

# IH21

## Handheld UHF RFID Reader

Today's retailers are facing pressure like never before to better track their inventory and ensure that their stores are always adequately stocked and replenished to meet increasingly sophisticated customer expectations – all with fewer employees and resources. Many are looking to Honeywell's mobile computing, scanning, and RFID technology to help streamline the process and increase their efficiency and productivity.

The Honeywell IH21 handheld RFID reader, when paired with a Honeywell handheld computer, is designed to provide best-in-class performance for reading large numbers of RFID tags quickly and accurately. With a successful track record in apparel retail, inventory management, and other workflows, the IH21 RFID reader employs an advanced antenna design that allows it to read tags positioned in front of the antenna with a high degree of accuracy – simply point it in the general direction of the items to be read and pull the trigger. All items within range will be read nearly simultaneously, speeding inventory processes up to 20 times faster than using barcodes.

The IH21 unit includes an improved RFID reader module, the ability to connect to the mobile computer via USB or Bluetooth®, and the ability to charge both the RFID reader battery as well as the connected mobile computer battery using the IH21 reader charge base.

The IH21 RFID reader is compatible with Honeywell Dolphin™ 75e, Dolphin CT40, or ScanPal™ EDA50 mobile computers, offering an ergonomic, sleek profile for use in retail in-store or back-room inventory or picking applications such as inventory cycle counts, omnichannel order fulfillment, receiving new product, or pick lists. When paired with the Dolphin CT50 or CT60 mobile computer, the IH21 reader can be used for direct store delivery, dock receiving, or back-of-truck inventory tasks.



*The IH21 is the ideal handheld RFID reader for use with Honeywell mobile computers when high-performance RFID reading in a compact, lightweight package is required.*

## FEATURES & BENEFITS



Industry-standard EPC Global Class 1 Gen 2, RAIN RFID reader ensures that the IH21 can read all common supply chain RFID tags.



A lightweight and ergonomic design makes the IH21 reader suitable for all users.



A fast RFID reader module combined with a versatile antenna design enables reading more tags in less time.



Simultaneous charging of the IH21 reader and the connected mobile computer streamlines operations and reduces maintenance of mechanical components.



USB data connectivity provides trouble-free, secure communications between the IH21 reader and the connected mobile computer.

# IH21 Technical Specifications

## RFID

**Standards:** EPC Global Class 1 Gen 2  
**Antenna:** Right hand circular polarized  
**Field:** 150° forward-facing  
**Frequency Ranges:**  
EU: 865–868 MHz  
US: 902–928 MHz  
**Nominal Read Range:** 6 m (20 ft)  
**Nominal Write Range:** 3 m (10 ft)  
**Output Power:** 10 mW – 1 W, 10 dBm – 30 dBm

## COMMUNICATIONS

### Bluetooth:

V4.2, +12 dBm  
SPP Profile, HID Profile, iAP2  
Bluetooth Classic and Low Energy (BLE)

**Bluetooth Range:** 10 m (32 ft)

**Bluetooth Pairing:** PIN, Simple Secure Pairing, NFC OOB Pairing

**USB:** Communicates with select mobile computers via ePop-Loq® case

## POWER

**Battery Pack:** Removable, rechargeable 4.2 V Lithium Polymer 2200 mAh, 8.4 watt hours

## CHARGING

**Charge Base:** IH21-CB-1 provides dual charging of the IH21 RFID reader and connected mobile computer

## PHYSICAL CHARACTERISTICS

### Dimensions:

**Without Mobile Computer or ePop-Loq Adapter:**  
16 cm x 7.7 cm x 17.5 cm (6.3 in x 3 in x 6.9 in)

**With Dolphin 75e Mobile Computer and ePop-Loq Adapter:** 16.37 cm x 7.62 cm x 19.69 cm (6.43 in x 3.00 in x 7.75 in)

**With Dolphin CT50/60 Mobile Computer and ePop-Loq Adapter:** 17.46 cm x 8.89 cm x 17.46 cm (6.87 in x 3.5 in x 6.87 in)

### Weight:

**Without Mobile Computer or ePop-Loq Adapter:**  
365 g (12.8 oz)

**With Dolphin 75e Mobile Computer (Standard Battery) and ePop-Loq Adapter:** 569 g (20.1 oz)

**With Dolphin 75e Mobile Computer (Extended Battery) and ePop-Loq Adapter:** 609.5 g (21.5 oz)

**With Dolphin CT50/60 Mobile Computer and ePop-Loq Adapter:** 707 g (24.9 oz)

## ENVIRONMENTAL

**Operating Temperature:** -10°C to 40°C (-4°F to 140°F)

**Charging Temperature:** 5°C to 40°C (41°F to 104°F)

### Storage Temperature:

Less than 1 month at -20°C to +45°C (-4°F to 113°F)

Less than 6 months at -20°C to +35°C (-4°F to 95°F)

**Relative Humidity:** 5% to 85% non-condensing

### Drop Spec:

Multiple 1.2 m (4 ft) drops to concrete at ambient temperature; 0.9 m (3 ft) drops across the temperature range

**Tumble:** 500 tumbles at 0.5 m (1.6 ft) at ambient temperature

**Environmental Sealing:** IP54

### Electrostatic Discharge:

±15 kVdc air discharge

±8 cVdc contact discharge

**MIL-STD 810F:** Meets and exceeds applicable MIL-STD-810F for drop, tumble, and sealing

## MEMORY

**Optional Flash Memory Card:** Up to 32 GB Micro SD/SDHC

### Compatible Handheld Computers

**Computer Models:** Dolphin 75e, Dolphin CT50, Dolphin CT60, ScanPal EDA50

For a complete listing of all compliance approvals and certifications, please visit [www.honeywellaidc.com/compliance](http://www.honeywellaidc.com/compliance).

For a complete listing of all supported barcode symbologies, please visit [www.honeywellaidc.com/symbologies](http://www.honeywellaidc.com/symbologies).

Dolphin and ScanPal are trademarks or registered trademarks of Honeywell International Inc. in the United States and/or other countries.

Bluetooth is a trademark or registered trademark of Bluetooth SIG, Inc. in the United States and/or other countries.

ePop-Loq is a trademark or registered trademark of Technology Solutions (UK) Ltd. in the United Kingdom and/or other countries.

All other trademarks are the property of their respective owners.

## For more information

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

## Honeywell Safety and Productivity Solutions

9680 Old Bailes Road  
Fort Mill, SC 29707  
800-537-6945  
[www.honeywell.com](http://www.honeywell.com)