



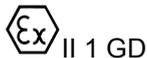
EC Type Examination Certificate CML 14ATEX2079 Issue 0

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC
- 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 schedule of this certificate and the documents to which it refers.
- 6 Certification Management Limited, Unit 1 Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK, Notified Body Number 2503, in accordance with Article 9 of Directive 94/9/EC, 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 EC Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 94/9/EC Article 8 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 60079-0:2012 EN 60079-11:2012 EN 60079-26:2006

- 10 The equipment shall be marked with the following:



Ex ia IIC T4 Ga

Ex ia IIIC T135°C Da

Ta = -20°C to 70°C

M D Shearman FlinstMC
Managing Director



**CML 14ATEX2079
Issue 0**

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

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	10 Oct 2014	R208A/00	First issue

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.

- 13.1 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.
- 13.2 Production units must be capable of meeting the dielectric strength requirement of IEC 60079-11:2011 clause 6.3.13.

14 Special Conditions for Safe Use (Conditions of Certification)

None

Certificate Annex

Certificate Number CML 14ATEX2079
Equipment ExTemp
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