

Supplementary instructions

RFID-Tag



Document ID: 1040548



VEGA

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1 About this document

1.1 Function

This supplementary instructions manual is valid in conjunction with the operating instructions of the instrument. It gives you all necessary information for a quick setup and safe operation of the instrument with accessory. Therefore read both instructions manuals before you start setup.

1.2 Target group

This instruction manual is directed to trained personnel. The contents of this manual must be made available to the qualified personnel and implemented.

1.3 Symbols used



Document ID

This symbol on the front page of this instruction refers to the Document ID. By entering the Document ID on www.vega.com you will reach the document download.



Information, note, tip: This symbol indicates helpful additional information and tips for successful work.



Note: This symbol indicates notes to prevent failures, malfunctions, damage to devices or plants.



Caution: Non-observance of the information marked with this symbol may result in personal injury.



Warning: Non-observance of the information marked with this symbol may result in serious or fatal personal injury.



Danger: Non-observance of the information marked with this symbol results in serious or fatal personal injury.



Ex applications

This symbol indicates special instructions for Ex applications.



List

The dot set in front indicates a list with no implied sequence.



Action

This arrow indicates a single action.



Sequence of actions

Numbers set in front indicate successive steps in a procedure.



Disposal

This symbol indicates special instructions for disposal.

2 For your safety

2.1 Authorised personnel

All operations described in this instruction manual must be carried out only by trained qualified personnel authorised by the plant operator.

During work on and with the device, the required personal protective equipment must always be worn.

2.2 Appropriate use

The RFID tag allows the identification link or measurement loop identification to be read using an NFC reader.

2.3 Warning about incorrect use

Inappropriate or incorrect use of the instrument can give rise to application-specific hazards, e.g. vessel overfill or damage to system components through incorrect mounting or adjustment.

2.4 General safety instructions

The safety information in the operating instructions manual of the respective device must be noted.

2.5 Mounting with Ex applications

Please note the Ex-specific safety information for installation and operation of the sensor in Ex areas. These safety instructions are part of the operating instructions and come with the Ex-approved instruments.

The RFID tag may be installed in Zone 1 and Zone 21.

Take note of the Ex-specific safety instructions of the RFID tag in chapter "*Certificates, approvals and certifications*".

3 Product description

3.1 Configuration

Scope of delivery

The scope of delivery encompasses:

- RFID-Tag
- Wire and corresponding seal for fastening
- This supplementary instructions manual with integrated safety instructions

Versions

The RFID tag is available in two versions:

RFID tag write-protected	RFID tag writable
● Recognisable by the DDCC RFID logo ● Written with identification link in accordance with IEC 61406, DIN Spec 91406 (syntax: sn.vega.com/12345678)	● Recognisable by the NFC logo ● Written with measurement loop identification
	

3.2 Order information

In the product configurator on www.vega.com, the RFID tag canbe selected under the feature "*Measurement loop identification*".

4 Mounting

A suitable crimping tool is required for assembly.

1. Thread the wire through the earthed eyelet on the sensor housing.
2. Thread the RFID tag onto the wire.
3. Thread the seal onto both ends of the wire.
4. Press the seal firmly together with crimping pliers.

RFID tag is mounted.

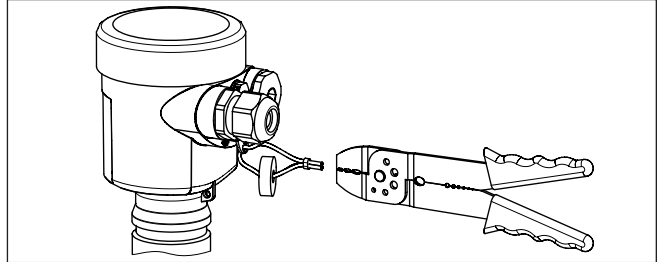


Fig. 1: RFID-Tag auf verblombtem Draht

Read out RFID tag

1. Open in the VEGA Tools app "*RFID/NFC functions > Read device identification*"
2. Read out RFID tag.

Device-specific information is displayed.

