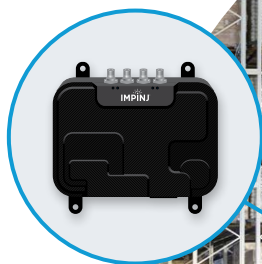




# Impinj R700 Series RAIN RFID Readers

for Enterprise-grade IoT Solutions



Designed for RAIN RFID deployments that demand industry-leading performance, Impinj R700 and R720 readers deliver reliability, security, and advanced capabilities that meet the increasing demands of large-scale enterprise solutions.

Supports  
**GEN2X™**

## Read tags farther and faster, and speed time-to-solution

Impinj R700 series readers provide best-in-class tag readability, enterprise security, and modern developer tools. IoT developers can easily build and deploy custom enterprise applications with Linux OS, REST API, and native support for industry-standard data formats and protocols such as MQTT. Powerful processing and expansive on-reader memory enable embedded applications that transform RAIN data into actionable business intelligence. With support for the Impinj Gen2X solutions toolbox, the Impinj R700 series advances RAIN RFID performance at dock doors, conveyors, and store exits where items are moving or densely packed. Impinj R700 series readers build on the heritage of the Impinj Speedway reader family, which has been proven reliable since its introduction in 2006.



*Impinj R700 Series RAIN RFID Reader*

## Why use Impinj R700 series RAIN RFID readers?

Impinj R700 series readers discover, engage, and protect connected items, packages, and pallets, delivering data accurately and efficiently to enterprise systems. Available in two versions, Impinj R700 and R720 readers:

### Ensure accurate and reliable performance

Users can leverage market-leading sensitivity, powerful edge processing, and high-speed network connectivity to enable fast, high-throughput reading of small RAIN RFID tags at long distances.

### Simplify IoT solution development

IoT developers can easily connect applications and speed up time-to-solution with the Impinj IoT Device Interface, which enables configuration of reader settings, viewing of tag data, and management of security certificates, reader events, and alarms.

### Leverage critical edge intelligence

The Impinj R700 series supports autonomous reading deployments with high-performance processing and expansive application memory that collects and manages enterprise data at the source.

### Solve challenging use cases with Impinj Gen2X

The Impinj Gen2X solutions toolbox speeds inventory, increases tag read range, declutters the environment, protects consumers, inhibits label and item counterfeiting, and reduces solution cost.

# Connect everything with features that deliver industry-leading performance

## Impinj Gen2X Performance

Improves reader sensitivity and tag read range, and reduces reader inventory time, tag communication errors, and solution cost.

## Secure, upgradable Linux OS





Achieve enterprise-grade security and reliability — and the flexibility to customize with on-reader applications.

## Impinj Gen2X Protection

Protects consumer privacy and tag data integrity, while inhibiting tag and item counterfeiting and fraudulent returns.

## Rich peripheral and accessory support

Gain flexibility and versatility with support for USB drives, Wi-Fi adapters, and up to 32 antennas via an optional antenna hub.

		Supports <b>GEN2X</b>			
Impinj Fixed Reader Portfolio					
		R720	R700	R420	R220
SPECIFICATIONS	RAIN RFID/ISO 18000-63, EPCglobal Gen2v2 compliant	✓	✓	✓	✓
	Support for Impinj Gen2X1, an enhancement to the RAIN radio standard	✓	✓		
	Antenna ports	4	4	4	2
	Read zones (max)	32	32	32	16
	Read rate (max per second)	1,100	1,100	1,100	200
	Transmit power (max, dBm)	33	33	32.5	32.5
	Receive sensitivity (dBm) per ISO 18046-2	-93 Up to 5 dB improvement with Impinj Gen2X		-84	-84
	Processor speed (GHz)	1.4 (Quad core)	1 (Dual core)	0.4 (Single core)	0.4 (Single core)
	Random-access memory (MB)	1,024	1,024	256	256
	Custom-application partition (CAP) size (MB)	256	256	32	32
FEATURES	Impinj IoT Device Interface	✓	✓		
	Support for USB peripherals (slots)	3	3	1	1
	General-purpose input/output (GPIO) connector	Integrated	Integrated	Accessory	Accessory
	Gigabit Ethernet network connectivity	✓	✓		
	Power sources	802.3at PoE+	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 GEN2X	Impinj Gen2X Performance	✓	✓		
	Impinj FastID high speed verification2	✓	✓	✓	✓
	Impinj Authenticity cryptographic authentication2	✓	✓		
	Impinj Protected Mode tag data protection2	✓	✓		

1. Impinj R700 series firmware v8.4 adds support for Impinj Gen2X  
2. Impinj FastID, Impinj Authenticity, and Impinj Protected Mode are included in Impinj Gen2X Protection  
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](http://www.impinj.com/supported_regions)

Ready to discuss how Impinj can help your business?

Contact us: [www.impinj.com](http://www.impinj.com)

Impinj (NASDAQ: PI) helps businesses and people analyze, optimize, and innovate by wirelessly connecting billions of everyday things—such as apparel, automobile parts, luggage, and shipments—to the internet. The Impinj platform uses RAIN RFID to deliver timely data about these everyday things to business and consumer applications, enabling a boundless Internet of Things.

