# IMPINJ®
# FIXED READERS

## Impinj R700
## RAIN RFID Reader

Industry-leading performance, enterprise-grade reliability and security, and support for next-gen RAIN tags — the Impinj R700 reader simplifies IoT solution development and global RAIN deployments.

## Empowers Reading Tags Farther and Faster, and Speeds Time-to-Solution

The Impinj R700 reader provides industry-leading performance, enterprise reliability and security, and modern developer tools. IoT developers can easily build and deploy custom enterprise applications with a Linux OS, REST API, and native support for industry-standard data formats and protocols, such as MQTT. The Impinj R700 delivers increased support for on-reader applications — including 10x the processing power. Plus, when combined with tags based on Impinj M700 series tag chips, the Impinj R700 advances RAIN RFID performance at dock doors, conveyors, and store exits.

The Impinj R700 reader builds on the heritage of the Impinj Speedway reader family, which has been proven reliable for 15 years in the field.

## Why Use Impinj R700

### Deliver Industry-Leading Performance
Leverage industry-leading sensitivity, powerful edge processing, and high-speed network connectivity to enable fast reading of small, global RAIN RFID tags and open up new use cases

### Simplify RAIN Deployments with IoT Edge Device
Speed time-to-solution with increased on-reader memory, plus the Impinj IoT device interface that empowers developers to easily connect IoT applications to configure and control devices, and to consume RAIN data

### Meet Demands of Next-Generation RAIN Solutions
Future-proof investments in RAIN RFID and next-gen tag chips with performance, reliability, and deployment simplicity for enterprise-grade solutions

## Key Features

> **Industry-Leading Sensitivity**
> Empowers reading tags farther and faster, and future-proofing of IoT solutions

> **Powerful Edge Processing**
> Enables intelligent on-reader RAIN tag-processing algorithms

> **Secure, Upgradable Linux OS**
> Delivers enterprise-grade security and reliability, and the flexibility to customize with on-reader applications

> **Simple IoT Device Interface**
> Easily connects IoT applications to configure and control devices, and to consume RAIN data, with native support for MQTT

> **Optimized Design for Inventory**
> Increases read rate and improves read zone control at lower transmit power

> **Rich Peripheral and Accessory Support**
> Provides versatility with support for USB flash drives, Wi-Fi adapters, and up to 32 antennas via optional antenna hub

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# Impinj RAIN RFID Readers Overview

Impinj readers are edge devices that enable bidirectional, wireless communications between applications and everyday items. Read, write, and authenticate RAIN endpoints or tagged items. Impinj fixed readers offer flexible implementation to meet your unique needs.

## Impinj Fixed Reader Portfolio

**R120 is in the end-of-life process.**

| | R700 | R420 | R220 | R120 |
|---|---|---|---|---|
| **SPECIFICATIONS** | | | | |
| Air interface protocol | RAIN RFID / ISO 18000-63 and EPCglobal Gen2v2 compliant | | | |
| Antenna ports | 4 | 4 | 2 | 1 |
| Read zones (max) | 32 | 32 | 16 | 8 |
| Read rate (max per-second) | 1,100 | 1,100 | 200 | 200 |
| Transmit power (max, dBm) | 33 | 32.5 | 32.5 | 30 |
| Receive sensitivity (dBm) | -92 | -84 | -84 | -84 |
| Processor speed (GHz) | 1 (Dual-core) | 0.4 (Single core) | 0.4 (Single core) | 0.4 (Single core) |
| Random-access memory (MB) | 1,024 | 256 | 256 | 256 |
| Custom-application partition (CAP) size (MB) | 128 | 32 | 32 | 32 |
| **FEATURES** | | | | |
| Impinj IoT device interface | ✓ | | | |
| Support for USB peripherals (slots) | 3 | 1 | 1 | 1 |
| General-purpose input/output (GPIO) connector | Integrated | Accessory | Accessory | Accessory |
| Gigabit Ethernet network connectivity | ✓ | | | |
| Power Sources | 802.3af PoE/ 802.3at PoE+ | All regions: AC-DC adapter<br>All regions except EU2: IEEE 802.3af PoE EU2: IEEE 802.3at PoE+ | | |

Impinj product performance is based on Impinj's modeling and test data, actual results may vary. For a list of supported regions and geographies please go to: www.impinj.com/supported_regions.

# 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.