

RESOURCES & NEXT STEPS

Develop business applications using the Impinj Octane Software Development Kit (SDK), the LLRP Toolkit (LTK) or ItemSense software. For more information, contact Impinj using the resources listed below.

- Sales: www.impinj.com/contact-us
- Support: support.impinj.com
- Postal Address: 400 Fairview Avenue North, Suite 1200, Seattle, WA 98109

REGULATORY

SIMPLIFIED EU DECLARATION OF CONFORMITY

Hereby, Impinj, Inc., declares that the radio equipment type IPJ-R700-241 is in compliance with Directive 2014/53/EU, EMC Directive 2014/30/EU, and RoHS 2011/65/EU.

The full text of the EU declaration of conformity is available at the following internet address:
<https://support.impinj.com/hc/en-us/articles/360005324979-EU-Declaration-of-Conformity>



The EU countries indicated below have not approved RFID use in the 916.1 to 918.9 MHz frequency band:

AT	BE	BG	CZ	DE	EL	ES	FI	HR	IS	IT	LT	MT
NL	PL	RO	SE	SK	TR							

NOTICES

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Quick Start Guide

Impinj R700 RAIN RFID Reader

OVERVIEW

This guide provides simple steps to quickly start using your new Impinj R700 RAIN RFID reader. Please consult the Impinj R700 Installation and Operations manual for a full description of mounting choices, antenna types, power and network connection methods and reader configuration options. To view this guide in another language visit www.impinj.com/R700-QSG.



Box Contents

- 1 x Impinj R700 RAIN RFID reader
- 1 x Quick Start Guide

Accessories Sold Separately

- PoE Injector
- PoE Injector AC power cords
- Reader antennas
- Antenna cables

Connections and Ports

- 4 x RP-TNC antenna ports
- RJ-45 10/100/1000BASE-T Ethernet port
- 3 x USB Type-A host ports
- GPIO terminal block
- Factory reset button
- Micro USB device port

Download Impinj ItemTest software

1. Open a browser on your Microsoft Windows PC
2. Go to <https://support.impinj.com>
3. Type “Impinj ItemTest software” into Search Support
4. Click the “Impinj ItemTest Software” link and download the latest version

NOTE: The Impinj R700 is only supported in Impinj ItemTest version 2.0 and newer.

5. Extract the files and run the executable to install Impinj ItemTest

Connect antenna

1. Securely mount one or more Impinj-approved antennas in accordance with the antenna manufacturer’s instructions
2. Securely connect the antenna to a reader antenna port



Warning: You must use Impinj-approved antennas with the reader. See the Impinj R700 Installation and Operations Guide for a detailed list of approved antennas. Using any other antenna may adversely affect performance or cause damage. The reader requires professional installation to correctly set the TX power for the selected RF cables and antennas.

Power the reader using PoE and connect it to the network





1. Route an Ethernet cable from the reader’s RJ45 Ethernet port to a power over Ethernet (PoE) power source
 - a. An IEEE 802.3at PoE+ source is recommended. A POE+ source enables full reader functionality, including maximum reader transmit power
 - b. An IEEE 803.af PoE source can be used. Reader transmit power and certain features will be constrained. See the Impinj R700 Installation and Operations Guide for additional detail
 - c. Typical PoE power sourcing equipment (PSE) includes the Impinj midspan injector (sold separately) or an endspan network switch. A midspan injector requires an additional Ethernet cable and an AC line cord.



Sign into the reader, select region, and update firmware if necessary

1. Open a browser and navigate to <https://support.impinj.com>
2. Type “latest firmware” into Search Support
3. Click the “Latest firmware, utilities, and development libraries for Impinj readers and gateways” link
4. Note the firmware version listed on the page
5. Open a new browser tab
6. Enter the reader host name ***http://impinj-XX-XX-XX***
 - a. XX-XX-XX is the last 3 octets of the reader MAC address
 - b. The MAC address is printed on labels affixed to the reader and shipping box
7. Sign into the reader using the default username ***root*** and default password ***impinj***
8. The reader web UI will open
9. In the CHANGE REGULATORY REGION section of the WebUI use the drop-down box to select the region the reader will operate in. Select update region and press ok in the pop-up window
10. Under DETAILS note the software version
11. Compare the software version number to the firmware version in step 4 above
 - a. If newer reader firmware is available
 - b. Download the firmware upgrade file from the support portal or contact an authorized Impinj partner
 - c. Click the Browse button next to Select Upgrade File in the web UI
 - d. Navigate to the firmware upgrade file
 - e. Click Upgrade (this may take several minutes)
 - f. Click Reboot

Read tags with Impinj ItemTest software

1. Open the Impinj ItemTest software application
2. Add a new data source 
 - a. Enter the reader host name ***impinj-XX-XX-XX*** where XX-XX-XX is the last 3 octets of the reader MAC address (e.g. ***impinj-89-AB-CD***)
 - b. Click ***Add Data Source***
3. Select the ***Inventory*** showcase (default)
4. Place tags in the antenna field of view
5. Click the ***Start/Stop*** button to start tag inventory 
 - a. Click a column header to sort by a specific attribute
 - b. Right click to change what attributes are displayed
6. Click the ***Start/Stop*** button again to stop tag inventory
 - a. Click the ***Settings*** button  to change how inventory runs are configured
 - b. Click ***Save*** to change the configuration
7. Click the reader name (under DATA SOURCES ) to change reader settings
 - a. Change settings
 - b. Click ***SAVE*** (default will be modified)