



## **EU Type Examination Certificate CML 15ATEX2169X Issue 2**

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **iRFID500 RFID Tag Reader**
- 3 Manufacturer **Extronics Ltd**
- 4 Address **1 Dalton Way  
Midpoint 18  
Middlewich  
Cheshire  
CW10 0HU**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.  

The examination and test results are recorded in the confidential reports listed in Section 12.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN 60079-0:2012 + A11:2013

EN 60079-11:2012

- 10 The equipment shall be marked with the following:



II 1 GD / I M1

Ex ia IIC T4 Ga

Ex ia IIIC T135°C Da

Ex ia I Ma

Ta = -20°C to +55°C



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## 11 Description

The iRFID500 is an intrinsically safe handheld device designed to read passive RFID (Radio Frequency Identification) tags.

It features an LCD display, indicating LEDs, sounder, vibrator, RF transceiver and a Bluetooth transceiver for communicating wirelessly with other electronic devices.

The electronic circuit board is housed in a plastic enclosure and is powered by an internal 3.7V rechargeable lithium ion battery. The unit is charged in the safe area via a USB socket in the base of the enclosure using the USB Charger Adapter model number iRFID500UC.

### Variation 1

This variation introduces the following modifications:

- i. To allow minor changes to the iRFID500 drawings to include the modification below, correct typographic errors and clarification of drawing notes, references and assembly parts.
- ii. To allow an alternative safety fuse to be utilised.

### Variation 2

This variation introduces the following modifications:

- i. Addition of a Battery Monitoring circuit board
- ii. Removal of fuse from main circuit board
- iii. Removal of thermistor
- iv. Modifications to USB Charger Adapter

## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	27/09/2016	R611A/00	Issue of prime certificate
1	05/01/2017	R1745A/00	Introduction of Variation 1
2	20/11/2017	R2265A/00	Introduction of Variation 2

Note: Drawings that describe the equipment or component are listed in the Annex.

## 13 Conditions of manufacture

None

## 14 Special Conditions for Safe Use (Conditions of Certification)

The following conditions relate to safe installation and/or use of the equipment.

- 14.1 The USB socket must not be used in the hazardous area
- 14.2 Equipment must only be recharged with USB Charger Adapter model number iRFID500UC

# Certificate Annex



**Certificate Number** CML 15ATEX2169X  
**Equipment** iRFID500 RFID Tag Reader  
**Manufacturer** Extronics Ltd

The following documents describe the equipment or component defined in this certificate:

## Issue 0

Drawing No	Sheets	Rev	Approved date	Title
418522	1 to 2	1.0	27/09/2016	iRFID500 Assembly BOMs
413432	1 of 1	3.0	27/09/2016	iRFID500 General Assembly Certification
413479	1 to 4	1.0	27/09/2016	iRFID500 Certification Schematics
413480	1 to 9	1.0	27/09/2016	iRFID500 PCB Layout
413487	1 to 2	1.0	27/09/2016	iRFID500 PCB BOM
417684	1 of 1	1.0	27/09/2016	iRFID500 ATEX/IECEx Label Certification Drawing
413455	1 of 1	1.1	27/09/2016	iRFID500UC USB Charger Adaptor Schematic
418220	1 of 1	1.2	27/09/2016	iRFID500UC USB Charger Adaptor PCB BOM
413483	1 to 2	1.1	27/09/2016	iRFID500UC USB Charger Adaptor PCB Layout

## Issue 1

Drawing No	Sheets	Rev	Approved date	Title
418522	1 to 2	2.0	05/01/2017	iRFID500 Assembly BOMs
413432	1 of 1	5.0	05/01/2017	iRFID500 General Assembly Certification
413479	1 to 4	2.0	05/01/2017	iRFID500 Certification Schematics
413487	1 to 2	2.0	05/01/2017	iRFID500 PCB BOM

## Issue 2

Drawing No	Sheets	Rev	Approved date	Title
418522	1 of 1	3.0	20/11/2017	iRFID500 Assembly BOMs
413432	1 of 1	6.0	20/11/2017	iRFID500 General Assembly Certification
413479	1 to 4	3.0	20/11/2017	iRFID500 Certification Schematics
413487	1 to 2	3.0	20/11/2017	iRFID500 PCB BOM
413480	1 to 9	2.0	20/11/2017	iRFID500 PCB Layout
413455	1 of 1	2.0	20/11/2017	iRFID500 USB Charger Adapter
418220	1 of 1	2.0	20/11/2017	iRFID500 Charger ATEX BOM
413483	1 to 8	2.0	20/11/2017	iRFID500 USB Charger Adapter
421451	1 of 1	2.0	20/11/2017	iRFID500 Battery Monitor

## Certificate Annex



**Certificate Number** CML 15ATEX2169X  
**Equipment** iRFID500 RFID Tag Reader  
**Manufacturer** Extronics Ltd

Drawing No	Sheets	Rev	Approved date	Title
421453	1 of 1	2	20/11/2017	iRFID500 Battery Monitor BOM-1_1 (ATEX)
421452	1 to 15	2.0	20/11/2017	iRFID500 Battery Monitor Layout
419088	1 of 1	2.0	20/11/2017	DE iRFID500 Reader Label Safe Area USB Charger
417684	1 of 1	2.0	20/11/2017	iRFID500 ATEX/IECEX Label Certification Drawing