8



## **Maximize Efficiency and Productivity for Inventory Management**

The CipherLab RK25/RK26 and RS35/RS36 mobile computers can be equipped with UHF RFID capability. By attaching the UHF RFID reader to your existing RK25/RK26 or RS35/RS36 device, you can easily read and write RFID tags.This is a cost-effective solution that enhances productivity and efficiency in managing inventory tasks.

## Upgradeable Functions with the UHF RFID Reader

**UHF RFID Reader** CipherLab's UHF RFID reader is specially designed to upgrade the functions of your RK25/RK26 and RS35/RS36 devices. With the UHF RFID reader, your device gains the flexibility to switch between RFID and 1D/2D barcode data collection. Its ability to quickly read large quantities of tags makes it perfect for retail storage and warehouse applications. The UHF RFID reader is rugged and efficient for inventory management, with long-lasting power to sustain a full working day. Combined with excellent software support, the RK25/RK26 and RS35/RS36 UHF RFID reader ensures efficient productivity that is quick and simple.



#### The Flexibility of RFID Functionality

The RK25/RK26 and RS35/RS36 mobile computer can quickly provide RFID capabilities by simply sliding it onto its UHF RFID reader. Data collection is more stable and secure with a direct electrical 8-pin connection with the host device. Software upgradability for the RFID reader is also possible. Users have the flexibility to switch between RFID reading and barcode scanning with a simple press of a button after setting up hot keys on the RK25/RK26 and RS35/RS36 using the Button Assignment utility. Moreover, the Triggerless function can be enabled in EZEdit to control reading by a software trigger on the screens of the mobile computers. This allows continuous RFID reading with only one click to start or end the task, providing an alternative to the hardware trigger to fulfill user demands in data capture while preventing fatigue from the user's fingers.

## Best-in-class UHF RFID Reading Sensitivity and Performance

The CipherLab UHF RFID readers offer best-in-class RFID reading sensitivity and performance. Both the RK25/RK26 and RS35/RS36 UHF RFID readers comply with the EPC Global Gen 2v2 standard, allowing them to read RFID tags commonly used in supply chain applications. The Gen 2v2 standard meets higher security and privacy requirements, making it suitable for retail and healthcare settings.

Equipped with an Impinj Indy RFID module and a high-performance circularly polarized antenna, users can achieve maximum read/write speed and coverage. The RK25/RK26 UHF RFID reader can read over 700 tags per second, making it ideal for warehousing environments that require extensive data input with its two different keypad options.

On the other hand, the RS35/RS36 UHF RFID reader can read over 900 tags per second and has a multi-tag reading rate of 600+ tags within 2 meters. Featuring a large touch screen, it is suitable for retail and T&L applications. It meets the long-range reading needs of warehouse and in-store inventory management, allowing users to effortlessly scan and collect loads of RFID tags while moving around the store or warehouse.

#### **Ruggedness and Ergonomic Design**

The UHF RFID readers inherit CipherLab's rugged mobile device designs, allowing users to operate them with confidence. These readers feature an IP54 ruggedized design, providing protection against dust and water infiltration. They have also passed a 1.2-meter drop resistance test, ensuring their ability to withstand occasional and accidental drops in various working environments. The trigger has been tested for reliability and durability with 2.5 million presses. The ergonomic design, featuring a slim line grip and comfortable trigger, simplifies intensive scans of RFID and 1D/2D barcode data collection for the users.





## Long Lasting Battery with Flexible Charging Options

By combining the 4,000 mAh battery of the RK25/RK26 or the RS35/RS36 with the UHF RFID reader's 3,000 mAh battery, users have more than enough power to support a full work shift. This eliminates the worry of interruptions or battery replacements.

Furthermore, the battery lives of the mobile computers and the UHF RFID reader can be monitored on the top right and left corners of the screen of the RK25/RK26 and RS35/RS36. Users have the flexibility to charge the RFID reader using the charging cradle or snap-on cable while connected to the mobile computer. Additionally, users can hot-swap the battery of the RFID reader when the power is running low and charge it with its charger.

