



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.:	IECEx EXV 19.0051X	Page 1 of 4	<u>Certificate history:</u> Issue 0 (2019-11-12)
Status:	Current	Issue No: 1	
Date of Issue:	2021-05-24		
Applicant:	Extronics Ltd. 1 Dalton Way Midpoint 18 Middlewich Cheshire CW10 0HU United Kingdom		
Equipment:	iWAP Wireless Zone 2 Access Point Enclosure. Models: iWAP XN3, iRFID XN3		
Optional accessory:			
Type of Protection:	Equipment Protection by increased safety "e", Equipment protection by type of protection "n", Equipment protection by intrinsic safety "i", Equipment dust ignition protection by enclosure "t"		
Marking:	Ex ec [ic Gc] nR IIC T6 Gc Ex [ic Dc] tc IIIC T85°C Dc Tamb -40°C to +60°C		

Approved for issue on behalf of the IECEx
Certification Body:

Sean Clarke CEng MSc FIET

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.



Certificate issued by:

ExVeritas Limited
Units 16-18 Abenbury Way
Wrexham Ind. Est.
Wrexham LL 139UZ
United Kingdom





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Manufacturer: **Extronics Ltd.**
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

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

IEC 60079-15:2017 Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
Edition:5.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

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/EXV/ExTR19.0056/00](#)

[GB/EXV/ExTR21.0024/00](#)

Quality Assessment Report:

[GB/EXV/QAR19.0010/01](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The iWAP XN3 Zone 2 Access point consists of two main parts, the Ex nR restricted breathing section and an Ex ec increased safety portion to allow for external connections. The Ex nR portion can house wireless equipment and IT/Electrical devices and has various allowable lengths and power limits as detailed below. A PCB or aluminium plate provides the barrier between the Ex nR and Ex ec portions of the enclosure and can be fitted with suitably certified glands through board connections. The RF outputs of the iWAP XN3 are galvanically isolated to make them intrinsically safe to allow for the connection of any suitable antenna. The enclosure is made from aluminium alloy and provides IP66 ingress protection.

Length of nR enclosure	Maximum total internal power dissipation
≥ 150mm	58W
≥ 200mm	80W
≥ 300mm	93W

In addition, the enclosure provides Ex tc protection by enclosure for hazardous dust applications again with the RF outputs being galvanically isolated.

The iWAP XN3 may also be fitted with the Extronics iSOLATE501 to allow Ex ia output to the type N connectors, the marking becoming:

Ex ec [ia Ga] nR IIC T6 Gc

Ex [ia Da] tc IIIC T85°C Dc

In addition the iWAP XN3 may be provided without RF outputs in which case the coding becomes:

Ex ec nR IIC T6 Gc

Ex tc IIIC T85°C Dc

Alternative ambient temperature ranges within the certified limits may be marked when appropriate for the service temperature of installed equipment.

Maximum input voltage = 253V AC 60V DC.

iRFID XN3 is an alternative model name for the iWAP XN3.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The equipment is not to be mounted in an area with a high airflow dust laden atmosphere, in addition, cleaning of the enclosure shall only be with a damp cloth.
- The enclosure shall only be mounted in a vertical orientation with the top plate face up.
- The connection between the antenna and the factory installed N-type connector shall maintain at least IP54.
- The 'ec' portion of the enclosure may contain a USB console connection. When fitted this connection is for service purposes only and shall not be used in normal operation.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

The following changes are introduced in issue 1 of the certificate:

- To allow the use of equipment which has an already certified intrinsically safe RF output without the need to include the DC block.
- Update of GA drawing with additional details to provide clarity during production.
- Update of label drawing.
- Update to PCB layout drawing to allow additional flexibility for component locations.
- Inclusions of additional locations for external earth point.
- Inclusion of optional N-Type bulk-head stopping plug.

Annex:

[IECEx EXV 19-0051X Certificate Annex Issue 1.pdf](#)

Routine Tests:

1. The restricted breathing enclosure shall be subjected to a routine restricted breathing test in accordance with clause 12.2.2.1.2 of IEC 60079-15:2017. **NOTE** – The restricted breathing portion of the enclosure is not intended to be opened in service.
2. The equipment shall be subject to a routine dielectric strength test in accordance with clause 7.1 of IEC 60079-7:2015. Refer to General Assembly drawing X122912.

Issue 0**Manufacturer's documents:**

Title:	Drawing No.:	Rev	Date:
General Assembly Certification iWAP XN3 (Pages 1-5)	X122912	1	11/11/2019
Manual Safety ATEX/IECEx iWAP XN3	X123263	1	11/11/2019

Issue 1**Manufacturer's documents:**

Title:	Drawing No.:	Rev	Date:
General Assembly Certification iWAP XN3 (Sheets 1 to 6))	X122912	2	04/03/2021
Schematic Interface Plate PCB iWAP XN3 (Sheet 1 of 1)	X124219	3	3/2/2021
PCB Layout Drawing Certification Interface Plate PCB iWAP XN3 (Sheets 1 to 4)	X124220	3	3/2/2021
Manual Safety ATEX/IECEx iWAP XN3 (Sheets 1 to 7)	X123263	2	26 October 2020