



Proton - R4320P

**Compact 4-port
Long Range
RAIN RFID Reader**

Features

- RAIN (UHF EPC Class1 Gen 2 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
- IP65 in compact form factor
- M12 industrial connectors

Applications

- RAIN RFID portal for logistic
- Industrial automation reading points
- RAIN RFID tunnels
- Access control reading points

General Info

The Proton (Model R4320P) is a rugged long range RAIN RFID reader of the easy2read® product line, well suited for industrial environment installations.

The Proton reader has 4 antenna ports capable of a 31.5 dBm maximum power enabling to build RAIN RFID portals for logistic. Its compact form factor makes it easy to install and the IP65 protection permits outdoor or harsh environment installations. Featuring Power Over Ethernet, RS232 and GPIOs via industry standard M12 connectors the Proton is an ideal choice for industrial automation and Industry 4.0 solutions.

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

The Proton 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 devices requiring compliance to different geographical regions.



-  **Embedded Readers**
-  **Mobile Readers**
-  **Integrated Readers**
-  **Fixed Readers**
-  **Temperature Loggers**

easy2read[®] product line

The easy2read[®] product family constitutes a complete and reliable product line of RAIN RFID readers for any Auto-ID need. A reading range from a few centimetres up to 7-8 metres distance makes the easy2read[®] family suitable for applications such as access control, RFID gates, desktop reading or OEM modules for integration into handheld or printer devices.

Technical Specifications Table

Frequency Range	– 865.600÷867.600 MHz (ETSI EN 302 208 v3.1.1) – 902÷928 MHz (FCC part 15.247)
RF Power	– Up to 31.5 dBm (1.4W) conducted (ETSI) – Up to 30 dBm (1W) conducted (FCC)
Number of Channels	– 4 channels (compliant to ETSI EN 302 208 v3.1.1) – 50 hopping channels (compliant to FCC part 15.247)
Standard Compliance	EPC C1 G2 / ISO18000-63
CPU	ARM9 @ 400Mhz on Atmel AT91SAM9G25
Operating system	Linux
Receiving Capability	Gen 2 Dense Reader Mode Management Data rate up to 400 Kb/s
Connectivity	RS232 Serial Communication (M12 connector) Ethernet 10/100/1000BASE-T (M12 connector) PoE standard IEEE 802.3af
I/O Interface	M12 connector 2 digital inputs optically isolated 2 solid state photorelay outputs optically isolated (500mA max)
Antenna Connectors	4 TNC Reverse Polarity
Electrical Power	9÷36 DC power supply (12W) PoE standard IEEE 802 3af (12,95W)
Visual Status Indicators	Multicolor LEDs: Power, Activity, Status and Applications
Operating Temperature	-10°C to +55°C
IP Rating	IP65
Dimensions	(W)131 x(L)106 x (H)50 mm ³ 5.15 x 4.17 x 1.96 inch ³
Weight	530 g
Ordering Options	
Code	Description
Reader	
WR4320PXAAAA	R4320P Proton - Compact 4 - port UHF RFID Reader
Development kit	
WR4320PXDKEU	Proton - ETSI Dev Kit with antenna, interface, power supply and tags (reader not included)
WR4320PXDKUS	Proton - FCC Dev Kit with antenna, interface, power supply and tags (reader not included)
Accessories	
WALIM0000006	Power Supply for Proton R4320P Reader
WANTENNAX019	Circular polarized antenna 8.5dBc – ETSI
WANTENNAX020	Circular polarized antenna 8.5dBc – FCC
WCAVOAAAAX005	Antenna RF cable with TNC/RP-N connectors
ECCANTRFX033	Ethernet cable (5 m)



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