

IMPINJ xArray Gateway RFID Reader User Guide

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OVERVIEW

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

Box Contents

- 1 x Impinj xArray Gateway
- 1 x Quick Start Guide
- 1 x Safety Screw (and Allen Wrench)

Accessories Sold Separately

- Universal Power Supply
- Region-Specific AC Power Cord
- · Console Cable
- · 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

Software for Download

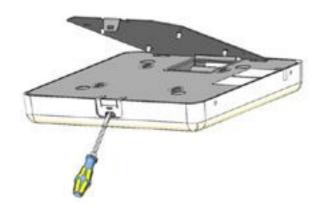
Before getting started, download and install the following on your PC:

- Impinj ItemTest software (available on the Impinj Support Portal PC only)
- Latest Octane firmware for Impini xArray (available on the Impini Support Portal)

Unfasten the Mounting Plate

The xArray gateway has a detachable mounting plate to serve all applicable mount configurations. It must be unfastened to access the gateway's ports and connectors

- 1. Insert a flathead screwdriver into the latching mechanism as shown. Push the mounting clip out and unfasten the mounting plate.
- 2. If unfastened correctly, the mounting plate should slide and release. It can be removed during setup.



Powering the Gateway

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

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

With PoE / PoE+

- 1. Use the appropriate PoE/PoE+ Power Sourcing Equipment (PSE).
 - R680-EU2 models: IEEE 802.3at certified (PoE+)
 - All other models: IEEE 802.3af certified (PoE)
- 2. Route an Ethernet cable from the PSE to the Ethernet port.

With AC Power

- 1. Connect an Impinj universal power supply to the +24VDC power supply port.
- 2. Secure the cable using the locking connector
- 3. 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)

xArray Connectivity with DHCP Services

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

NOTE:

If you are connecting your xArray to a network with a static IP address, refer to the xSpan and xArray 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>.
- 2. Log in using default credentials:

username: rootpassword: Impini

3. 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 gateways have no region pre-configured and will not transmit RAIN RFID signals until a region is selected.

- 4. The gateway 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.)
- 5. Click the REBOOT button. When changing the operating region, the change does not take effect until the next reboot.

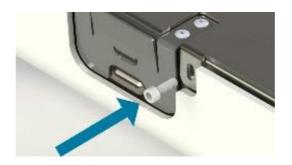
Using Impinj ItemTest Software

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

Fasten the Gateway to the Mounting Plate

1. Swing the xArray chassis upwards towards the mounting plate and latch mechanism with sufficient force to ensure a successful connection.

NOTE: The user can apply the safety screw with the Allen wrench included in the packaging to prevent unwanted removal of the mounting plate. The screw hole is located next to the latch mechanism as shown.



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

• Support: support.impinj.com

• Developer site: developer.impinj.com

Postal Address: 400 Fairview Avenue North, Suite 1200, Seattle, WA 98109

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Documents / Resources



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References

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