



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.:	IECEX TRC 12.0019X	Issue No: 1	<u>Certificate history:</u> Issue No. 1 (2014-03-28) Issue No. 0 (2013-03-22)
Status:	<b>Current</b>	Page 1 of 5	
Date of Issue:	<b>2014-03-28</b>		
Applicant:	<b>CorDEX Instruments Ltd.,</b> Unit 1 Owens Road, Skippers Lane Industrial Estate, Middlesbrough, Cleveland, TS6 6HE <b>United Kingdom</b>		
Electrical Apparatus:	<b>Intrinsically Safe Digital Camera DC6000 and TC7000 Thermal Imaging Camera</b>		
<i>Optional accessory:</i>			
Type of Protection:	<b>Intrinsic Safety</b>		
Marking:	Ex ib IIC T4 Gb                      Tamb -10°C to 40°C Ex ib IIIC T200°C Db Ex ib I Mb		
<i>Approved for issue on behalf of the IECEx Certification Body:</i>	Stephen Winsor		
<i>Position:</i>	Certification Officer		
<i>Signature:</i> <i>(for printed version)</i>	<hr/>		
<i>Date:</i>	<hr/>		

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:



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TRaC Global Ltd.  
Unit 1 Pendle Place  
Skelmersdale  
West Lancashire  
WN8 9PN  
United Kingdom





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Manufacturer: **CorDEX Instruments Ltd.**,  
Unit 1 Owens Road,  
Skippers Lane Industrial Estate,  
Middlesbrough,  
Cleveland,  
TS6 6HE  
**United Kingdom**

Additional Manufacturing  
location(s):

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 electrical apparatus 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 : 2007-10** Explosive atmospheres - Part 0: Equipment - General requirements  
Edition:5  
**IEC 60079-11 : 2011** Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"  
Edition:6.0

*This Certificate **does not** indicate compliance with electrical 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:

[GB/TRC/ExTR12.0018/01](#) [GB/TRC/ExTR12.0018/00](#) [GB/TRC/ExTR13.0008/00](#)

#### Quality Assessment Report:

[GB/SIR/QAR10.0010/04](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The DC6000 is a battery powered hand held digital optical camera with an articulating lens, designed to take images. It comprises of several printed circuit boards inside the equipment. The IP54 enclosure is made from polymeric materials inside a protective rubber boot, the articulating lens head is made from aluminium.

The equipment is battery powered by three 1.5V AA alkaline cells. Only Duracell MN1500 LR6 cells can be used.

The TC7000 is a thermal imaging camera which shares the same enclosure, power source and common pcbs with the DC6000. Different PCBs are fitted to provide the thermal imaging function. The TC7000 is powered by a rechargeable battery pack with a nominal voltage of 7.6V, comprising of two series connected Lithium-ion cells.

### CONDITIONS OF CERTIFICATION: YES as shown below:

The following conditions apply to the DC6000

1. Only Duracell Procell MN1500 LR6 AA cells can be used.
2. Only Panasonic CR2032 for real time clock backup can be used.
3. The equipment must be de-energized and removed from the hazardous area by the operator when the presence of a hazardous atmosphere is detected. When used in an underground mining area EPL Mb.
4. The USB connection to be used only in the safe area.

The following conditions apply to the TC7000

1. Only TC7000 battery pack can be used.
2. The battery pack must be removed from the equipment in the safe area when charging and the battery pack can only be charged in the safe area.
3. Do not replace the battery pack in the hazardous area.
4. Only Panasonic CR2032 for real time clock backup can be used.
5. The equipment must be de-energized and removed from the hazardous area by the operator when the presence of a hazardous atmosphere is detected. When used in an underground mining area EPL Mb.
6. The USB connection to be used only in the safe area.



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

Issue 1

Certificate issued to include report GB/TRC/ExTR12.0018/01 which adds a re-chargeable battery pack for use with the TC7000.

## **Annex:**

[Annex to CoC IECEx TRC 12.0019X is 1.pdf](#)