



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 MSC 15.0002X** Page 1 of 5 Certificate history:
Status: **Current** Issue No: 3 [Issue 2 \(2019-09-24\)](#)
Date of Issue: 2022-03-21 [Issue 1 \(2017-05-23\)](#)
[Issue 0 \(2015-06-25\)](#)
Applicant: **Nautitech Mining Systems Pty Limited**
Unit 3/9 Packard Ave
Castle Hills NSW 2154
Australia
Equipment: **Intrinsically Safe LED Light Type 1220X and Type 1230X**
Optional accessory:
Type of Protection: **Intrinsic safety "ia"**
Marking: Ex ia I Ma
Ex ia IIB T4 Ga
Ex ia IIIB T135 °C Da
-20°C ≤ Ta ≤ 60°C

Approved for issue on behalf of the IECEx
Certification Body:

Geoff Slater

Position:

Manager

Signature:
(for printed version)

Date:
(for printed version)

21/3/2022

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:

MSTC Mine Safety Technology Centre
8 Hartley Drive
Thornton NSW 2322
PO Box 343
Australia



**Regional
NSW**



IECEX Certificate of Conformity

Certificate No.: **IECEX MSC 15.0002X**

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Date of issue: 2022-03-21

Issue No: 3

Manufacturer: **Nautitech Mining Systems Pty Limited**
Unit 3/9 Packard Ave
Castle Hills NSW 2154
Australia

Manufacturing locations: **Nautitech Mining Systems Pty Limited**
Unit 3/9 Packard Ave
Castle Hills NSW 2154
Australia

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

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:

[AU/MSC/ExTR15.0002/00](#)

[AU/MSC/ExTR15.0002/01](#)

[AU/MSC/ExTR15.0002/02](#)

Quality Assessment Report:

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



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Date of issue: 2022-03-21

Issue No: 3

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The intrinsically safe Light Types 12200, 12201, 12300, 12301, 12302, 12303, 12304 and 12305 are light fittings suitable for use in all zones including Zone 0 Group I, Group IIB and Group IIIB.

All Types 1220X and 1230X series are identical in every aspect except for the type of LED used,

The circuits can be switched individually or together. The equipment can be fixed, portable or handheld supplied from an intrinsically safe source.

The electronics are housed in a fully encapsulated metal enclosure which is fitted with a lens at its front, that is protected by a fixed and retained metal guard.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1- The equipment must be supplied from a single intrinsically safe power source.

2- The following input parameters are to be taken into account during the installation of the Intrinsically Safe LED Light Type 1220X :

Connector P1 (Pin 1, 2 & 3:Power/Pin 4:Ground) for 12200 and (Pin 1, 2 & 5:Power/Pin 4:Ground) for 12201	
Maximum Input Voltage U_i	20 V
Maximum Input Capacitance C_i	Negligible
Maximum Input Inductance L_i	Negligible

3- The following input parameters are to be taken into account during the installation of the Intrinsically Safe LED Light Type 1230X :

Connector P1 (Pin 1, 2 & 3:Power/Pin 4:Ground) for 12300, 12303, and 12305; (Pin 1, 2 & 5:Power/Pin 4:Ground) for 12301 and 12304 and (red, white & blue: Power/ Black: GND for 12302)	
Maximum Input Voltage U_i	20 V
Maximum Input Current I_i	3.2 A
Maximum Input Capacitance C_i	Negligible
Maximum Input Inductance L_i	Negligible



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

1. Added the option Types 12201, 12301, 12302, 12303, 12304 and 12305 intrinsically safe LED Lights to the existing 12200 and 12300.
2. Update the applicable IEC 60079-0 Standard Edition to 7.0.



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Additional information:
Refer to the attached Annex

Annex:

[Annex of IECEx MSC15.0002-03_1.pdf](#)



IECEX Certificate of Conformity Annex

Annex for Certificate No.: IECEx MSC 15.0002X Issue No:3

Drawing list pertaining to Issue 0 of this Certificate:

