

IMPINJ[®]

FIXED READERS

Impinj R700 RAIN RFID Reader

Industry-leading performance, enterprise-grade reliability and security, and support for next-gen RAIN tags—the all-new Impinj[®] R700 RAIN RFID reader simplifies IoT solution development and RAIN deployments

Enterprise-Grade RAIN RFID Reader for Next-Gen IoT Solutions

The Impinj R700 reader is designed to support global RAIN deployments that need industry-leading performance, enterprise-grade reliability and security, and support for next-gen RAIN tags. The Impinj R700 delivers the best receive sensitivity, fastest network connectivity, and powerful edge processing. IoT developers can easily build and deploy customized solutions with developer-friendly tools and increased on-reader memory.

The Impinj R700 reader builds on the heritage of the Impinj Speedway[®] reader family with an all-new internal and external design which delivers increased support for on-reader applications – including 10x the processing power and 16x the on-reader memory. With fast, accurate reading of small, global RAIN RFID tags, such as the Impinj M700 series tag chips, the Impinj R700 advances the performance of use cases including threshold transitions and inventory management.

Key Features

➤ Best Receive Sensitivity

Empowers faster, more accurate reads and better control of read zones at low transmit power

➤ Powerful Edge Processing

Enables intelligent on-reader RAIN tag-processing algorithms

➤ Secure, Upgradable Linux OS

Delivers enterprise-grade security and reliability

➤ Simple IoT Device Interface

Easily connects IoT applications to configure, control, and consume RAIN data, with native support for MQTT

➤ Fast Gigabit Ethernet Connectivity

Brings fast network connectivity to IoT applications

➤ Rich Peripheral and Accessory Support

Provides versatility, including support for up to 32 antennas, to seamlessly integrate the reader into customized IoT solutions

Why Use Impinj R700

Deliver Industry-Leading Performance

Best receive sensitivity, powerful edge processing, and high-speed network connectivity enable fast, accurate 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 and the Impinj IoT device interface to easily connect applications to configure, control, and 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



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

				
	R700	R420	R220	R120
Air interface protocol	RAIN RFID / ISO 18000-63 and EPCglobal Gen2v2 compliant			
Antenna ports	4	4	2	1
Read zones (max)	32	32	2	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
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 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.