Alternatively, the information stored in the RFID tag can be read with any mobile device that supports NFC (near field communication).

Write RFID tag

1. Open in the VEGA Tools app "*RFID/NFC functions > Measurement loop identification*"
2. Enter the desired text and save it on the RFID tag.

5 Supplement

5.1 Technical data

General data

Material	PUR (Polyurethane)
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Electrical data

Operating frequency	13.37 ± 0.35 MHz, 125 kHz, 860 ... 960 MHz
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Ambient conditions

Ambient temperature	-55 °C ... +80 °C (temperature class T6 or T80 °C) -55 °C ... +110 °C (temperature class T4 or T130 °C)
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Electromagnetic fields

Not authorised for use in environments with high electromagnetic fields exceeding 1 A/m or 3 V/m.

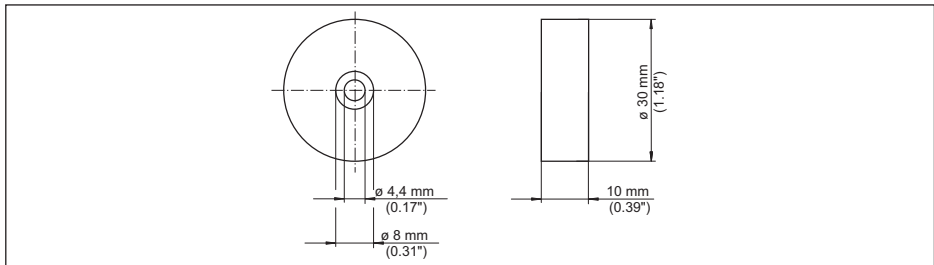
Communication

ISO/IEC 14443, Typ A, NFC Forum Type 2, Text

Data format

NDEF message format

5.2 Dimensions



5.3 Certificates, approvals and certifications



EU Declaration of Conformity

Company: smart-TEC GmbH & Co. KG
Address: Kolpingring 3
82041 Oberhaching

Product category: Passive LF (125 kHz) RFID Tag
Passive HF (13,56 MHz) RFID Tag

Model name: smart-DOME Freestyle Ex, smart-DOME Classic Ex

The product is in compliance with the requirements of the following European harmonisation legislations:

Harmonisation legislation:	Title:
2014/53/EU:2014-04-16	Radio equipment Directive (RED)
2011/65/EU:2011-06-08	Restriction of the use of hazardous substances Directive (RoHS)
2014/34/EU 2014-02-16	Equipment and protective systems intended for use in potentially explosive 2014/34/EU atmospheres (ATEX)

The compliance with the requirements of the European harmonisation legislations was proved by the application of the following harmonised standards and technical specifications:

Essential requirements:	Reference:
Health and safety (article 3.1(a) RED)	EN 62368-1:2014+AC:2015
	EN 50364:2010
Electromagnetic compatibility (article 3.1(b) RED)	EN 301 489-1 V2.2.3
	EN 301 489-3 V2.1.1
Radio equipment (article 3.2 RED)	EN 300 330 V2.1.1
Equipment within certain categories or classes (article 3.3 RED)	N/A
Hazardous substances (RoHS)	EN IEC 63000:2018
ATEX	EN IEC 60079-0:2018
	EN IEC 60079-11:2012

Additional information:

The object of the declaration described above is in conformity with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

According to the EU Type Examination EPS 15 ATEX 1 1011 X issued by Bureau Veritas Consumer Products Services (Notified Body 2004).

