

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:	IECEx SIR 19.0019X		Issue No: 1	Certificate history:		
Status:	Current		Page 1 of 4	Issue No. 1 (2019-04-01) Issue No. 0 (2019-03-01)		
Date of Issue:	2019-04-01		Tage TOT 4			
Applicant:	Detectronic Limited Regent Street Whitewalls Ind. Est. Colne, Lancashire. BB8 8LJ United Kingdom					
Equipment: <i>Optional accessory:</i>	9W3200 Battery Pack					
	Intrinsically Safe					
	Ex ia IIB T4 Ga Ta = -40°C to +60°C					
Approved for issue on Certification Body:	behalf of the IECEx	N Jones				
Position:		Certification Manager				
Signature: (for printed version)						
Date:						
<ol> <li>This certificate and schedule may only be reproduced in full.</li> <li>This certificate is not transferable and remains the property of the issuing body.</li> <li>The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.</li> </ol>						
Certificate issued by:						

SIRA Certification Service CSA Group Unit 6, Hawarden Industrial Park Hawarden, Deeside, CH5 3US United Kingdom







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Manufacturer:	Detectronic Limited Regent Street Whitewalls Ind. Est. Colne, Lancashire. BB8 8LJ United Kingdom	

Additional Manufacturing location(s):

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 apparatus 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 Edition:7.0	Explosive atmospheres - Part 0: Equipment - General requirements
<b>IEC 60079-11 : 2011</b> Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

This Certificate does not indicate compliance with electrical 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 Report:

GB/SIR/ExTR19.0044/00

GB/SIR/ExTR19.0107/00

Quality Assessment Report:

GB/SIR/QAR08.0019/09



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Schedule

#### EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

9W3200 Battery Pack is an intrinsically safe rechargeable battery pack with a flying lead terminating in a socket which is designed to connect to a mating plug on another suitably certified intrinsically safe device, typically a data logger. When the 9W3200 is in the non-hazardous area, the same connector can be used to connect to a charger, the charging connector itself being protected by triplicated series diodes.

The battery pack consists of three Saft '3s1p INT 176065 ise CCS' 4.2V, Lithium ion cells in series to produce an output of 12.6V peak, the current being limited to an intrinsically safe value by means of a resistor. The battery pack constitutes of a PCB containing a number of safety critical components, the three cells and their protection PCBs mounted on top of the cells. They are completely encapsulated inside a plastic enclosure.

The 9W3200 is designed to be charged by means of a charger specifically designed for lithium-ion cells, with a maximum charging voltage of 12.6V and a maximum charging current of 3A.

Um at the charging terminal = 12.6V.

The 9W3200 has the following safety description:

Uo = 12.6V	lo = 2.708A	Po = 6.142W	Ci = 0
Co = 7.4µF	Li = 0	Lo = 19µH	

SPECIFIC CONDITIONS OF USE: YES as shown below:

See attached annexe.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

**Issue 1** – this Issue introduced the following change:

1. Correction on drawing C9W5210 to change approval text.

#### Annex:

IECEx SIR 19.0019X Issue 1 Annexe.pdf

Annexe to:I ECEx SI R 19.0019X I ssue 1Applicant:Detectronic LimitedApparatus:9W3200 Battery Pack



### Specific Conditions of Use

- i. Under certain extreme circumstances, exposed plastic and unearthed metal parts of the enclosure may store an ignition-capable level of electrostatic charge. Therefore, the user/installer shall implement precautions to prevent the build-up of electrostatic charge, e.g. locate the equipment where a charge-generating mechanism is unlikely to be present and clean with a damp cloth. The capacitance of the metallic cover was determined as 21pF.
- ii. While charging the 9W3200 battery pack in non-hazardous area, it shall be supplied with a maximum charging voltage of 12.6V and maximum charging current of 3A, that is
  - Powered from a SELV or PELV system or
  - Powered via a safety isolating transformer complying with the requirements of IEC 61558-2-6 or technically equivalent standard, or
  - Directly connected to apparatus complying with IEC 60950, IEC 61010-1 or a technically equivalent standard, or
  - Fed directly from cells of batteries.
  - The ambient temperature during charging shall be in the range of  $-30^{\circ}$ C to  $+85^{\circ}$ C.
- iii. When the battery pack is installed in a portable equipment, a drop test shall be considered under the assessment of the complete portable equipment.