TELEDYNE
OLDHAM SIMTRONICS
Everywhereyoulook™

OPERATING MANUAL

LT15

FLAME DETECTOR TEST LAMP

NOSP 15560-Revision 6b

User manuals in other languages are available on Website https://teledynegasandflamedetection.com

All of the information that is provided in this document is accurate to the best of our knowledge.

As a result of continuous research and development, the specifications of this product may be changed without prior notice.

TELEDYNE OLDHAM SIMTRONICS S.A.S.

Rue Orfila

Z.I. Est – CS 20417

62027 ARRAS Cedex

Limitation of Liability

- The Company TELEDYNE OLDHAM SIMTRONICS S.A.S., hereinafter referred to as "TELEDYNE OLDHAM SIMTRONICS" throughout this document, shall not be held responsible for any damage to the equipment or for any physical injury or death resulting in whole or in part from the inappropriate use or installation of the equipment, non-compliance with any and all instructions, warnings, standards and/or regulations in force.
- No business, person or legal entity may assume responsibility on behalf of TELEDYNE OLDHAM SIMTRONICS, even though they may be involved in the sale of TELEDYNE OLDHAM SIMTRONICS products.
- TELEDYNE OLDHAM SIMTRONICS shall not be responsible for any direct or indirect damage, or any direct or indirect consequence, resulting from the sale and use of any of its products **UNLESS SUCH PRODUCTS HAVE BEEN SELECTED BY TELEDYNE OLDHAM SIMTRONICS ACCORDING TO THE APPLICATION**.

Ownership clauses

- The drawings, specifications, and information herein contain confidential information that is the property of TELEDYNE OLDHAM SIMTRONICS.
- This information shall not, either in whole or in part, by physical, electronic, or any other means whatsoever, be reproduced, copied, divulged, translated, or used as the basis for the manufacture or sale of TELEDYNE OLDHAM SIMTRONICS equipment, or for any other reason **without the prior consent of TELEDYNE OLDHAM SIMTRONICS.**

Warning

- This is not a contractual document. In the best interest of its customers and with the aim of improving performance, TELEDYNE OLDHAM SIMTRONICS reserves the right to alter the technical features of its equipment without prior notice.
- **READ THESE INSTRUCTIONS CAREFULLY BEFORE THE FIRST USAGE**: these instructions should be read by all persons who have or will have responsibility for the use, maintenance, or repair of the instrument.
- This instrument shall only be deemed to be in conformance with the published performance if used, maintained, and repaired in accordance with the instructions of TELEDYNE OLDHAM SIMTRONICS by TELEDYNE OLDHAM SIMTRONICS personnel or by personnel authorized by TELEDYNE OLDHAM SIMTRONICS.

Important Information

- The modification of the material and the use of parts of an unspecified origin shall entail the cancellation of any form of warranty.
- The use of the unit has been projected for the applications specified in the technical characteristics. Exceeding the indicated values cannot in any case be authorized.

Warranty

- Under normal conditions of use and on return to the factory, LT15 lamp carry a 1-year warranty, excluding accessories such as tilt mount, weather protection, etc.

Waste Electrical and Electronic Equipment (WEEE directive)

European Union (and EEA) only. This symbol indicates that, in conformity with directive DEEE (2002/96/CE) and according to local regulations, this product may not be discarded together with household waste.

It must be disposed of in a collection area that is set aside for this purpose, for example at a site that is officially designated for the recycling of electrical and electronic equipment (EEE) or a point of exchange for authorized products in the event of the acquisition of a new product of the same type as before.

Table of Contents

1 Product Description

The LT15 is a flashing test lamp for functional test of flame detectors. The calibration cannot be perform by the LT15.

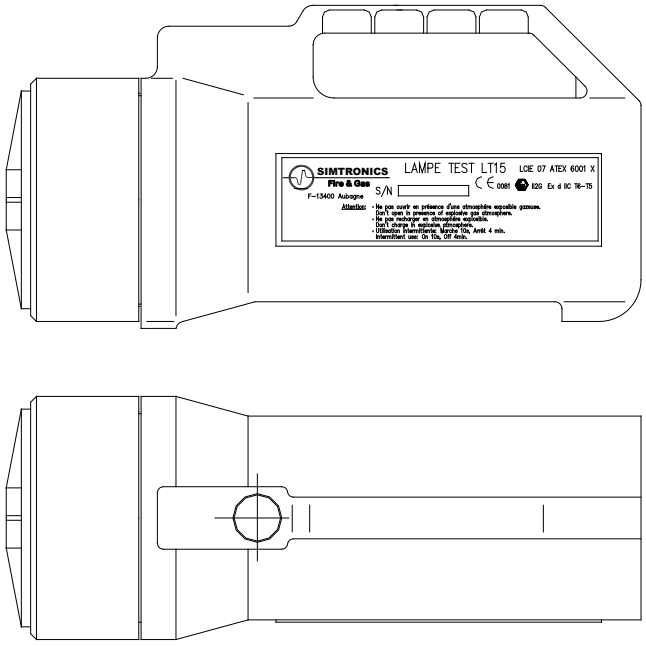
The emission spectrum of the lamp covers from the UV (250 nm) to the IR (4.3 um detection range. The emission is modulated to simulate the typical flickering of flames.

1.1 Construction

The LT15 housing is manufactured in aluminium. It holds an electronic board controlling the emission lamp, and a rechargeable battery.

