



## EU Type Examination Certificate CML 14ATEX2079 Issue 2

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **ExTemp Series Infrared Temperature Sensor**
- 3 Manufacturer **Calex Electronics Ltd**
- 4 Address **Leedon House  
Billington Road  
Leighton Buzzard  
LU7 4TN**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Koopvaardijweg 32, 4906CV Oosterhout The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 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 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 12.
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN 60079-11:2012

- 10 The equipment shall be marked with the following:



II 1 GD

Ex ia IIC T4 Ga

Ex ia IIIC T135°C IP65 Da

Ta= -20°C to +70°C



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## 11 Description

The ExTemp is a series of intrinsically safe two-wire infra-red temperature sensors. The two wires are used for both the 4-20mA power/analogue output and digital communication for configuration of settings such as emissivity.

The device consists of a PCB assembly housed in a cylindrical stainless steel enclosure of IP65 rating. The enclosure incorporates a lens at one end behind which is located an infra-red thermopile mounted on a daughter PCB. The permanently attached cable of up to 25m length exits through a cable gland at the other end of the enclosure.

The ExTemp Series (alternatively known as OSAT Series) is supplied in a number of configurations defined by the model number,

EX-FFF-TT-C-LL-XXX or OSAT-FFF-TT-C-LL-XXX

where

FFF = Field of view  
TT = Measurement temperature range  
C = Configurable  
LL = Cable length  
XXX = Other options

There are no differences between models prefixed with 'EX-' or 'OSAT-'.

The equipment has the following safety description:

Ui = 28V  
Ii = 93mA  
Pi = 0.651W  
Ci = 8nF  
Li = 0

### Variation 1

This variation introduces the following modifications,

- i. Update certificate reference to the 2014/34/EU Directive
- ii. Minor drawing changes

### Variation 2

This variation introduces the following modifications,

- i. To update the certificates to latest harmonised standards.
- ii. Removal of EN 60079-26.
- iii. Minor label drawing change.
- iv. This report records and confirms the transfer of CML UK ATEX certificate CML 14ATEX2079 to CML B.V. and subsequent issue of a corresponding CML B.V. certificate.



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## 12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	10 Oct 2014	R208A/00	First issue
1	17 Oct 2019	R12772A/00	Introduction of Variation 1
2	22 Dec 2020	R13543A/00	Introduction of Variation 2

Note: Drawings that describe the equipment or component are listed in the Annex.

## 13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.
- ii. Production units must be capable of meeting the dielectric strength requirement of EN 60079-11:2012, Clause 6.3.13.

## 14 Specific Conditions of Use (Special Conditions)

None.

## Certificate Annex

**Certificate Number** CML 14ATEX2079  
**Equipment** ExTemp Series Infrared Temperature Sensor  
**Manufacturer** Calex Electronics Ltd



The following documents describe the equipment or component defined in this certificate:

### Issue 0

Drawing No	Sheets	Rev	Approved date	Title
IRI-00020-EX	1 of 1	E	10 Oct 2014	General Arrangement Drawing
IRI-00021-EX	1 of 1	D	10 Oct 2014	ATEX/IECEX Label Marking Drawing
IRI-00022-EX	1 of 1	C	10 Oct 2014	Circuit Diagram
IRI-00023-EX	1 of 1	B	10 Oct 2014	Board Layout
IRI-00024-EX	1 of 1	B	10 Oct 2014	Safety Distances
IRI-00025-EX	1 of 1	C	10 Oct 2014	ExTemp PCB Parts List

### Issue 1

Drawing No	Sheets	Rev	Approved date	Title
IRI-00020-EX	1 of 1	F	17 Oct 2019	General Arrangement Drawing
IRI-00021-EX	1 of 1	E	17 Oct 2019	ATEX/IECEX Label Marking Drawing
IRI-00023-EX	1 of 1	C	17 Oct 2019	Board Layout
IRI-00024-EX	1 of 1	C	17 Oct 2019	Safety Distances
IRI-00025-EX	1 to 3	D	17 Oct 2019	ExTemp PCB Parts List

### Issue 2

Drawing No.	Sheets	Rev	Approved /issued date	Title
IRI-00021-EX	1 of 1	F	22 Dec 2020	ATEX/IECEX Label marking drawing