



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 ITA 12.0002X** Page 1 of 5 [Certificate history:](#)
Issue 0 (2012-03-21)

Status: **Current** Issue No: 1

Date of Issue: 2021-08-20

Applicant: **Nautitech Mining Systems Pty Ltd (NTMS Pty Ltd)**
Unit 3, 9 Packard Avenue
Castle Hill, NSW, 2154
Australia

Equipment: **IS Battery Backup Unit - CT502001**

Optional accessory:

Type of Protection: **Intrinsic Safety "ia"**

Marking: **Ex ia I Ma**

Approved for issue on behalf of the IECEx
Certification Body:

Ajay Maira

Position:

Certification Authority

Signature:
(for printed version)

Ajay Maira

Date:

2021-08-20

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:

Ex Testing and Certification Pty Ltd
1/30 Kennington Drive
Tomago NSW 2322
Australia



TESTING & CERTIFICATION



IECEX Certificate of Conformity

Certificate No.: **IECEX ITA 12.0002X**

Page 2 of 5

Date of issue: 2021-08-20

Issue No: 1

Manufacturer: **Nautitech Mining Systems Pty Ltd (NTMS Pty Ltd)**
Unit 3, 9 Packard Avenue
Castle Hill, NSW, 2154
Australia

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 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

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

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 Report:

[AU/ITA/ExTR12.0006/00](#)

Quality Assessment Report:

[AU/MSC/QAR21.0001/00](#)



IECEX Certificate of Conformity

Certificate No.: **IECEX ITA 12.0002X**

Page 3 of 5

Date of issue: 2021-08-20

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The apparatus comprises two printed wiring boards (pwb) upon which are mounted electronic components including non replaceable batteries. All components are fully encapsulated within a metallic enclosure. External connections are made via integral plugs and sockets located in the walls of the enclosure.

SPECIFIC CONDITIONS OF USE: YES as shown below:

See Annexe for details



IECEX Certificate of Conformity

Certificate No.: **IECEX ITA 12.0002X**

Page 4 of 5

Date of issue: 2021-08-20

Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
See Annexe for details



IECEX Certificate of Conformity

Certificate No.: **IECEX ITA 12.0002X**

Page 5 of 5

Date of issue: 2021-08-20

Issue No: 1

Additional information:

Job 21105

Annex:

[IECEX ITA 12.0002X -1 Annexe final.pdf](#)

IECEX Certificate of Conformity



Annexe



Annexe for Certificate No.:

IECEX ITA 12.0002X

Issue No.: 1

Description:

As provided in 'Equipment' section of the certificate.

Specific Conditions of Use pertaining to Issue 0 of this Certificate:

The following parameters are to be taken into account in the installation.

The apparatus is only to be connected to one source of power connected to Connection A

Connections A		
U _i =	8.9	V
I _i =	2.8	A
P _i =	12.5	W
C _i =	Negligible	uF
L _i =	Negligible	mH
U _o =	9.3	V
I _o =	3.27	A
P _o =	5.34	W
C _o =	1000	uF
L _o =	0.036	mH
L/R =	61	uH/Ω

Connections B		
U _o =	8.9	V
I _o =	3.12	A
P _o =	6.23	W
C _i =	3.6	uF
L _i =	Negligible	mH
C _o =	1000	uF
L _o =	0.043	mH
L/R =	64	uH/Ω

Connections C		
U _o =	9.3	V
I _o =	52	mA
P _o =	109	mW
C _i =	Negligible	uF
L _i =	Negligible	mH
C _o =	1000	uF
L _o =	39	mH
L/R =	14.2	uH/Ω

The above load parameters apply where:

- The external circuit contains no combined lumped inductance L_i and capacitance C_i greater than 1% of the above values. or
- The inductance and capacitance are distributed as in a cable. Or
- The external circuit contains only lumped inductance or only lumped capacitance in combination with a cable.

In all other situations, e.g. the external circuit contains combined lumped inductance and capacitance, up to 50% of each of the inductance and capacitance values is allowed.

IECEX Certificate of Conformity



Annexe



Annexe for Certificate No.:

IECEX ITA 12.0002X

Issue No.: 1

Drawing list pertaining to Issue 0 of this Certificate:

Manufacturer's Documents

Title:	Drawing No.:	Pages	Rev. Level:	Date:
CONTROL BOARD – IS BATTERY BACKUP Sheets 1 to 7	ExpB502001-A	7	6	2012/02/01
BATTERY BOARD – IS BATTERY PACK Sheets 1 to 5	ExpB502002-A	7	6	2012/01/04
CONTROL BOARD – Exia BATTERY PACK	ExSH502001-A	1	6	2012/02/01
BATTERY BOARD – IS BATTERY PACK	ExSH502002-A	1	6	2012/02/01
LABEL – IS BATTERY BACKUP	ExME5020-0-25-010-A*	1	C	2012/02/15
FINAL ASSEMBLY – IS BATTERY BACKUP	ExME5020-2-99-001-A	1	B	2012/01/05
WIRING DIAGRAM-Exia BATTERY BACKUP	WD502001-A	1	B	2011/12/28

* The drawing number listed was incorrect. It has been corrected in issue 1 of the certificate.

Variations permitted by Issue 1 of this certificate:

- The manufacturer's Quality Assessment was changed from Ex Testing and Certification to another IECEx Certification Body, Mine Safety Technology Centre. QAR reference has been changed accordingly.

Specific Conditions of Use pertaining to Issue 1 of this certificate:

There are no changes to the conditions of use.

Drawings Associated with the Issue 1 of this Certificate:

There are no drawings applicable to this issue of the certificate.