Oberhaching, 16 November 2021

Klaus Dargahi, General Manager

smart-TEC GmbH & Co. KG
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Oberhaching: AG Mchn. B 162297 | smart-TEC GmbH & Co. KG: AG Mchn. A 74704 VAT-ID-No.: DE203077185



1040548-EN-240614

UK Declaration of Conformity



Company: smart-TEC GmbH & Co. KG
 Address: Kolpingring 3
 82041 Oberhaching

Product category: Passive LF (125 kHz) RFID Tag
 Passive HF (13,56 MHz) RFID Tag

Model name: smart-DOME Freestyle Ex, smart-DOME Classic Ex

The product is in conformity with the following United Kingdom Regulations:

Designation legislation:	Title:
SI 2017 No.1206, as amended by SI 2019 No. 696	Radio Equipment Regulation 2017
SI 2012 No.3032, as amended	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (RoHS)
UKSI 2016 No.1107, as amended by SI 2019 No. 696	Equipment and protective systems intended for use in potentially explosive atmospheres 2016

The compliance with the requirements of the United Kingdom Regulations was proved by the application of the following designated standards:

Essential requirements:	Reference:
Health and safety (Regulation 6.1(a))	BS EN 62368-1:2014+AC:2015 BS EN 62311:2008
Electromagnetic compatibility (Regulation 6.1(b))	ETSI EN 301 489-1 V2.2.3 ETSI EN 301 489-3 V2.1.1
Radio equipment (Regulation 6.2)	ETSI EN 302 208 V3.1.1
Hazardous substances (RoHS)	BS EN IEC 63000:2018
Explosive atmospheres	EN IEC 60079-0:2018 EN 60079-11:2012

Additional information:

The object of the declaration described above is in conformity with UK legislation Radio Equipment Regulation 2017 and S.I. 2012 No. 3032, on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

 According to the UK Type Examination EPS 22 UKEX 1 086 X issued by Bureau Veritas Consumer Products Services (Approved Body 8507).

Oberhaching, 1 July 2022

Klaus Dargahi, General Manager

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 Oberhaching: AG Mchn. B 162297 | smart-TEC GmbH & Co. KG: AG Mchn. A 74704 VAT-ID-No.: DE203077185





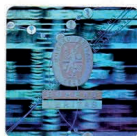
EU - Baumusterprüfbescheinigung

- (1)
- (2) Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen –
Richtlinie 2014/34/EU
- (3) EU - Baumusterprüfbescheinigungsnummer
- EPS 15 ATEX 1 1011 X** **Revision 2**
- (4) Gerät: RFID Tags Typ smart-DOME Freestyle Ex und smart-DOME Classic Ex
- (5) Hersteller: smart-TEC GmbH & Co. KG
- (6) Anschrift: Kolpingring 3
82041 Oberhaching
Deutschland
- (7) Die Bauart dieses Gerätes sowie die verschiedenen zulässigen Ausführungen sind in der Anlage zu dieser
EU - Baumusterprüfbescheinigung festgelegt.
- (8) Bureau Veritas Consumer Products Services Germany GmbH bescheinigt als benannte Stelle Nr. 2004 nach
Artikel 21 der Richtlinie 2014/34/EU des Europäischen Parlaments und des Rates vom 26. Februar 2014 die
Erfüllung der grundlegenden Sicherheits- und Gesundheitsanforderungen für die Konzeption und den Bau von
Geräten und Schutzsystemen zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen
gemäß Anhang II der Richtlinie. Die Ergebnisse der Prüfung sind in der vertraulichen Dokumentation unter der
Referenznummer 15TH0139 festgelegt.
- (9) Die grundlegenden Sicherheits- und Gesundheitsanforderungen werden erfüllt durch Übereinstimmung mit:
- EN IEC 60079-0:2018** **EN 60079-11:2012**
- (10) Falls das Zeichen „X“ hinter der Bescheinigungsnummer steht, wird auf besondere Bedingungen für die sichere
Anwendung des Gerätes in der Anlage zu dieser Bescheinigung hingewiesen.
- (11) Diese EU - Baumusterprüfbescheinigung bezieht sich nur auf Konzeption und Prüfung des festgelegten Gerätes
gemäß Richtlinie 2014/34/EU. Weitere Anforderungen dieser Richtlinie gelten für die Herstellung und das
Inverkehrbringen dieses Gerätes. Diese Anforderungen werden nicht durch diese Bescheinigung abgedeckt.
- (12) Die Kennzeichnung des Gerätes muss die folgenden Angaben enthalten:



II 2G Ex ia IIC T6/T4 Gb

II 2D Ex ia IIIC T80°C/T130°C Db



Zertifizierungsstelle Explosionschutz

J. Feike



Hamburg, 28.01.2022

Seite 1 von 2

Bescheinigungen ohne Unterschrift und Siegel haben keine Gültigkeit. Diese Bescheinigung darf nur unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung von Bureau Veritas Consumer Products Services Germany GmbH. EPS 15 ATEX 1 1011 X, Revision 2.



