

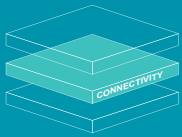
The Impinj Speedway Antenna Hub provides a low cost opportunity to create a large, contiguous RAIN RFID read zone with up to 32 antennas connected to a single Speedway R420 reader.

The Speedway Antenna Hub makes RAIN RFID monitoring applications, including interactive marketing display and document or item tracking, cost-effective and easy to deploy.



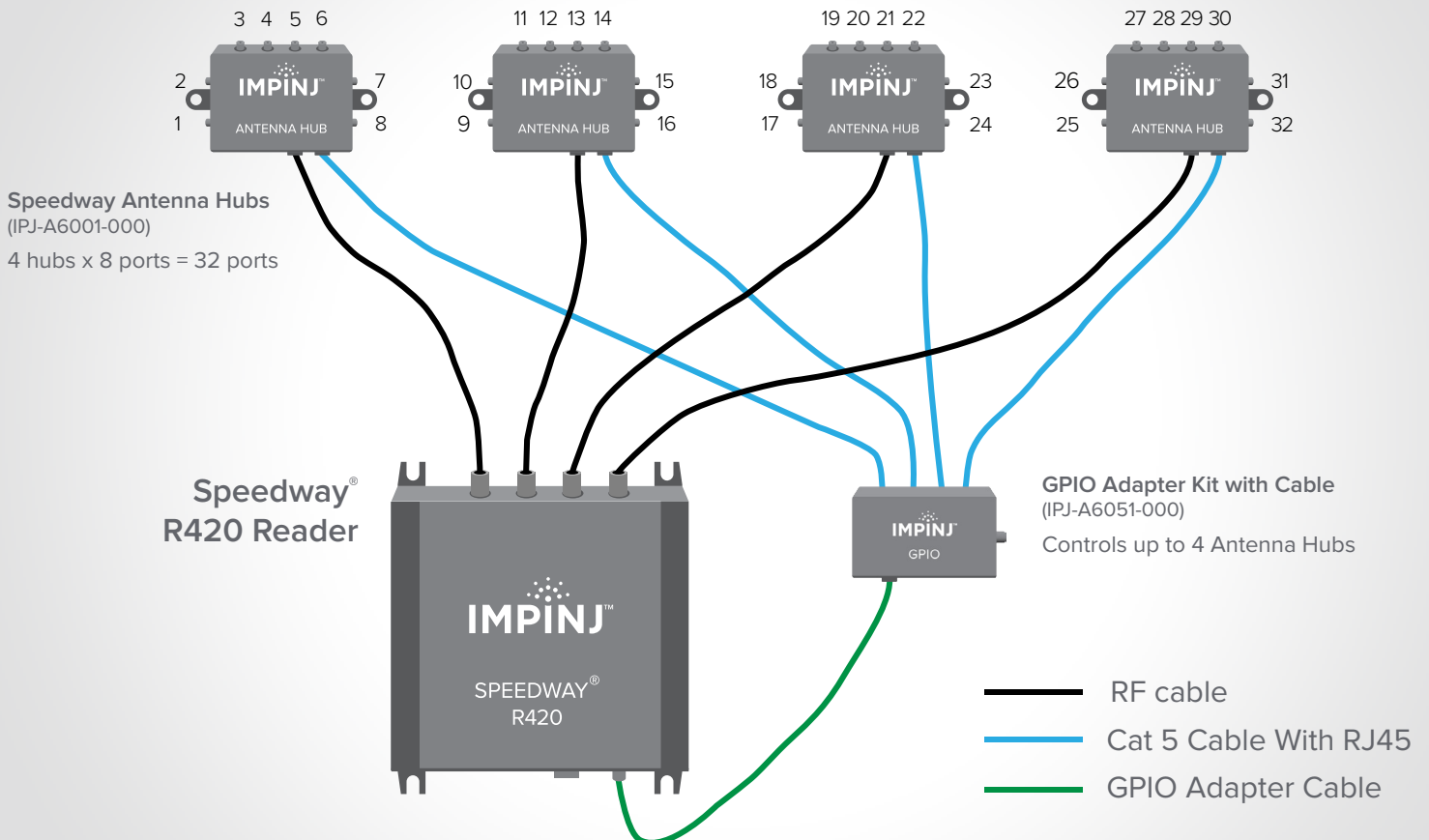
SPEEDWAY ANTENNA HUB BENEFITS

- Cost Effective
- Simple to Scale
- Easy to Install



READERS PROVIDE CONNECTIVITY FOR THE IMPINJ PLATFORM

Antenna Port Numbering





Impinj Speedway Readers Link Endpoints to Applications

Impinj Speedway readers are high-performance, enterprise-class fixed readers and the #1 selling RAIN RFID readers in the world. Speedway R420 fixed readers deliver the performance, quality, and reliability necessary for maximum visibility of endpoints including tagged inventory and assets.

Product Details	Speedway Antenna Hub (IPJ-A6001-000)	GPIO Adapter Kit (IPJ-A6051-000)
Dimensions	4 x 2.4 x 1 in (102 x 61 x 24 mm)	3.5 x 2.4 x 1 in (92 x 61 x 24 mm)
Weight	3.5 oz (100 g)	2.8 oz (80 g)
Power Supply	5V provided by the GPIO Adapter	5V provided by the Speedway reader
Power Consumption	25mA (80mW) max	5mA (20mW) max, nominal voltage is 3.3V I/O with 5V max
Connectors	RF Input: SMA Female 8 RF Outputs: SMA Female 1 Digital I/O: RJ45	• 1 GPIO Input: HD-15 • 4 Digital I/O: RJ45
Mounting Options	Two 1/4 in mounting holes	Two 1/4 in mounting holes
Max Input Power	34 dBm	
Insertion Loss	Typical	
Isolation	36 dB (Min)	
Return Loss	Typical	
Antenna Hub Switching Speed	<200 μ s based on hardware design	
Device Switching Speed	~25 ms based on Speedway firmware	
Operating Temperature	-40 °C to +80 °C	-40 °C to +80 °C
Storage Temperature	25 °C	25 °C
Humidity	5% to 95%, non-condensing	5% to 95%, non-condensing
IP Rating	IP52	IP52
Frequency	860-960 MHz	
Certifications	FCC, CE, RoHS	FCC, CE, RoHS
Cables	RF cable maximum length: depends on environment/region, typical 1/2 dB per meter signal loss Digital cable (Cat5) for control, maximum length: • 300 ft (100 m) if shielded • 100 ft (30 m) if unshielded	• HD-15: 1 ft cable for Speedway GPIO port included • Custom HD-15 can be manufactured up to 100ft (30 m) max
Configuration	Octane Rshell, Speedway WebUI	
Antenna Port Numbering	1-32 on Antenna Hubs 1, 9, 17, 25 on native reader ports	
API	LLRP Tool Kit (LTK), Speedway Development Kit (SDK)	
Test Software	MultiReader v6.6.4 or later	

SPEEDWAY ANTENNA HUB BENEFITS & FEATURES



Simple to Scale

Connect 5-32 antennas to a single high-performance Speedway R420 and GPIO Adapter



Cost Effective

Antenna intensive RAIN RFID deployments can connect up to 32 antennas



Performance

All the benefits of the Speedway reader but no new API's or extensive programming changes



Easy to Install Design

Enclosed electronics board with mounting tabs and LED's for system level feedback



Track Movement in Real-Time

Robust solution for popular item monitoring and other antenna-intensive RFID applications



Robust, System Level Feedback

With system level feedback for reliable installations in real world conditions