## **Easy Deployment with CipherLab Software Support**

Extensive software support is available, including the RFID Android Software Development Kit and apps of EZConfig and EZEdit. These utilities save users' valuable development and configuration time on their business rather than programming.



EZConfig provides a convenient console to quickly configure all the settings in the RK25/RK26 and RS35/RS36 UHF RFID readers. Users can customize settings to fit their individual needs best. It allows the users to change UHF RFID parameters through Scan Settings. By Filter, users have the option to include or exclude certain data from tags. It also has multiple working modes to provide maximum flexibility. The Multi-tag Mode allows the device to power save and read a large number of tags at high speed, which is perfect for warehouse inventories. It allows the device to read multiple types of tags in stores while filtering repeated tags for accurate replenishments. Users can also define their own settings in five other profiles to freely switch between different applications.







Users can easily utilize Read, Write and Lock functions of the RK25/RK26 and RS35/RS36 UHF RFID readers through EZEdit. The Lock function provides security by limiting the reading and writing of information on tags. With the Inventory function, users can scan multiple RFID tags and get the results of total reads and unique tags. Users can utilize Tag Locating to pinpoint and identify the location of a specific tag through beeping sounds, while the volume indicates how close or far the tag is.

## RK25/RK26 RS35/RS36 UHF RFID READERS



	Compatible host	CipherLab RK25/RK26 mobile computer	CipherLab RS35/RS36 mobile computer
Physical characteristics	Communication	Electrical 8-pin connection	
	Dimension	Without RK25/RK26 : 152.4 mm x 85.3 mm x 158.8 mm With RK25/RK26 : 181.4 mm x 85.3 mm x 162.9 mm	Without RS35/RS36: 156.2 mm x 92.8 mm x 186.3 mm With RS35/RS36: 199.4 mm x 92.8 mm x 186.3 mm
	Weight	Without RK25/RK26:353.4 g With RK25/RK26:632.7 g	Without RS35/RS36: 366 g With RS35/RS36: 655 g
	Power	Li-ion battery pack Typical voltage : 3.6V Typical capacity : 3000mAh	
	Notification	R/ G/ B LED	
	Input	Trigger key	
RFID performance	Standard	EPC Class1 Gen 2 v2	
	RF module	Impinj R2000 high performance UHF RFID chipset solution	
	Antenna	Circularly polarized	
	Fastest read data rate *1	700 <sup>+</sup> tags / sec	900 <sup>+</sup> tags / sec
	Multi tags read data rate*2	RK25: 500+ tages/sec RK26: 550+ tags/sec	600 <sup>+</sup> tags/sec
	RF power level	5-30, 26 steps	
	Nominal read range*1	+8 m (+26 ft)	
	Frequency range	US : 902~928 MHz EU : 865~868 MHz TW : 922~928 MHz JP : 916~920 MHz AU : 920~924 MHz NZ : 920~924 MHz IN : 865.7~866.9 MHz	
		Morocco: 867.7~867.9 MHz	TH(Thailand): 920-924 MHz
User environment	Drop	1.2m (With RK25/RK26)	1.2m (With RS35/RS36)
	Operating temperature	-20°C to 50°C / -4°F to 122°F	
	Storage temperature	-30°C to 70°C / -22°F to 158°F	
	Sealing	IP54	
	Charging time	Full charged time approximate 6 hrs (charge with RK25/RK26 data terminal)	Full charged time approximate 6 hrs (charge with RS35/RS36 data terminal)
	ESD	± 15kV air discharge / ± 8kV contact discharge	
	EMC	CE, FCC, NCC, IC, JRL, EAC, NBTC, RCM, WPC	CE, RCM, FCC, NCC, IC, JRL, EAC, NBTC, WPC
Software	RFID Android Software Development Kit		
	EZConfig with filter repeated tags		
	EZEdit		
Accessories	Battery, Battery charger		
Warranty	1 year		

1. Maximum read rate and read range are subject to the function setting, tag performance, test environment and conditions. The test result is based on Smartrac DogBone RFID tag. 2. The Scanning speeds are reference values. Actual multiple scanning speeds will depend on the environment. The result tested by Cipherlab multi-tag mode setting with FM0400KHz, Section0, Dynamic Q in 700 tags space.



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