(13) **Anlage**

(14) **EU - Baumusterprüfbescheinigung EPS 15 ATEX 1 1011 X**

Revision 2

(15) Beschreibung des Gerätes:

Passive RFID Tags / Transponder

Elektrische Daten:

Betriebsfrequenz: (13,37±0,35) MHz / 125 kHz / 860-960 MHz. Die maximalen Feldstärken, siehe besondere Bedingungen sowie die Bedienungsanleitung, müssen strikt eingehalten werden.

(16) Referenznummer: 15TH0139

(17) Besondere Bedingungen:

Maximaler Umgebungstemperaturbereich:

-55 °C bis +80 °C (T6 / T80 °C)

-55 °C bis +110 °C (T4 / T130 °C)

Die RFID-Tags dürfen nicht benutzt werden in einer Umgebung mit hohen elektromagnetischen Feldstärken mit Effektivwerten größer 1 A/m oder 3 V/m, z.B. in Hochstromelektrolyseanlagen.

Elektrostatische Aufladungen müssen vermieden werden. Das Gerät darf nicht in der Nähe stark ladungserzeugender Prozesse verwendet werden.

(18) Grundlegende Sicherheits- und Gesundheitsanforderungen:

Durch Übereinstimmung mit Normen abgedeckt.

Zertifizierungsstelle Explosionsschutz

Hamburg, 28.01.2022



Seite 2 von 2

Bescheinigungen ohne Unterschrift und Siegel haben keine Gültigkeit. Diese Bescheinigung darf nur unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung von Bureau Veritas Consumer Products Services Germany GmbH. EPS 15 ATEX 1 1011 X, Revision 2.

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www.bureauveritas.de/cps



UK - Type Examination Certificate

- (1)
- (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 1 086 X**
- Revision 0**
- (4) Equipment: RFID Tags types smart-DOME Freestyle Ex and smart-DOME Classic Ex
- (5) Manufacturer: smart-TEC GmbH & Co. KG
- (6) Address: Kolpingring 3
82041 Oberhaching
Germany
- (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 15TH0139.
- (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 ia IIC T6/T4 Gb

II 2D Ex ia IIIC T80°C/T130°C Db

Certification department of explosion protection

Warrington, 2022-06-15

Natalie Wilkinson

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 1 086 X, Revision 0.

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 Company Number: 00862439

ZERT-0003-GBR-ZE-EX-V03 / TEMP-0000-GBR-ZE-EX-V01

1/2

1040548-EN-240614



Annex

(13)

(14) **UK - Type Examination Certificate EPS 22 UKEX 1 086 X**

Revision 0

(15) Description of equipment:

Passive RFID-Tags.

Electrical data:

Rated frequencies: (13.37 ± 0.35) MHz or 125 kHz or 860 – 960 MHz. The maximum field strengths according to the Instruction manual and the Special conditions for safe use below need to be strictly followed.

(16) Reference number: 15TH0139

(17) Special conditions for safe use:

Maximum ambient temperature range:

-55 °C to +80 °C (T6 / T80 °C)
-55 °C to +110 °C (T4 / T130 °C)

The RFID-tags shall never be exposed to high electromagnetic field strengths exceeding RMS values of 1 A/m or 3 V/m e.g. in high current electrolysis plants.

Electrostatic charges shall be avoided. The tags shall never be used next to strong charge generating processes.

(18) Essential health and safety requirements:

Met by compliance with standards.



