

iRFID101 Fixed Zone 1 RFID Reader



- Explosion proof for use in Zone 1 and 21
- ATEX and IECEx approved
- User choice of RFID Reader hardware
- Read a wide range of passive RFID tags
- Read range dependant on chosen Reader
- Suitable antennas available
- IP66 for industrial environments
- -20°C to +60°C (dependant on Reader choice)

The Extronics iRFID101 brings RFID reader technology into hazardous areas, enabling reliable tracking solutions to be implemented in ATEX and IECEx Zone 1 and 21 environments. Use with passive RFID tags, such as the extensive iTAG500 range from Extronics, to locate assets across the site, improving traceability and efficiency.

The concept allows installation of equipment from leading RFID Reader vendors such as SICK, CAEN and Impinj, meaning that the user may select the vendor of their choice when extending RFID reading into hazardous areas.

Choice of antenna

The iRFID101 incorporates Extronics iISOLATE501 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

Typically, the chosen Reader will have programmable output power allowing the iRFID101 to detect tags at variable distances, typically 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 typically up to 10m (dependant on chosen Reader) 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 iRFID101 is designed to operate successfully in harsh environments and hazardous areas, including IP66 ingress protection, wide temperature range and a marine grade aluminium enclosure painted with epoxy for maximum durability.

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Specification

Certification	Ex II 2 (1) GD Exd [ia IIC Ga] IIB+H2 T5 Gb Ex tb [ia Da] IIIC T100°C Db
Frequency range	Dependent on chosen Reader hardware
Output power	Dependent on chosen Reader hardware
Number of outputs	Typically up to 4
Power supply	Universal 90-264VAC Or DC Voltage
Power consumption	Typically 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	Typically -20°C to +60°C, dependent on chosen Reader
Humidity	0 to 95%, non-condensing
Digital I/O	Dependent on chosen Reader hardware
Ports	Dependent on chosen Reader hardware
RF output connections	N-type
RFID Compliance	Dependent on chosen Reader hardware

Ordering Information

iRFID101 Fixed RFID Reader

IRFID101-[#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, eg. iANT217 – see iANT2xx datasheets for more information

Accessories - Stainless steel 316L pipe mount bracket kit for iRFID101 enclosure, to fit 1.5-2" diameter pipe or rectangular post



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