



1 **TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 15ATEX4353X** Issue: **2**

4 Equipment: **NivoRadar NR 3000 Level Monitoring Radar Equipment**

5 Applicant: **UWT GmbH**

6 Address: **Westendstrasse 5  
D-87488 Betzigau  
Germany**

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 Group Netherlands B.V., certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design of Category 3 equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN IEC 60079-0:2018      EN IEC 60079-7:2015+A1:2018      EN 60079-11:2012

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This Type Examination Certificate relates only to the design of the specified equipment, and not to specific items of equipment subsequently manufactured. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 3 G

Ex ic IIC T4 Gc

Ex ec IIC T4 Gc

Ta = -40°C to +80°C

Note - Due to restrictions applied by the applicant some products that are detailed in this certificate may not be commercially available.

Project Number 80133405

Signed: Michelle Halliwell

Title: Director of Operations

CSA Group Netherlands B.V.  
Utrechtseweg 310, Building B42,  
6812AR Arnhem, The Netherlands



SCHEDULE

TYPE EXAMINATION CERTIFICATE

Sira 15ATEX4353X  
Issue 2

13 DESCRIPTION OF EQUIPMENT

The NivoRadar NR 3000, available in either HART or Profibus/Foundation Fieldbus version, is a continuous level measurement instrument using radar technology. The HART version is connected to loop power (4-20 mA), which provides power and communication to and from the device while the Profibus/Foundation Fieldbus version is powered and communicated through the Profi/FF communication link itself.

The circuit is housed in a two part welded stainless steel enclosure. The upper enclosure, accessible via the threaded cover, houses the following PCBs:

- Main board (either HART or Profi/FF)
- FMCW Radar Technology board
- FMCW Radar HF module
- Display Interface main card
- Removable Display board

Except for the Display Interface main card and the Removable Display Module, all other PCBs are encapsulated within a plastic housing. Electrical connections are made via a conduit entry to a 2-way terminal block situated on top of this housing.

The lower enclosure is the sensor housing containing all the radar sensing components (emitter, lens, moisture absorbent material) as well as aiming parts (horn, flange).

The equipment may be used as either Increased safety (Ex ec) or Intrinsically safe for Zone 2 (Ex ic)

As Increased safety (Ex ec) the equipment is rated:

Un = 32 V

For Intrinsically safe in Zone 2 application (Ex ic) the following parameters apply:

Foundation Fieldbus	Profibus PA	HART
Entity Parameters Ui=32 V Ii = 13.5 mA Ci ≤ 5 nF Li ≤ 20 μH	Entity Parameters Ui=32 V Ii = 13.5 mA Ci ≤ 5 nF Li ≤ 20 μH	Ui=32 V Ii = 22.63 mA Ci ≤ 5 nF Li ≤ 20 μH

Variation 1 - This variation introduced the following change:

- Following appropriate assessment to demonstrate compliance with the latest technical knowledge EN 60079-0:2006 and EN 60079-15:2005 were replaced by EN IEC 60079-0:2018, EN IEC 60079-7:2015+A1:2018 and EN 60079-11:2012, , the markings in section 12 were updated accordingly.

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

CSA Group Netherlands B.V.  
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## SCHEDULE

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Issue 2

#### 14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	09 February 2016	R70051339A	The release of the prime certificate.
1	15 October 2019	1417	Transfer of certificate Sira 15ATEX4353X from Sira Certification Service to CSA Group Netherlands B.V.
2	18 November 2022	R80133404A	The introduction of Variation 1.

#### 15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

- 15.1 Parts of the enclosure may be non-conducting and may generate an ignition-capable level of electrostatic charge under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam), which might cause a build-up of electrostatic charge on non-conducting surfaces.
- 15.2 The supply to the equipment shall be rated for a prospective short-circuit current of not more than 10 kA and shall be protected by a suitably-rated fuse.
- 15.3 Any glands, conduit entry devices or blanking elements fitted to the equipment shall suitably be Certified and installed in compliance with IEC 60079-14 for the explosive environment, method of protection, and environmental conditions applicable for end use.

#### 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

#### 17 CONDITIONS OF MANUFACTURE

- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Certificates.
- 17.2 Holders of Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.

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Utrechtseweg 310, Building B42,  
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# Certificate Annexe



Certificate Number: Sira 15ATEX4353X

Equipment: NivoRadar NR 3000 Level Monitoring Radar Equipment

Applicant: UWT GmbH

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## Issue 0

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Title
A5E36852453	1 of 1	1	04 Feb 16	UWT NivoRadar NR 3000 HART Hazardous Nameplate Drawing

Issue 1. No new drawings were introduced

## Issue 2

Drawing	Sheets	Rev	Date (Stamp)	Title
A5E36852453	1 of 1	3	06 Oct 22	UWT NivoRadar NR 3000 HART Hazardous Nameplate Drawing

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