

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



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.

R120 is in the end-of-life process.

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	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
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+		

SPECIFICATIONS

FEATURES

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.



Impinj enables digital transformation by extending the Internet of Things from the cloud, through edge connectivity devices, all the way to physical items.

www.impinj.com



AB&R® (American Barcode and RFID) is an Impinj Gold partner and a leader in IoT solutions. Supplying businesses across all industries with advanced technology to identify, track, and manage inventory and assets throughout the supply chain. With 40+ years as a trusted expert in technical innovation, performance, and cost-effectiveness, AB&R's solutions improve efficiency and productivity that transform companies all around the world.

Contact us to learn more www.abr.com/rain-rfid-contact/