iRFID100 Fixed Zone 1 UHF RFID Reader

- Explosion proof for use in Zone 1 and 21
- Read passive UHF RFID tags
- Up to 10m read range
- Choice of antenna
- IP66 for industrial environments
- -20°C to +60°C

The Extronics iRFID100 brings RFID reader technology in hazardous areas, enabling reliable tracking solutions to be implemented in Zone 1 and 21 environments. Use with passive RFID tags, like the extensive iTAG500 range from Extronics, to locate assets across the site, improving traceability and efficiency.

Choice of antenna

The iRFID100 incorporates Extronics iSOLATE501 RF galvanic isolators, making RF outputs intrinsically safe. This means that any antenna assessed as meeting the international intrinsic safety standards for simple apparatus may be used. The Extronics iANT2xx range has been assessed for this purpose by our team of engineers.

Variable read range

With programmable output power in 256 steps from 17dBM to 32dBm, the iRFID100 can detect tags at variable distances up to 10m (also depending on antenna chosen and tag dimensions). This gives you greater accuracy and reduces false readings.

Long range tag detection

Up to 4 antenna outputs, each with a read range of up to 10m, for maximum performance and efficiency.

Intrinsically safe RF outputs

Not only does this give greater choice of antenna, it also means that antennas may be hot swapped without having to power down equipment – reducing downtime.

Highly rugged and reliable

The iRFID100 is designed to operate successfully in harsh environments and hazardous areas, including IP66 ingress protection, wide temperature range of -20°C to +60°C, and a marine grade aluminium enclosure painted with epoxy for maximum durability.

Extronics Limited
1 Dalton Way, Midpoint 18, Middlewich, Cheshire, UK. CW10 0HU
Tel: +44 (0) 845 277 5000 **Fax:** +44 (0)845 277 4000 **E-mail:** info@extronics.com **Web:** www.extronics.com

Specification

Certification	ATEX II 2 (1) GD Ex d [ia IIC Ga] IIB+H2 T6 Ex tb IIC T85°C
Frequency range	865.6 to 867.6 MHz (ETSI EN 302 208)
Output power	SW programmable, max 32dBm (~1.5W) conducted
Number of outputs	Up to 4
Power supply	Universal 90-264VAC Or 15 Vdc
Power consumption	15W (max), 0.25W (idle mode)
Enclosure material	Marine grade copper-free aluminium light alloy, epoxy powder coated
Ingress protection	IP66
Dimensions	W415 x H340 x D168 mm
Weight	Approx. 21 kg
Ambient temperature	-20°C to +60°C
Humidity	0 to 95%, non-condensing
Digital I/O	5 x GPIO pins 3.3V out, 5V tolerant
Ports	RS232 serial communication (DB9)
RF output connections	N-type
Compliance	ETSI EN 302 208, ETSI EN 300 220, EPC C1G2, ISO 18000-6B, Philips UCODE EPC 1.19

Ordering Information

iRFID100 Fixed UHF RFID Reader	**IRFID100-[#1]-[#2]**
Specify option #1 – power supply	
Universal AC powered (90-264VAC)	AC
DC powered (15Vdc)	DC
Specify option #2 – number of intrinsically safe outputs	
1 off N-type connector	1
2 off N-type connector	2
3 off N-type connector	3
4 off N-type connector	4

Optional Extras

Antennas - iANT2xx range of simple apparatus antennas – see iANT2xx datasheets for more information

Accessories - Stainless steel 316L pipe mount bracket kit for iRFID100 enclosure, to fit 1.5-2” diameter pipe or rectangular post

Cable glands - the iRFID100 is a flameproof / explosion-proof product and requires installation using the correct types of cable glands and stopping plugs. It is the customer’s responsibility to ensure that the correct cable glands and stopping plugs are purchased for the installation. Extronics can quote for cable glands if given a full cable specification. Contact us for suitable types for use with power or Ethernet entries on this product.

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