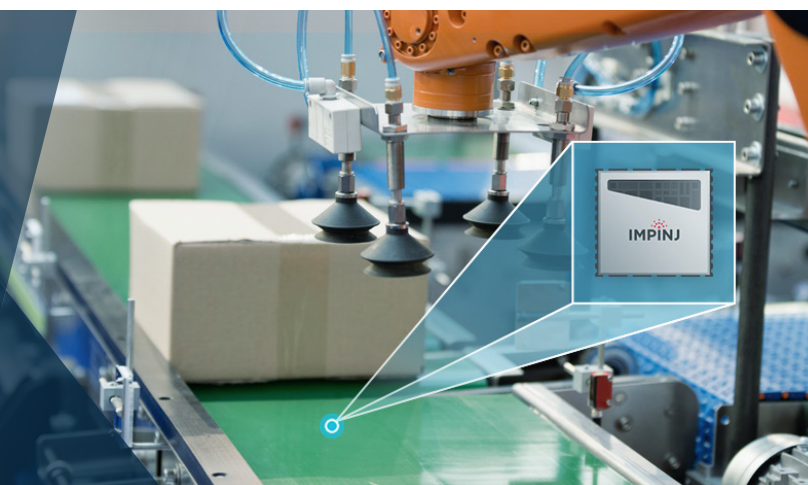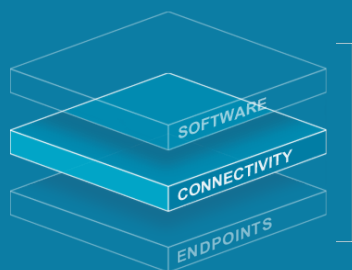# IMPINJ®
INDY®

Indy RS2000 RAIN RFID Reader Module

The Impinj Indy RS2000, a completely integrated surface-mount module, makes embedding high-performance RAIN RFID read/write capability quick and easy with low development risk and fast time-to-market.

Embedded Solution for Demanding Use Cases

Ideal for applications requiring long read range of large tag populations, the small form factor and four antenna ports of the Indy RS2000 enable a wide range of fixed and mobile readers for inventory management, asset tracking, logistics, and industrial automation.

SOFTWARE
CONNECTIVITY
ENDPOINTS

The Impinj Platform includes Connectivity Devices

IMPINJ™ INDY® RS2000

Indy RS2000 Benefits

High Performance

Enables long read range of large tag populations for read reliability in challenging environments

Small Form Factor

Small size (52 x 38 mm) enables a diverse range of connectivity devices and applications

Easy Embedding

High integration enables quick and easy development with low risk and fast time-to-market

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Key Features

› Ultra-High Output Power
31.5 dBm output power delivers design flexibility (up to four antenna ports)

› Long Read Range
Market-leading receiver performance enables greater than 10 meters read range

› Four Antenna Ports
Flexible configurability with two connector ports and two surface mount ports

Use Cases

Industrial Automation
Enable workflow efficiencies and enhance M2M communication with Indy RS2000-enabled automation solutions in industrial environments
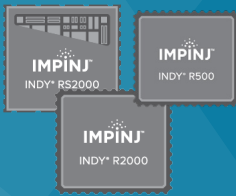
Asset Tracking
Improve efficiency of healthcare environments by managing medical equipment or consumables with portal, shelf or handheld readers

Inventory Accuracy
Drive sales with enhanced store, in-transit, or warehouse inventory visibility with portal, shelf or handheld readers based on Indy RS2000

IMPINJ™

Reader Chip and Module Family Overview

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.
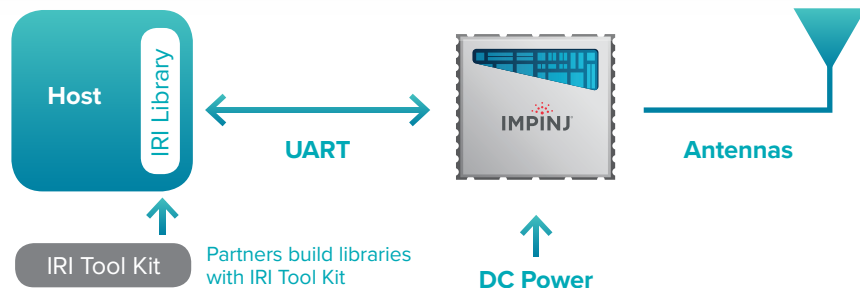
Product Details	INDY RS500	INDY RS1000	INDY RS2000
Air Interface Protocol	RAIN RFID / ISO 18000–63 and EPCglobal Gen2v2 compliant		
Typical Read Range*	≤ 3 m	≤ 6 m	≤ 10 m
Output Power	10 to 23 dBm	10 to 27 dBm	10 to 31.5 dBm
Rx Sensitivity	-65 dBm	-75 dBm	-74 dBm
Antenna Ports	1		4
DC Power Supply	3.6 to 5.25 volts		3.2 to 5.25 volts
Power Consumption	2.5 watts @ 23 dBm	3.5 watts @ 27 dBm	7 watts @ 30 dBm
Temperature	Operating: -20 to +70 °C Storage: -30 to +100 °C		Operating: -20 to +60 °C Storage: -30 to +100 °C
Dimensions	29 x 32 mm		38 x 52 mm

* Assumes 6 dBI reader antenna and far-field tag with Impinj Monza R6 chip

These products are not recommended for new designs.

THREE SIMPLE CONNECTIONS

1. DC Power
2. UART Communication
3. RF Antennas

Host — IRI Library

UART

Antennas

IRI Tool Kit — Partners build libraries with IRI Tool Kit

DC Power

Ready to discuss how Impinj can help your business?

CONTACT US / WWW.IMPINJ.COM

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.