



# 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](http://www.iecex.com)

Certificate No.: **IECEX ITS 16.0033**

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Certificate history:

Status: **Current**

Issue No: 3

Issue 2 (2019-10-31)

Issue 1 (2018-06-21)

Issue 0 (2016-06-20)

Date of Issue: 2020-09-07

Applicant: **Ocean Signal Ltd**  
Unit 4  
Ocivan Way  
Margate  
Kent  
CT9 4NN  
**United Kingdom**

Equipment: **M100X**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: IECEx ITS 16.0033

Ex ic IIB T4 Gc

-20°C ≤ Tamb ≤ +55°C

Approved for issue on behalf of the IECEx  
Certification Body:

**Paul Moss**

Position:

**Certification Officer**

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](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Intertek Testing & Certification Limited**  
ITS House, Cleeve Road  
Leatherhead  
Surrey, KT22 7SA  
United Kingdom



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Manufacturer: **Ocean Signal Ltd**  
Unit 4  
Ocivan Way  
Margate  
Kent  
CT9 4NN  
**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

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/ITS/ExTR16.0024/00](#)  
[GB/ITS/ExTR16.0024/03](#)

[GB/ITS/ExTR16.0024/01](#)

[GB/ITS/ExTR16.0024/02](#)

Quality Assessment Report:

[GB/ITS/QAR16.0006/03](#)



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## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The Ocean Signal M100X is an intrinsically safe emergency location beacon designed to be affixed to an individual's lifejacket where when activated will lock onto its GPS location and transmit this signal through two transmitters to nearby search and rescue vessels.

The Ocean Signal M100X can also be rebranded under 'Viking Life-Saving Equipment', with the Model No. 1063354.

The two transmitters in the M100X are:

An AIS (Automatic Identification System) transmitter which operates on two frequencies, 161.975MHz & 162.025MHz. Each message transmission contains the GPS position.

A homing signal which transmits on 121.5MHz. This is amplitude modulated with a swept audio tone and operates continuously.

The equipment consists of a plastic enclosure housing the battery pack and PCBs, the enclosure provides the degree of protection minimum IP67. The equipment is attached to the lifejacket using one of the supplied fixtures.

Visual indication for the user that the equipment is active is provided by a tri colour LED on the front of the unit.

**SPECIFIC CONDITIONS OF USE: NO**



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

Variation 1: (Intertek Project No. G103484596)

This variation covers the following:

Revision to product label.

Variation 2: (Intertek Project No. G103910278)

This variation covers the following:

Update to IEC 60079-0, from Ed. 6.0 to Ed. 7.0.

Revision to circuit.

Revision to PCB.

Variation 3: (Intertek Project No. G104396574)

This variation covers the following:

Revision to circuit.

Revision to PCB.

Minor drawing revisions/changes.

## **Annex:**

[IECEX ITS 16.0033 Issue 3 Annex.pdf](#)



# Annex to IECEx Certificate of Conformity

Certificate No:	IECEX ITS 16.0033	Issue No. 3
Annex No. 1		

Technical Documents			
Title:	Drawing No.:	Rev. Level:	Date:
Label: M100X Ex Approvals	163S-02093	01.03	4/6/18
*Battery Assembly MSLD	901S-01926	01.02	30/07/20
GA MSLD Ex	903S-02067	01.00	4/5/16
Case Front Assembly MSLD Ex	903S-02068	01.00	9/2/16
*M100X MSLD Safety Data (Ocean Signal) (2 Sheets)	912S-02081	01.10	13/08/2020
*Schematic MSLD M100X (7 Sheets)	910S-01908	05.00	30/07/20
*PCB Assy MSLD M100X (4 Sheets)	800S-01908	05.00	30/07/20
*BOM – PCB Assy: Professional MOB M100X (6 Sheets)	800S-01908	05.00	30/07/20
*M100X MSLD Safety Data (Viking) (2 Sheets)	912S-02259	01.10	13/08/2020

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