Guardwall RAIN
RFID Antenna

deployed in pairs, Impinj Guardwall antennas connect to an Impinj Speedway reader to provide a tightly-controlled read zone that integrates into conveyor systems.

Focused Read Range For Distinct Scenarios

As part of a custom solution built with an Impinj Speedway reader, Guardwall antennas monitor items, packages, or cases moving on conveyor systems. Their high-capacity read range is designed to maximize performance in highly-specific read zones.

Guardwall Benefits

Narrow Field of View
Unparalleled read zone intensity and focus in controlled zone delivers strong performance

Maximum Intensity
Penetrates deep into packed cases with a small, tightly-controlled read zone

Region-specific Operation
Optimized performance in FCC- and ETSI-supported regions

Key Features

Matched-Pair Design
Pair two Guardwall antennas together to create a tightly-controlled read zone and intense RF field to penetrate boxes and cases of items

Tight Read Zone Control
Designed to easily integrate into conveyor systems

Frequency Range
FCC and ETSI versions available

Use Cases

Conveyor Systems
Designed to be utilized in a pair for penetrating and verifying packed goods moving on a conveyor belt

Logistics Optimization
Automate the tracking and movement of goods and assets to gain item-level insights that identify bottlenecks and traffic patterns, so you can create an efficient system that keeps shipments moving

Carton Contents Verification
Accurately verify tagged items in cartons and identify which contents are in which carton
Antenna Family Overview

The Impinj family of antennas connect to Impinj Speedway readers and support custom solution development for retail, supply chain and logistics, healthcare, and many other industries. The antennas come in an assortment of sizes and enclosures to support proximity, specialized, and distance read zones.

<table>
<thead>
<tr>
<th>Product Details</th>
<th>Guardwall</th>
<th>Threshold</th>
<th>Brickyard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions</td>
<td>70 x 40 x 7.3 cm</td>
<td>46 x 9 x 2 cm</td>
<td>29.5 x 6 cm (2.4m integrated cable)</td>
</tr>
<tr>
<td>Weight</td>
<td>11 lbs / 5 kgs</td>
<td>1.6 lbs / .71 kgs</td>
<td>2 lbs / .91 kgs</td>
</tr>
<tr>
<td>Connectors</td>
<td>2X SMA female (Requires accessory cable to connect to reader’s RP-TNC connector)</td>
<td>SMA female (Requires accessory cable to connect to reader’s RP-TNC connector)</td>
<td>Reverse polarized TNC male connector</td>
</tr>
<tr>
<td>Mounting options</td>
<td>Brackets sold separately</td>
<td>Recommended to be recessed within a cable mat</td>
<td>3 mounting holes for tabletop or surface mounting; 6 mounting holes for mounting under surface</td>
</tr>
<tr>
<td>IP rating</td>
<td>IP 51 indoor use only</td>
<td>indoor and outdoor</td>
<td>IP 51 indoor use only</td>
</tr>
<tr>
<td>Environment</td>
<td>Operating Temp: 0°C to 40°C (32°F to 104°F) Humidity: 5% to 95% relative, non-condensing</td>
<td>Operating Temp: -25°C to 55°C (-13°F to 131°F) Humidity: 5% to 95% relative, non-condensing</td>
<td>Operating Temp: -20°C to 55°C (-4°F to 131°F) Storage Temp: -40°C to 85°C (-40°F to 185°F) Humidity: 5% to 95% relative, non-condensing</td>
</tr>
<tr>
<td>Frequency range</td>
<td>865-868 MHz 902-928 MHz bands</td>
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<td>865-868 MHz 902-928 MHz 952-954 MHz bands (country-specific)</td>
</tr>
<tr>
<td>Polarization</td>
<td>RHCP &amp; LHCP</td>
<td>Linear (parallel to short axis)</td>
<td>Near-field magnetic coupling</td>
</tr>
<tr>
<td>Far-field gain</td>
<td>6 dBi</td>
<td>5 dBi</td>
<td>6 dBi max</td>
</tr>
<tr>
<td>VSWR</td>
<td>1.5:1</td>
<td>ETSI: 1.5:1 FCC: 2:1</td>
<td>1.43:1</td>
</tr>
<tr>
<td>Impedance</td>
<td>50 ohms</td>
<td>50 ohms</td>
<td>50 ohms</td>
</tr>
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</table>

Impinj (NASDAQ: PI) wirelessly connects billions of everyday items such as apparel, medical supplies, and automobile parts to consumer and business applications such as inventory management, patient safety, and asset tracking. The Impinj platform uses RAIN RFID to deliver timely information about these items to the digital world, thereby enabling the Internet of Things.

Ready to discuss how Impinj can help your business?
CONTACT US/WWW.IMPINJ.COM