

# INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx TRC 15.0015X Page 1 of 4 Certificate history:

Status: Current Issue No: 5

Date of Issue: 2021-12-13

Applicant: Extronics Ltd.

1 Dalton Way Midpoint 18 Middlewich Cheshire CW10 0HU United Kingdom

Equipment: RF Galvanic Isolator - isolate501

Optional accessory:

Type of Protection: Non-sparking, Intrinsically Safe

Marking: Ex nA [Ex ia Ga] IIC T6 Gc

Ex ic [Ex ia Da] III C T85 °C Dc

[Ex ia Ma] I

-40°C ≤ Ta ≤ +80°C

Approved for issue on behalf of the IECEx Stephen Winsor

Certification Body:

Position: Certification Manager

Signature:

(for printed version)

Date:

- 1. This certificate and schedule may only be reproduced in full.
- 2. This certificate is not transferable and remains the property of the issuing body.
- 3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Issue 4 (2017-12-20)

Issue 3 (2017-08-23) Issue 2 (2016-11-24)

Issue 1 (2016-10-13) Issue 0 (2015-09-30)

Certificate issued by:

Element Materials Technology Unit 1 Pendle Place Skelmersdale West Lancashire





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Manufacturer: Extronics

1 Dalton Way Midpoint 18 Middlewich Cheshire CW10 0HU United Kingdom

Additional manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

#### STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

IEC 60079-11:2011 Edition:6.0

IEC 60079-15:2010 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"

Edition:4

This Certificate does not indicate compliance with safety and performance requirements

other than those expressly included in the Standards listed above.

#### **TEST & ASSESSMENT REPORTS:**

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/TRC/ExTR15.0016/00 GB/TRC/ExTR15.0016/01 GB/TRC/ExTR15.0016/02

**Quality Assessment Report:** 

GB/TRC/ExTR15.0016/03

GB/EXV/QAR19.0010/02



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#### **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The iSOLATE501 is a RF galvanic isolator. It is intended to allow the connection of any RF transmitter within certain power and frequency limits to any appropriate antenna using coaxial cables. The device provides galvanic isolation to frequencies in the range of 120Mhz to over 8Ghz. It provides an open circuit to DC and low frequency AC signals, and is a passive component.

#### SPECIFIC CONDITIONS OF USE: YES as shown below:

See Conditions of use in the Annex.



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### **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)**

Update to applied standards and minor revision to conditions of use (to correct typographical error in dBm values).

Annex:

Annex to IECEx TRC 15.0015X iss 5.pdf



# Element Materials Technology, Unit 1, Pendle Place, Skelmersdale, West Lancashire, WN8 9PN, United Kingdom

### **Annex to IECEx Certificate of Conformity**

IECEx TRC 15.0015X issue No.: 5

#### "Conditions of Use" for Ex Equipment

1. The RF power input to the device must be limited to defined power levels dependent on the Equipment / Gas Group:

	Group I	6.0 W (37.7 dBm)
Maximum safe input power, defined as in normal operation without user-settable software limits and must include antenna gain consideration.	Group IIC	2.0 W (33.0 dBm)
	Group IIB	3.5 W (35.4 dBm)
	Group IIA	6.0 W (37.7 dBm)
	Group III	6.0 W (37.7 dBm)

- 2. The product must be mounted such that it is earthed before use in accordance with clause 15 in IEC 60079-0:2017.
- 3. The product shall be mounted in an IECEx / ATEX approved Ex 'n' or Ex 'e' enclosure with minimum IP54 rating while situated in hazardous gas atmospheres.
- 4. The product must be mounted in an IECEx / ATEX Ex 'e' enclosure with minimum IP54 rating while situated in hazardous dust atmospheres.
- 5. Live connections or disconnections in the hazardous area are limited to a passive antenna type only. Antenna output is galvanically isolated, so intrinsically safe parameters are not relevant.
- 6. The product must only be situated in the safe area when providing 'ia' output into mining 'M1' area.

### "Notes to this certificate"

TA1 TRA-029958



## **Annex to IECEx Certificate of Conformity**

IECEx TRC 15.0015X issue No.: 5

Manufacturer's Documents					
Title:	Drawing No.:	Rev. Level:	Date:		
CD iSOLATE501 PCB Certification Drawing	409580	2.1	2015-06-16		
iSOLATE501 Label Certification ATEX_IECEx	418407	2.0	2017-10-10		
CD iSOLATE501 General Assembly Certification (2 sheets)	412479	3.0	2017-10-10		
Safety Instructions iSOLATE501 (8 sheets)	X120044	2	2021-11-30		



Attention is drawn to the operating and installation instructions which may contain useful information in relation to conditions of use.