

## RESOURCES & NEXT STEPS

Develop business applications using the Impinj Octane SDK, Impinj Octane LLRP toolkit, or Impinj Octane ETK. For more information, contact Impinj using the resources listed below.

- Sales: [www.impinj.com/contact-us](http://www.impinj.com/contact-us)
- Support: [support.impinj.com](http://support.impinj.com)
- Developer site: [developer.impinj.com](http://developer.impinj.com)
- Postal Address: 400 Fairview Avenue North, Suite 1200, Seattle, WA 98109

## NOTICES

Copyright © 2021, Impinj, Inc. All rights reserved.

Impinj gives no representation or warranty, express or implied, for accuracy or reliability of information in this document. Impinj reserves the right to change its products and services and this information at any time without notice.

EXCEPT AS PROVIDED IN IMPINJ'S TERMS AND CONDITIONS OF SALE (OR AS OTHERWISE AGREED IN A VALID WRITTEN INDIVIDUAL AGREEMENT WITH IMPINJ), IMPINJ ASSUMES NO LIABILITY WHATSOEVER AND IMPINJ DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATED TO SALE AND/OR USE OF IMPINJ PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT.

NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY PATENT, COPYRIGHT, MASKWORK RIGHT, OR OTHER INTELLECTUAL PROPERTY RIGHT IS GRANTED BY THIS DOCUMENT.

Impinj assumes no liability for applications assistance or customer product design. Customers should provide adequate design and operating safeguards to minimize risks.

Impinj products are not designed, warranted or authorized for use in any product or application where a malfunction may reasonably be expected to cause personal injury or death or property or environmental damage ("hazardous uses") or for use in automotive environments. Customers must indemnify Impinj against any damages arising out of the use of Impinj products in any hazardous or automotive uses.

Impinj, Monza, Speedway, xArray, xSpan are trademarks or registered trademarks of Impinj, Inc. All other product or service names are trademarks of their respective companies. For a complete list of Impinj Trademarks visit: [www.impinj.com/trademarks](http://www.impinj.com/trademarks)

The products referenced in this document may be covered by one or more U.S. patents. See [www.impinj.com/patents](http://www.impinj.com/patents) for details.

## Quick Start Guide

# IMPINJ SPEEDWAY® READER

## OVERVIEW

This guide provides simple steps to quickly start using your new Speedway® reader. For a full description of connection methods, configuration and system setup options, please consult the latest Speedway Installation and Operations Manual.



## Box Contents

- 1 x Speedway Revolution Reader
- 1 x Quick Start Guide

## Accessories Sold Separately

- Universal Power Supply
- Region-Specific AC Power Cord
- Console Cable
- Speedway Antenna Hub
- Speedway Reader GPIO Box
- Reader Antennas
- Speedway Connect Software
- ItemSense Software

## Connections and Ports

- +24 VDC Locking Power Supply (24 V, 2.1 A minimum)
- RJ-45 10/100 BASE-T Ethernet Port
  - Power over Ethernet (PoE / PoE+) Enabled
- USB Type-B Device
- USB Type-A Host
- Management Console Port
- DB-15 GPIO
- RP TNC antenna

## Software for Download

Before getting started, download and install the following on your PC:

- Impinj ItemTest software (available on the Impinj Support Portal – Windows only)
- Latest Octane firmware for Speedway (available on the Impinj Support Portal)

## Powering the Speedway

The Speedway reader can be powered in one of two ways: through the Speedway's Power over Ethernet (PoE / PoE+) capability, or with an AC power source.

**NOTE:** Use either AC Power or PoE / PoE+. Do not use both simultaneously.

### With PoE / PoE+

- Use the appropriate PoE/PoE+ Power Sourcing Equipment (PSE) and route an Ethernet cable from the PSE to the Speedway's Ethernet port.
  - R660-EU2 models: IEEE 802.3at certified (PoE+)
  - All other models: IEEE 802.3af certified (PoE)

### With AC Power

- Connect an Impinj universal power supply to the +24VDC power supply port using a region-specific AC power cord.
- Secure the cable using the locking connector
- Route an Ethernet cable from the work area outlet to the 10/100BASE-T port on the reader

**NOTE:** This product is intended to be supplied with a Listed/Certified power supply, marked LPS or Class 2, with 24Vdc output, rated minimum 2.1A. (Ce produit est conçu pour être alimenté avec une alimentation Mis / certifiés, marqué LPS ou de classe 2, avec sortie 24V, 2,1 A nominal minimum)

## Speedway Connectivity with DHCP Services

- Make sure your Speedway is connected to your local network via Ethernet. Determine the Speedway hostname to connect to a network with a DHCP server.
  - Hostname:** Speedway-XX-XX-XX (where XX-XX-XX is the last 3 hex couplets of the reader MAC address, e.g. Speedway-12-AB-CD)
- If desired, test your connection by pinging <hostname>.local in your PC's command prompt (e.g., ping speedway-12-AB-CD.local).

**NOTE:** If you are connecting your Speedway to a network with static IP addressing, refer to Speedway Installation and Operations Guide on the Support Portal for instructions.

## Updating the Firmware

- Connect to the web configuration page using a web browser at the URL `http://<Hostname or Static IP>`.
- Log in using default credentials:
  - username: **root**
  - password: **impinj**
- Select your region from the drop-down list. (Optional)

**NOTE:** The user is responsible for ensuring operation with the correct RF settings and is solely responsible for any fines and other damages due to incorrect or non-compliant country/region settings

**NOTE:** GX1 and GX2 Speedway readers have no region pre-configured and will not transmit RAIN RFID signals until a region is selected.

- The Speedway runs Impinj Octane firmware. Make a note of the "Software Version" shown on the web configuration page. If you are not running the latest version, upgrade using the "Reader Upgrade" utility. (Download from the Support Portal or ask your Impinj authorized partner for the latest released version.)
- Under "Reader Reboot", click the REBOOT button. When changing operating region, the change does not take effect until the next reboot.

## Using Impinj ItemTest Software

- Open the Impinj ItemTest software application.
- Add a new data source by clicking: 
  - Enter reader hostname (Speedway-XX-XX-XX) or static IP address
  - Click Add Data Source
  - Ensure the reader data source is enabled: 
- Select the Inventory showcase (default). Place tags in the antenna field of view.
- Start tag inventory operation by clicking: 
  - Click a column header to sort by a specific attribute
  - Right-click any column header to select which attributes are displayed
- Stop tag inventory operation by clicking: 
  - Click the Settings button  to change how inventory runs are configured
  - Click Save to apply the updated configuration (Cancel to revert changes)
- Click the reader name (under DATA SOURCES ) to change reader settings.
  - Update reader settings as desired
- Click Save to apply updated reader settings (Cancel to revert changes).