Certification department of explosion protection

Warrington, 2022-06-15

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 1 086 X, Revision 0.

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Registered Office: 31 Kingsland Grange,
Woolston, Warrington, Cheshire, WA1 4RW

Registered in England & Wales
Company Number: 00852439

ZERT-0003-GBR-ZE-EX-V03 / TEMP-0005-GBR-ZE-EX-V01

2/2



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 EPS 15.0042X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 2	Issue 1 (2020-10-20)
Date of Issue:	2022-01-28		Issue 0 (2016-02-01)
Applicant:	smart-TEC GmbH & Co. KG Kolpingring 3 82041 Oberhaching Germany		
Equipment:	RFID Tags types smart-DOME Freestyle Ex and smart-DOME Classic Ex		
Optional accessory:			
Type of Protection:	ia		
Marking:	Ex ia IIC T6/T4 Gb Ex ia IIIC T80 °C/T130 °C Db		

Approved for issue on behalf of the IECEx
Certification Body:

Position:

Signature:
(for printed version)

Date:

Ulrich Feike

Head of Certification

2022-01-28

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:

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





IECEx Certificate of Conformity

Certificate No.: **IECEx EPS 15.0042X**

Page 2 of 4

Date of issue: 2022-01-28

Issue No: 2

Manufacturer: **smart-TEC GmbH & Co. KG**
Kolpingring 3
82041 Oberhaching
Germany

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 Report:

DE/EPS/ExTR16.0003/03

Quality Assessment Report:

DE/EPS/QAR16.0001/05



IECEx Certificate
of Conformity

Certificate No.: IECEx EPS 15.0042X

Page 3 of 4

Date of issue: 2022-01-28

Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

Passive RFID-Tags. Rated frequencies:

(13.37 ± 0.35) MHz or 125 kHz or 860-960 MHz

SPECIFIC CONDITIONS OF USE: YES as shown below:

Maximum ambient temperature range:

-55 °C to +80 °C (T6 / T80 °C)

-55 °C to 110 °C (T4 / T130 °C)

The RFID-tags shall never be exposed to high electromagnetic field strengths exceeding RMS values of 1 A/m or 3V/m e.g. in high current electrolysis plants.

Electrostatic charges shall be avoided. The tags shall never be used next to strong charge generating processes.



IECEx Certificate
of Conformity

Certificate No.: **IECEx EPS 15.0042X**

Page 4 of 4

Date of issue: **2022-01-28**

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Extension of the rated ambient temperature range to +80°C for temperature class T6 / T80 °C.

1040548-EN-240614



Betriebsanleitung für EX-Datenträger
Operating Instructions for EX-transponders



1040548-EN-240614

Dokumentenstatus: Geändert 18.01.2023, Freigegeben 18.01.2023



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Klaus Dargahl, graduate in business administration (FH) | HR: smart-TEC Verwaltungsgesellschaft mbH, headquarter
Oberhaching: AG Mchn. B 162297 | smart-TEC GmbH & Co. KG: AG Mchn. A 74704 VAT-ID-No.: DE203077185
WEEE Registration No.: DE 48886082



Dokumentenstatus: Geändert 18.01.2023, Freigegeben 18.01.2023



Betriebsanleitung für Ex-Datenträger smart-DOME Classic Ex & smart-DOME Freestyle Ex

1 Zielgruppe/Personal

Die Montage, Inbetriebnahme, der Betrieb, die Wartung und Demontage aller Geräte darf nur durch eingewiesenes Fachpersonal durchgeführt werden. Die Betriebsanleitung sollte gelesen und verstanden worden sein.

2 Verweis auf weitere Dokumentation

Die für die Verwendung bzw. den geplanten Einsatzzweck zutreffenden Gesetze, Normen bzw. Richtlinien sind zu beachten. In Verbindung mit explosionsgefährdeten Bereichen ist insbesondere die Richtlinie 1999/92/EG zu beachten.

