



R4321P

Quattro

Smart 4-port RAIN RFID
Long Range Reader



IMPINJ
CONNECTED

BENEFITS

High Sensitivity

Customizable
with Javacode

Customizable
with Javacode

IOIOI
GP I/O

PoE

USB Host &
Device

Features

- RAIN RFID (UHF EPC Class1 Gen2, ISO 18000-63) compliant
- Multiregional support
- Four 50 Ohm TNC-RP antenna connectors
- Power over Ethernet interface
- Up to 31.5 dBm (1.4 W) output power
- Internal scripting engine
- USB host port
- PoE or external power supply

Applications

- RAIN RFID portals for logistic
- Industrial automation reading points
- RAIN RFID tunnels
- Access control reading points
- Smart shelves and smart displays

Overview

The **Quattro** (Model R4321P) is a compact long range RAIN RFID reader of the easy2read® product line, well suited for retail and warehousing installations.

The **Quattro** reader has 4 antenna ports capable of a 31.5 dBm maximum power enabling to build RAIN RFID portals for long range reading. Its slim form factor makes it easy to install even when limited space is available. It offers the Ethernet (PoE) and USB communication interface in order to simplify the installation both on large and single read point solutions. The Power over Ethernet capability permits to provide power and to communicate with the reader with a single cable.

The USB host port, combined with the internal computing architecture, permits to connect USB peripherals like barcode scanners, keyboards, printers and many others transforming the **Quattro** reader in a powerful and versatile identification platform.

The **Quattro** is based upon an embedded Linux platform and it's easily configurable using an internal web interface. System integrators can customize the behavior of the reader installing Java code that, having access to all the RFID features and interfaces, permits a full customization.

The **Quattro** reader complies with and can operate in both European and US regulatory environments and, due to its multiregional capabilities, it's ideal for integration in solutions requiring compliance to different geographical regions.



Technical Specification Table

Frequency Range	• 865.600÷867.600 MHz (ETSI EN 302 208 v. 3.1.1) • 902÷928 MHz (FCC part 15.247)
RF Power	• Up to 31.5 dBm (1.4 W) conducted (ETSI) • Up to 30 dBm (1 W) conducted (FCC)
RX Sensitivity	-84 dBm – 10%PER, assuming 20 dB antenna RL @ 31.5 dBm output
Number of Channels	• 4 channels (compliant to ETSI EN 302 208 v. 3.1.1) • 50 hopping channels (compliant to FCC part 15.247)
Standard Compliance	EPC Class 1 Gen 2 - ISO18000-63
CPU	ARM9 @ 400 MHz on Atmel AT91SAM9G25
Operating System	Linux
Receiving Capability	• Gen 2 Dense Reader Mode Management • Data rate up to 400 kbit/s
Connectivity	• USB Interface: USB 2.0 High Speed (480 Mbit/s) device port (USB mini connector) • Virtual COM port parameters: • Baudrate up to 115.200 kbit/s • Databits: 8 • Stopbit: 1 • Parity: none • Flow control: none • Ethernet 10/100/1000Base-T (RJ45) • PoE standard IEEE 802.3af
I/O Interface	• 10 Poles Terminal Block with screw connector • 2 digital inputs optically isolated • 2 solid state photorelay outputs optically isolated (500mA max)
Antenna Connectors	4 TNC Reverse Polarity
Power Supply	• 5 V DC power supply (12 W) • PoE standard IEEE 802.3af (12.95 W)
Status Indicators	Multicolour LEDs: Power, Activity, Status and Applications
IP Rating	IP30
Dimensions	• (W)210 x (L)140 x (H)27 mm³ • 8.27 x 5.51 x 1.06 inches³
Operating Temperature	-10 °C to +55 °C
Weight	740 g

Ordering Options

WR4321PXAAAA	Quattro - Smart Long Range Reader		
WR4321PXDKEU	Quattro - ETSI Dev. Kit		
WR4321PXDKUS	Quattro - FCC Dev. Kit		
WALIM0000005	Quattro power supply		



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