



1 CERTIFICATE OF CONFORMITY

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 94/9/EC

3 Certificate Number: **ABTECH15ATEX4111X**

4 Equipment: **Abtech STR1 Roadway Lantern**

5 Manufacturer: **Abtech Limited**

6 Address: **Newhall Road, Sheffield, S9 2QJ**

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

8 Abtech Limited as the manufacturer of the equipment identified in '4' above certifies that it has been tested and 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 of the Directive.

The examination and test results are recorded in the confidential report listed in section 16.


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 60079-0:2012:A11:2013 EN 60079-15:2010 EN 60079-31:2014

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

11 This Certificate of Conformity relates only to the design and construction of the specified equipment. 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 D
Ex nR IIC T* Gc (-50°C<Tamb<55°C)
Ex tc IIIC T* °C Dc (-50°C<Tamb<55°C)

This certificate may only be reproduced in its entirety, without any change, schedule included.

A handwritten signature in black ink, appearing to read 'M. Lancashire', is written over a horizontal line.

M. Lancashire
Managing Director
Abtech Limited

Abtech Limited
Newhall Road,
Lower Don Valley
Sheffield,
South Yorkshire,
S9 2QJ, UK

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SCHEDULE

14 **Certificate Number:** ABTECH15ATEX4111X

15 **Description of Equipment**

The Abtech STR1 is a range of LED Restricted breathing (Ex nR) roadway lanterns that comprise of a single enclosure. The enclosure is manufactured from die cast Aluminium protected from corrosion by a suitable coating. Silicone rubber gaskets are used to seal the enclosure.

The main enclosure, approximately 773mm in length by 400mm wide and a maximum depth of 98mm. The enclosure is sealed using a toughened safety glass window fitted with silicone rubber seal. It houses an LED driver and optical assembly comprising of Philip Luxeon M's and PMMA optic.

The normal method of mounting uses a side entry pole mount arrangement, although any other method of mounting is approved providing the restricted breathing enclosure is not penetrated.

The housing is supplied with a single M20 cable entry which must be fitted with a suitably approved cable gland. The cable entry must be sealed to maintain the requirements for Restricted breathing (Ex nR) equipment.

The following table details the LED's that may be fitted and the associated ambient temperature ranges, temperature classes and surface temperatures for dust:

Description	Lamp Type	Wattage	T	Surface Rating	Ambient Temp
LX2STR1120SH	LED	120W	T5	T100°C	-50°C≤Tamb≤55°C

16 **Test Report Number:** TR15005r001

17 **Special Conditions for Safe Use** (denoted by X after the certificate number)

1. The STR1 must be mounted with the front cover horizontal beam down, or up to 15° from horizontal in the longitudinal plane only.
2. The STR1 is to be fitted with a suitably certified cable gland which maintains the restricted breathing properties of the equipment.

18 **Essential Health and Safety requirements**

All relevant health and safety requirements are covered by the standards listed at item 9.

19 **Drawings and Documents**

Number	Sheet	Issue	Date	Description
ABT30058	01	A	04/12/15	GA Certification Drawing
ABT30059	01	A	04/12/15	Certification label



1 SUPPLEMENTARY CERTIFICATE OF CONFORMITY

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

3 Certificate Number: **ABTECH15ATEX4111X**

4 Equipment: **Abtech STR1 Roadway Lantern**

5 Manufacturer: **Abtech Limited**

15 DESCRIPTION OF SUPPLEMENTARY CERTIFICATE

Addition of standard EN 60079-7:2015
Replacement of glass diffuser by polycarbonate version (Makrolon)
Change in protection to Ex ec and subsequent alteration of T rating and surface temperature.

Marking:

⊕ II 3 GD
Ex ec IIC T4 Gc(-50°≤Tamb≤55°C)
Ex tc IIIC T135°C Dc

16 Test Report Number: TR15005r002

17 Special Conditions for Safe Use (denoted by X after the certificate number)

1. The STR1 must be mounted with the front cover horizontal beam down, or up to 15° from horizontal in the longitudinal plane only.
2. The STR1 is to be fitted with a suitably certified cable gland.

18 Essential Health and Safety requirements

All relevant health and safety requirements are covered by the standards:

EN 60079-0:2012:A11:2013 EN 60079-7:2015 EN 60079-31:2014

19 Drawings and Documents

Number	Sheet	Issue	Date	Description
ABT30058	01	B	20.03.2018	GA Certification Drawing
ABT30059	01	B	20.03.2018	Certification label