Die entsprechende CE/UKCA-Konformitätserklärung, EU/UK-Baumusterprüfbescheinigung und IECEx Certificate of Conformity sind integraler Bestandteil dieses Dokuments.

3 Besondere Bedingungen (siehe EU/UK-Baumusterprüfbescheinigung Punkt 17)

Die Bedienungsanleitung ist zu beachten. Der smart-DOME Classic Ex (Variante on-Metal) und der smart-DOME Freestyle Ex sind auch für die Verwendung auf metallischen Untergründen vorgesehen.

4 Verwendung

4.1 Bestimmungsgemäße Verwendung

Das Betriebsmittel ist entsprechend den Angaben dieser Betriebsanleitung zu betreiben. Die EU/UK-Baumusterprüfbescheinigung ist zu beachten. Die besonderen Bedingungen sind einzuhalten!

Die Geräte sind nur für eine sachgerechte und bestimmungsgemäße Verwendung zugelassen. Bei Zuwiderhandlung erlischt jegliche Garantie und Herstellerverantwortung.

Das Gerät darf nur im angegebenen Umgebungstemperaturbereich betrieben werden.

Ersetzt das Gerät ein Vorgängergerät, muss die Dokumentation für den Nachweis der Eigensicherheit angepasst werden.

4.2 Bestimmungswidrige Verwendung

Der Schutz von Betriebspersonal und Anlage ist nicht gewährleistet, wenn das Produkt nicht entsprechend seiner bestimmungsgemäßen Verwendung eingesetzt wird.

5 Montage/Installation

Machen Sie sich vor der Montage, Installation und Inbetriebnahme des Gerätes mit dem Gerät vertraut und lesen Sie die Betriebsanleitung sorgfältig. Keine beschädigten oder verschmutzten Geräte installieren.

5.1 Produktbezogen

Achten Sie beim Betrieb des installierten Geräts darauf, dass es zu keiner elektrostatischen Entladung kommt. Vermeiden Sie daher elektrostatische Aufladung.

RFID-Transponder dürfen in Umgebungen mit hohen elektromagnetischen Feldern, die 1 A/m oder 3 V/m überschreiten, nicht eingesetzt werden, z. B. in Chlorelektrolyseanlagen, bei großen festinstallierten Frequenzumrichtern oder in Hochstromanlagen. Hochladungserzeugende Prozesse sind auszuschließen.

In Zone 1 und in Zone 21 sind Vorkehrungen zu treffen, um voraussehbare Fehler zu verhindern (z. B. herunterfallen des Transponders), um das Verringern von Luft- und Kriechstrecken anderer Geräte zu vermeiden.

Die Montage eines Transponders darf weder die Eigenschaften des Transponders selbst beeinträchtigen, noch die Schutzart der Anlage, an die er befestigt ist, negativ beeinflussen.

Bei Verwendung von Klebstoffen ist die maximale Betriebstemperatur zu beachten.

Luft- und Kriechstrecken dürfen durch die Montage nicht beeinträchtigt werden. Defekte RFID-Transponder dürfen nicht in einen explosionsgefährdeten Bereich gebracht werden.

5.2 Ex-Bereich

Das Gerät darf in Zone 1 und in Zone 21 installiert werden.

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WEEE Registration No.: DE 48586082



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6 Betrieb, Wartung, Reparatur

Die Geräte dürfen nicht repariert, verändert oder manipuliert werden.

RFID-Transponder dürfen in Umgebungen mit hohen elektromagnetischen Feldern, die 1 A/m oder 3 V/m überschreiten, nicht eingesetzt werden

Im Falle eines Defektes ist das Produkt immer durch ein Originalgerät zu ersetzen.

7 Lieferung, Transport, Entsorgung

Überprüfen Sie Verpackung und Inhalt auf Beschädigung. Überprüfen Sie den Lieferumfang auf Vollständigkeit und Richtigkeit.

Lagern sie das Gerät immer in trockener und sauberer Umgebung. Beachten Sie unsere Lager- und Verarbeitungshinweise und die zulässige Lagertemperatur (siehe technische Daten).