Manufacturer's Documents				
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
1234-16-9	1 of 5	Part# 7614 – 1.0 LED Lights SCHEMATIC	1	2015-05-29
1234-16-9	2 of 5	Part# DS_FV-1.0 IS BARRIER SCHEMATIC	1	2014-09-01
1234-16-9	3 of 5	Part# DS_HU-1.0 IS BARRIER SCHEMATIC	1	2015-03-03
1234-16-9	4 of 5	Part# 7614 –1.0 Timer Block SCHEMATIC	1	2015-03-03
1234-16-9	5 of 5	Part# 7614 – 1.0 LED Controller SCHEMATIC	1	2015-03-03
1234-16-6	1 of 1	PART 12200-1 IS LED Light CERTIFICATION DETAIL	1	2014-10-15
1234-16-7	1 of 1	PART 12200-1 IS LED Light DATASHEET	1	2014-10-15
1234-16-10	1 of 8	Part# 7614 LED Lights Top Layer PCB Artwork	1	2015-05-25
1234-16-10	2 of 8	Part# 7614 LED Lights Mid-Layer 1 PCB Artwork	1	2015-05-25
1234-16-10	3 of 8	Part# 7614 LED Lights Mid-Layer 2 PCB Artwork	1	2015-05-25
1234-16-10	4 of 8	Part# 7614 LED Lights Bottom Layer PCB Artwork	1	2015-05-25
1234-16-10	5 of 8	Part# 7614 LED Lights Top Silkscreen Overlay PCB Artwork	1	2015-05-25
1234-16-10	6 of 8	Part# 7614 LED Lights Bottom Silkscreen Overlay PCB Artwork	1	2015-05-25
1234-16-10	7 of 8	Part# 7614 LED Lights Top Solder Mask Print PCB Artwork	1	2015-05-25
1234-16-10	8 of 8	Part# 7614 LED Lights Bottom Solder Mask Print PCB Artwork	1	2015-05-25

Drawing list pertaining to Issue 1 of this Certificate:

Manufacturer's Documents				
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
*1234-16-9	1 of 5	Part# 7614 – 1.0 LED Lights SCHEMATIC	1	2015-05-29
*1234-16-9	2 of 5	Part# DS_FV-1.0 IS BARRIER SCHEMATIC	1	2014-09-01
*1234-16-9	3 of 5	Part# DS_HU-1.0 IS BARRIER SCHEMATIC	1	2015-03-03
1234-16-9	4 of 5	Part# 7614 –1.0 Timer Block SCHEMATIC	1	2015-03-03

Certificate issued by:



Planning,
Industry &
Environment

Mine Safety Technology Centre



IECEX Certificate of Conformity Annex

Annex for Certificate No.: IECEx MSC 15.0002X Issue No:3

Manufacturer's Documents				
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
1234-16-9	5 of 5	Part# 7614 – 1.0 LED Controller SCHEMATIC	1	2015-03-03
*12200-A	1 of 2	IS LED LIGHT - CERTIFICATION DETAIL	2	2017-02-27
*12200-A	2 of 2	IS LED LIGHT - DATA SHEET	2	2017-02-27
1234-16-7	1 of 1	PART 12200-1 IS LED Light DATASHEET	1	2014-10-15
1234-16-10	1 of 8	Part# 7614 LED Lights Top Layer PCB Artwork	1	2015-05-25
1234-16-10	2 of 8	Part# 7614 LED Lights Mid-Layer 1 PCB Artwork	1	2015-05-25
1234-16-10	3 of 8	Part# 7614 LED Lights Mid-Layer 2 PCB Artwork	1	2015-05-25
1234-16-10	4 of 8	Part# 7614 LED Lights Bottom Layer PCB Artwork	1	2015-05-25
1234-16-10	5 of 8	Part# 7614 LED Lights Top Silkscreen Overlay PCB Artwork	1	2015-05-25
1234-16-10	6 of 8	Part# 7614 LED Lights Bottom Silkscreen Overlay PCB Artwork	1	2015-05-25
1234-16-10	7 of 8	Part# 7614 LED Lights Top Solder Mask Print PCB Artwork	1	2015-05-25
1234-16-10	8 of 8	Part# 7614 LED Lights Bottom Solder Mask Print PCB Artwork	1	2015-05-25

Drawing list pertaining to Issue 2 of this Certificate:

Manufacturer's Documents				
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
1234-16-9	1 of 5	Part# 7614 – 1.0 LED Lights SCHEMATIC	1	2015-05-29
1234-16-9	2 of 5	Part# DS_FV-1.0 IS BARRIER SCHEMATIC	1	2014-09-01
1234-16-9	3 of 5	Part# DS_HU-1.0 IS BARRIER SCHEMATIC	1	2015-03-03
1234-16-9	4 of 5	Part# 7614 –1.0 Timer Block SCHEMATIC	1	2015-03-03
1234-16-9	5 of 5	Part# 7614 – 1.0 LED Controller SCHEMATIC	1	2015-03-03
*12200-A AND 12300-A	1 of 1	IS LIGHT ASSEMBLY CERTIFICATION DETAIL	3	2019-09-11
*12200-A AND 12300-A	1 of 1	IS-LED LIGHT ASSEMBLY-DATA SHEET	3	2019-09-11
1234-16-10	1 of 8	Part# 7614 LED Lights Top Layer PCB Artwork	1	2015-05-25
1234-16-10	2 of 8	Part# 7614 LED Lights Mid-Layer 1 PCB Artwork	1	2015-05-25

