

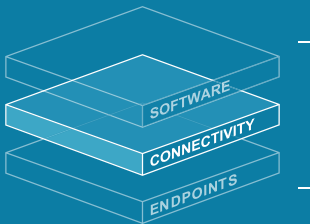
# Indy R2000 RAIN RFID Reader Chip

The Impinj Indy R2000 chip allows OEMs to design premium devices with embedded read/write capability utilizing the most advanced RAIN RFID radio technology in the reader chip market.



## Embedded Chip Enables Broad Spectrum of Devices and Solutions

The Indy R2000 chip's small form factor and high performance enable users to create a diverse set of devices including gateways, fixed readers, handhelds, tablets, POS solutions, smart kiosks, smart mirrors, and shelf readers.



*The Impinj Platform includes Connectivity Devices*



## Indy R2000 Benefits

### High Performance

Industry-exclusive technology ensures read reliability in challenging environments, long read range of large RAIN RFID tag populations

### Flexibility

Small form factor and modem accessibility enable device optimization on form and function

### Compatibility

Pin compatibility with Indy R500 enables single hardware design for both high performance and cost sensitive applications

## Key Features

- > Demanding Environments**  
Proprietary Self-Jammer Cancellation (SJC) technology maintains performance even with antenna reflections in metal-rich environments
- > Worldwide Compliance**  
An easy path to regulatory compliance with market-proven reference designs
- > Long Range**  
Market-leading receiver performance enables greater than 10 meters read range

## Use Cases

- 🏠 Inventory Management**  
Drive sales with enhanced store, in-transit or warehouse inventory visibility with Indy R2000-powered handheld readers
- 🏭 Industrial Automation**  
Improve work flow efficiencies with better visibility. Indy R2000's SJC technology ensures reliable read performance even in challenging environments
- 🚚 Shipment Verification**  
Streamline operations and ensure correct shipments and customer satisfaction with Indy R2000-based readers



## Reader Chip and Module Overview

Impinj Indy reader chips and surface-mount modules provide the performance and flexibility needed to enable a full range of RAIN RFID solutions. Indy surface-mount modules provide low development risk and fast time-to-market while Indy chips offer a path to future cost optimization, all based on a common Indy platform.



**INDY R500**



**INDY R2000**

### Product Details

Applications	Cost-sensitive proximity readers, medium range, medium tag population	High-performance devices, customizable devices, demanding conditions
Air Interface Protocols	RAIN RFID / ISO 18000-63 and EPCglobal Gen2v2 compliant	
Package	64-pin 9 mm <sup>2</sup> QFN	
Tag Read Rate	Up to 190 tags per second	Up to 900 tags per second
Receive Sensitivity	-68 dBm (DRM)	-95 dBm (DRM) -82 dBm (DRM) with a -10 dBm carrier at Rx port
Transmit Phase Noise (250 kHz offset)	-126 dBm / Hz	
Operating Frequencies	860–960 MHz	
Supported Regions	US, Canada and other regions following US FCC Part 15 regulations Europe and other regions following ETSI EN 302 08 China, India, Japan, Korea, Malaysia, Taiwan	

Ready to discuss how Impinj can help your business?

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Impinj (NASDAQ: PI) wirelessly connects billions of everyday items such as apparel, medical supplies, and automobile parts to consumer and business applications such as inventory management, patient safety, and asset tracking. The Impinj platform uses RAIN RFID to deliver timely information about these items to the digital world, thereby enabling the Internet of Things.