Die Geräte - das Verpackungsmaterial müssen entsprechend den einschlägigen Gesetzen und Vorschriften im jeweiligen Land entsorgt werden.

RFID/NFC Transponder fallen unter das deutsche ElektroG Abfallrecht, sowie der europäischen WEEE-Richtlinie und dürfen daher nicht über den normalen Hausmüll entsorgt werden. Stattdessen müssen sie ordnungsgemäß recycelt werden.

Für weitere Informationen besuchen Sie bitte unsere Website: www.smart-tec.com/de/info/unternehmen/nachhaltigkeit/weee-ruecknahmekonzept.

Weitere Informationen zur Entsorgung von Verpackungsmaterial finden Sie auf unserer Website:

www.smart-tec.com/de/info/unternehmen/nachhaltigkeit/verpackungsgesetz



8 Kennzeichnung

Typ-Kennzeichnung	für <i>smart-DOME Classic Ex</i> smart-TEC sDC ¹ wwjj ² nnnn ³ ,	für <i>smart-DOME Freestyle Ex</i> smart-TEC sDF ¹ wwjj ² nnnn ³ ,
	1 Artikelbezeichnung 2 Chargennummer (Kalenderwoche/Jahr) 3 Typennummer (4 stellig)	
CE/UK-Kennzeichnung	CE 2004/UKCA 8507	
Ex-Kennzeichnung	 II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C/T130°C Db	

9 Technische Daten

Gerät Typenbezeichnung	smart-DOME Classic Ex, smart-DOME Freestyle Ex
Gerätekategorie	2G – zur Verwendung in explosionsgefährdeten Bereichen von Gas, Dampf, Nebel 2D – zur Verwendung in explosionsgefährdeten Bereichen mit brennbarem Staub
Richtlinienkonformität	2014/34/EU, UKSI 2016 No.1107
Normenkonformität	EN 60079-11:2012, EN IEC 60079-0:2018, IEC 60079-0:2017, IEC 60079-11:2011
Zündschutzart	Eigensicher (ia)
EU/UK -Baumusterprüfbescheinigung	EPS 15 ATEX 1 1011 X/ EPS 22 UKEX 1 086 X
IECEx Certificate of Conformity	IECEx EPS 15.0042X
Zugeordneter Typ	smart-DOME Classic Ex, smart-DOME Freestyle Ex
Zulässige Umgebungstemperatur	Die Temperaturbereiche, abhängig von der Temperaturklasse, sind der EU/UK- Konformitätsbescheinigung zu entnehmen. -55°C bis +80°C (Temperaturklasse T6 bzw. T80°C)

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	-55°C bis +110°C (Temperaturklasse T4 bzw. T130°C)
Zulässiger Lagertemperaturbereich	-50 °C ≤ T _{amb} ≤ +110 °C

Operating instructions for RFID transponders smart-DOME Classic Ex & smart-DOME Freestyle Ex

1 Target Group / Personnel

Mounting, installation, commissioning, operation, maintenance and disassembly of any devices may only be carried out by trained, qualified personnel. The instruction manual must be read and understood.

2 Reference to further documentation

Laws, standards, or directives applicable to the intended use must be observed. In relation to hazardous areas, Directive 1999/92/EC must be observed.

The corresponding declaration of conformity, EU/UK-type-examination and IECEx Certificate of Conformity are an integral part of this document.

3 Special Conditions (conf. EU/UK-type-examination, paragraph 17)

The operating instructions have to be observed. The *smart-DOME Classic Ex* (type on-Metal) the *smart-DOME Freestyle Ex* are designed for mounting on metal surfaces.

4 Use

4.1 Intended Use

The apparatus has to be operated according to the appropriate data in this operating instruction manual. The EC Type Examination Certificate has to be observed. The special conditions must be adhered to!

The devices are only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

The device must only be operated in the ambient temperature range specified.

If the device replaces a predecessor device, the documentation for the verification of intrinsic safety must be adjusted.

