



EU - Type Examination Certificate

- (2) Equipment and protective systems intended for use in potentially explosive atmospheres Directive 2014/34/EU
- (3) EU Type Examination Certificate Number

EPS 19 ATEX 1 038

Revision 2

(4) Equipment:

X-Rayl[®] Solar Pointer S3

(5) Manufacturer:

DOT Telematik und Systemtechnik GmbH

(6) Address:

DOT-Solarpark, Im Atzersfeld 2

2100 Leobendorf

Austria

- (7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.
- (8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014, certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 19TH0108.
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-11:2012

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.
- (11) This EU Type Examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.
- (12) The marking of the equipment shall include the following:



Tuerkheim, 2022-06-17

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH.





(13) Annex

(14) EU - Type Examination Certificate EPS 19 ATEX 1 038

Revision 2

(15) Description of equipment:

The X-Rayl[®] Solar Pointer S3 was developed for railway wagons and containers. The device is attached to the car and provides position and sensor data via GPS at freely selectable intervals. The position of the vehicle is queried by web access and e.g. displayed as map view.

Additional data such as temperature, mileage, load, door opening or historical queries of individual vehicles are also available. Via "Geofencing" the customer has the possibility to receive a notification (email, SMS) when the device has reached a special point (charging station, border).

The device has no external power supply. The solar panel on the top generates a maximum of 12,5 V and supplies energy to a rechargeable lithium battery.

Ambient temperature range: -40 °C to +60 °C

The Revision 2 concerns to the following changes / modifications:

- 1. Substitution of two integrated circuits and adaptation of the layout to the different pin design. Due to a different functional range of the new circuits, functions were deleted and minor simplifications were made.
- 2. As an alternative, the case may also be made of cast aluminum (or machined aluminum as previously).

Electrical data:

Powered by internal battery or solar panel RF-Module: transmission power ≤ 63 mW

- (16) Reference number: 19TH0108
- (17) Special conditions for safe use:

None

(18) Essential health and safety requirements:

Met by compliance with standards.



Tuerkheim, 2022-06-17



INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.:

IECEX EPS 19.0015

Page 1 of 4

Certificate history:

Status:

Current

Issue No: 2

Issue 1 (2021-07-14) Issue 0 (2020-05-27)

Date of Issue:

2022-06-17

Applicant:

DOT Telematik und Systemtechnik GmbH

DOT-Solarpark, Im Atzersfeld 2

2100 Leobendorf

Austria

Equipment:

X-Rayl® Solar Pointer, type S3

Optional accessory:

Type of Protection:

Intrinsic Safety "ib"

Marking:

Ex ib IIC T6 Gb

Ex ib IIIC T85°C Db

Approved for issue on behalf of the IECEx Certification Body:

Position:

Signature:

(for printed version)

Date

(for printed version)

2022-06-17

Ulrich Felke RUNGSS

. 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:

Bureau Veritas Consumer Products Services Germany GmbH Businesspark A96 86842 Türkheim Germany





Certificate No.: IECEx EPS 19.0015 Page 2 of 4

Date of issue: 2022-06-17 Issue No: 2

Manufacturer: DOT Telematik und Systemtechnik GmbH

DOT-Solarpark, Im Atzersfeld 2

2100 Leobendorf

Austria

Manufacturing locations:

DOT Telematik und Systemtechnik

GmbH

DOT-Solarpark, Im Atzersfeld 2

2100 Leobendorf

Austria

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 Edition:6.0

Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

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:

DE/EPS/ExTR19.0014/02

Quality Assessment Report:

DE/EPS/QAR20.0001/02



Certificate No.:

IECEX EPS 19.0015

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Date of issue:

2022-06-17

Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The solar pointer was developed for railway wagons and containers. The device is attached to the car and provides position and sensor data via GPS at freely selectable intervals. The position of the vehicle is queried by web access and e.g. displayed as map view.

Additional data such as temperature, mileage, load, door opening or historical queries of individual vehicles are also available. Via "Geofencing" the customer has the possibility to receive a notification (email, SMS) when the device has reached a special point (charging station, border).

The device has no external power supply. The solar panel on the top generates a maximum of 12.5 V and supplies energy to a rechargeable lithium battery.

Ambient temperature range: -40 °C to +60 °C

Electrical data:

Powered by internal battery or solar panel

RF-Module: transmission power ≤ 63 mW

SPECIFIC CONDITIONS OF USE: NO

None



Certificate No.: IEC

IECEx EPS 19.0015

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Date of issue:

2022-06-17

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

1. Substitution of two integrated circuits and adaptation of the layout to the different pin design. Due to a different functional range of the new circuits, functions were deleted and minor simplifications were made.

As an alternative, the case may also be made of cast aluminum (or machined aluminum as prev	cililled aluitilliutti as bieviousivi.
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- (2) Equipment and protective systems intended for use in potentially explosive atmospheres UKSI 2016:1107 (as amended)
- (3) UK Type Examination Certificate Number

EPS 22 UKEX 1 019

Revision 0

(4) Equipment:

X-Rayl® Solar Pointer S3

(5) Manufacturer:

DOT Telematik und Systemtechnik GmbH

(6) Address:

DOT-Solarpark, Im Atzersfeld 2

2100 Leobendorf

Austria

- (7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.
- (8) Bureau Veritas Consumer Products Services United Kingdom Limited, approved body No. 8507 in accordance with UKSI 2016:1107 (as amended) Part 4, certifies that this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Schedule 1 of UKSI 2016:1107 (as amended). The examination and test results are recorded in the confidential documentation under the reference number 19TH0108.
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018

EN 60079-11:2012

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the annex to this certificate.
- (11) This UK Type Examination Certificate relates only to the design and construction of the specified equipment in accordance with UKSI 2016:1107 (as amended). Further requirements apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

II 2G Ex ib IIC T6 Gb
II 2D Ex ib IIIC T85°C Db



ertification department of explosion protection

Warrington, 2022-06-17

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(13)

Annex

(14) UK - Type Examination Certificate EPS 22 UKEX 1 019

Revision 0

(15) Description of equipment:

The X-Rayl[®] Solar Pointer S3 was developed for railway wagons and containers. The device is attached to the car and provides position and sensor data via GPS at freely selectable intervals. The position of the vehicle is queried by web access and e.g. displayed as map view.

Additional data such as temperature, mileage, load, door opening or historical queries of individual vehicles are also available. Via "Geofencing" the customer has the possibility to receive a notification (email, SMS) when the device has reached a special point (charging station, border).

The device has no external power supply. The solar panel on the top generates a maximum of 12.5 V and supplies energy to a rechargeable lithium battery.

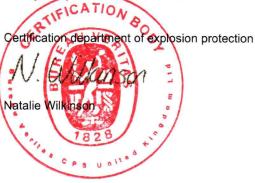
Ambient temperature range: -40 °C to +60 °C

Electrical data:

Powered by internal battery or solar panel RF-Module: transmission power ≤ 63 mW

- (16) Reference number: 19TH0108
- (17) <u>Special conditions for safe use</u>: None
- (18) Essential health and safety requirements:

Met by compliance with standards.



Warrington, 2022-06-17

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services United Kingdom Limited. EPS 22 UKEX 1 019, Revision 0.