Certificate issued by:

 NSW <small>GOVERNMENT</small>	Planning, Industry & Environment	<h2 style="margin: 0;">Mine Safety Technology Centre</h2>
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IECEX Certificate of Conformity Annex

Annex for Certificate No.: IECEx MSC 15.0002X Issue No:3

Manufacturer's Documents				
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
1234-16-10	3 of 8	Part# 7614 LED Lights Mid-Layer 2 PCB Artwork	1	2015-05-25
1234-16-10	4 of 8	Part# 7614 LED Lights Bottom Layer PCB Artwork	1	2015-05-25
1234-16-10	5 of 8	Part# 7614 LED Lights Top Silkscreen Overlay PCB Artwork	1	2015-05-25
1234-16-10	6 of 8	Part# 7614 LED Lights Bottom Silkscreen Overlay PCB Artwork	1	2015-05-25
1234-16-10	7 of 8	Part# 7614 LED Lights Top Solder Mask Print PCB Artwork	1	2015-05-25
1234-16-10	8 of 8	Part# 7614 LED Lights Bottom Solder Mask Print PCB Artwork	1	2015-05-25
* MS0074	1 of 1	List of LEDs used in Nautitech 12200(CX200) and 12300(CX300) IS lights	1	2019-09-11

Note: An * is included before the title of documents that are new or revised.

Drawing list pertaining to Issue 3 of this Certificate:

Manufacturer's Documents				
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
1234-16-9	1 of 5	Part# 7614 – 1.0 LED Lights SCHEMATIC	1	2015-05-29
1234-16-9	2 of 5	Part# DS_FV-1.0 IS BARRIER SCHEMATIC	1	2014-09-01
1234-16-9	3 of 5	Part# DS_HU-1.0 IS BARRIER SCHEMATIC	1	2015-03-03
1234-16-9	4 of 5	Part# 7614 –1.0 Timer Block SCHEMATIC	1	2015-03-03
1234-16-9	5 of 5	Part# 7614 – 1.0 LED Controller SCHEMATIC	1	2015-03-03
CD_1220X-1230X	1 of 1	*IS LIGHT ASSEMBLY - CERTIFICATION DETAIL	4	2022-01-27
DS_1220X-1230X	1 of 1	*IS - LED LIGHT ASSEMBLY - DATA SHEET	4	2022-01-27
1234-16-10	1 of 8	Part# 7614 LED Lights Top Layer PCB Artwork	1	2015-05-25
1234-16-10	2 of 8	Part# 7614 LED Lights Mid-Layer 1 PCB Artwork	1	2015-05-25
1234-16-10	3 of 8	Part# 7614 LED Lights Mid-Layer 2 PCB Artwork	1	2015-05-25
1234-16-10	4 of 8	Part# 7614 LED Lights Bottom Layer PCB Artwork	1	2015-05-25
1234-16-10	5 of 8	Part# 7614 LED Lights Top Silkscreen Overlay PCB Artwork	1	2015-05-25

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Annex for Certificate No.: IECEx MSC 15.0002X Issue No:3

Manufacturer's Documents				
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
1234-16-10	6 of 8	Part# 7614 LED Lights Bottom Silkscreen Overlay PCB Artwork	1	2015-05-25
1234-16-10	7 of 8	Part# 7614 LED Lights Top Solder Mask Print PCB Artwork	1	2015-05-25
1234-16-10	8 of 8	Part# 7614 LED Lights Bottom Solder Mask Print PCB Artwork	1	2015-05-25
MS0074	1 of 1	List of LEDs used in Nautitech 12200(CX200) and 12300(CX300) IS lights	1	2019-09-11

Note: An * is included before the title of documents that are new or revised.

Reference Documents				
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
*QA-PM-35-07	14	User Manual 1220X & 1230X (CX20X or CX30X) Ex ia Light fitting	07	2022-03-11
PDQ-12-03	6	Product Quality Plan Intrinsically Safe Lights Part 12200 & 12300	04	2019-09-12

Note: An * is included before the document of documents that are new or revised.

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