4.2 Improper Use

Protection of the operating personnel and the overall system is not ensured if the product is not being used according to its intended purpose.

5 Mounting/Installation

Prior to mounting, installation, and commissioning of the device you should make yourself familiar with the device and carefully read the instruction manual. Do not install damaged or polluted devices.

5.1 Product-Related

Electric discharges have to be avoided! RFID transponders shall not be used in environments with high electromagnetic fields exceeding RMS values of 1 A/m or 3 V/m, e.g., in chlorine electrolysis plants, with large static frequency converter drives or high current equipment. High charge generating processes must be excluded.

In locations classified as Zone 1 and Zone 21 a special precaution shall be applied to prevent foreseeable failures (e.g., dropping the transponder), to avoid reducing creepage and clearance distances of other devices.

Mounting of a transponder shall not impair the properties of the transponder itself, nor shall the type of protection of the equipment, on which it is attached, be affected negatively. By using adhesives, the maximum operating temperature has to be considered.

Creepage and clearance distances shall not be affected by mounting. Damaged RFID transponders shall not be taken into a hazardous area.

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5.2 Hazardous Area

The transponder may be installed in Zone 1 and in Zone 21.

6 Operation, Maintenance, Repair

The transponders must not be repaired, changed or manipulated.

RFID transponders shall not be used in environments with high electromagnetic fields exceeding RMS values of 1 A/m or 3 V/m.

If there is a defect, the product must always be replaced with an original transponder.

7 Delivery, Transport, Disposal

Check the packaging and contents for damage. Check if you have received every item and if the items received are the ones you ordered.

Always store the device in a clean and dry environment. The permitted storage temperature (see technical data) must be considered.

Disposing of devices and packaging material must be in compliance with the applicable laws and guidelines of the respective country.

RFID/NFC transponders fall under the German Electrical and Electronic Equipment Act (ElektroG) as well as the European WEEE Directive and may therefore not be disposed of along with normal household waste. They must instead be properly recycled.

For more information, please visit our website: www.smart-tec.com/en/info/company/sustainability/weee-take-back-concept



Further information on the disposal of packaging material can be found at the following internet address: <https://www.smarttec.com/en/info/company/sustainability/packaging-law>

8 Marking

Type marking	For smart-DOME Classic Ex smart-TEC sDC ¹ wwjj ² nnnn ³	For smart-DOME Freestyle Ex smart-TEC sDF ¹ wwjj ² nnnn ³
	1 transponder type 2 batch number (week/year) 3 type number (4 digits)	
CE/UK marking	CE 2004/UKCA 8507	
EX marking	 II 2G Ex ia IIC T6/T4 Gb II 2D Ex ia IIIC T80°C /130°C Db	

9 Technical Data

Model number	smart-DOME Classic Ex, smart-DOME Freestyle Ex
Device category	2G – for use in hazardous areas with gas, vapour and mist 2D – for use in hazardous areas with combustible dust
Directive conformity	2014/34/EU, UKSI 2016 No.1107
Standard conformity	EN 60079-11:2012, EN IEC 60079-0:2018, IEC 60079-0:2017, IEC 60079-11:2011

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Type of protection	Intrinsically safe (ia)
EU/UK type examination certificate	EP5 15 ATEX 1 1011 X/ EP5 22 UKEX 1 086 X
IECEx Certificate of Conformity	IECEx EP5 15.0042X
Appropriate type	smart-DOME Classic Ex, smart-DOME Freestyle Ex
Ambient temperature	The temperature ranges, according to temperature class, are given in the EU/UK-Type Examination Certificate. -55°C ≤ T _{amb} ≤ +80°C (Class T6 resp. T80°C) -55°C ≤ T _{amb} ≤ +110°C (Class T4 resp. T130°C)
Storage temperature	-50 °C ≤ T _{amb} ≤ +110 °C

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All statements concerning scope of delivery, application, practical use and operating conditions of the sensors and processing systems correspond to the information available at the time of printing.

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