An on / off push button is located on the forward part of the handle.

The LT15 is delivered with a separate fast battery charger.



1.2 Application areas

LT15 is a handheld test lamp for UV/IR and IR3 flame detectors.

LT15 is explosion-proof classified to Ex d IICT6-T5 and suitable for operation in hazardous areas, (area 1 and 2) in accordance with the EN 60079-0 and EN 60079-1 standards.

2 Technical Specifications

GENERAL

Lamp emission	180 nm to 5 µm, flicker modulated
Range	4 meters (see §3)

ELECTRICAL

Lamp type	12 VDC halogen, 100 W
Rechargeable battery	12 VDC, 2 AH Cd/Ni
Battery capacity (usage)	30 to 45 minutes accumulated use (on-time)
Continuous use	10 seconds, (4 minutes cooling between usage)
Charging time	3 hours (approximately)

TEMPERATURE RANGE

Operation	
Ex T6	-20°C - +40°C
Ex T5	-20°C - +60°C
Storage	-20°C - +60°C

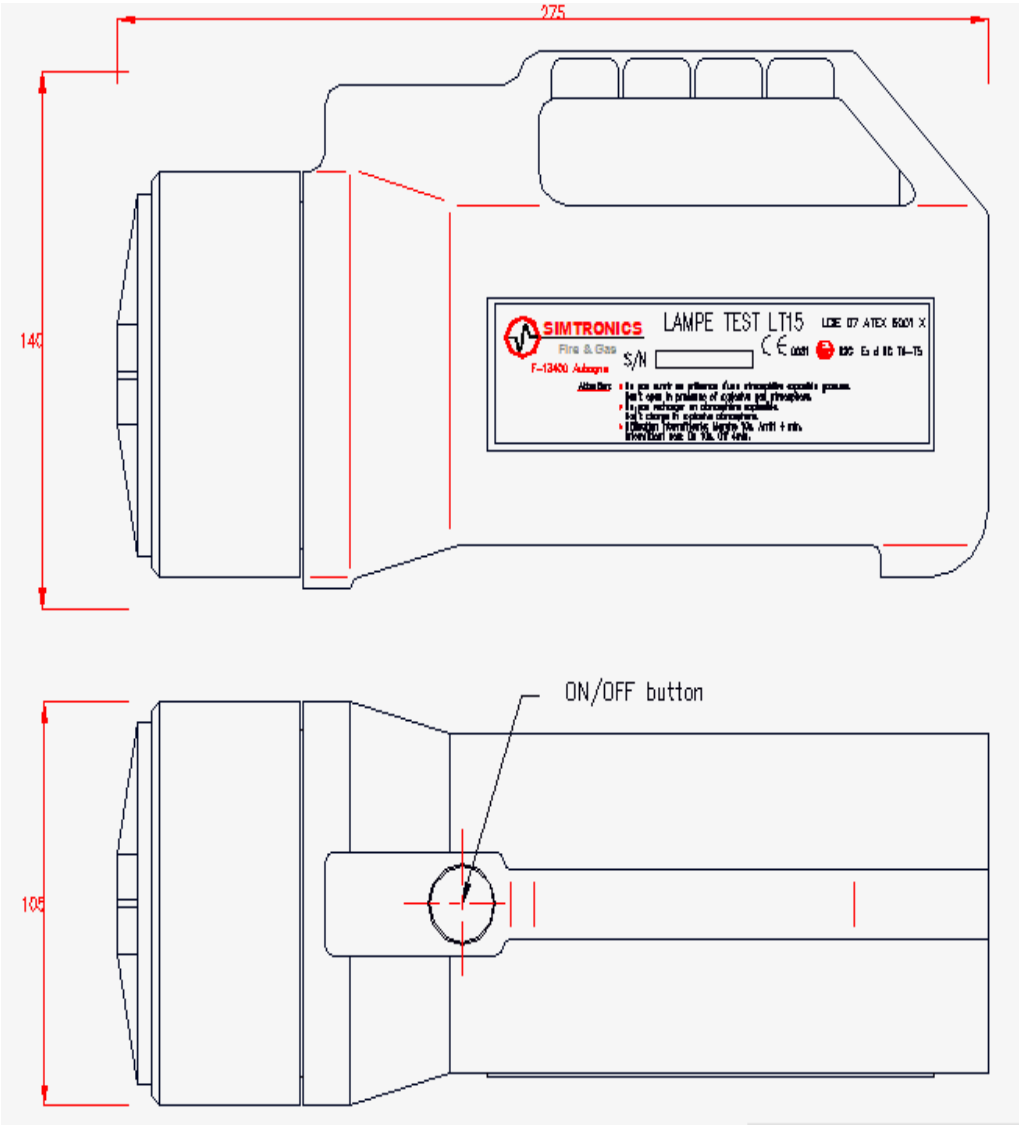
HOUSING

Protection category	IP66/IP67 DIN 40050
Housing material	Aluminium
Weight	2.9 kg

APPROVALS

ATEX	ATEX II 2 G Ex db IICT6-T5

OUTLINE DIMENSIONS



3 Operation

Refer to the operating manual for the flame detector to be tested for any required test mode or other precautions to be taken.

The LT 15 generates light pulses using a halogen lamp. The flame detector must be in LT15 mode because in normal mode the detector was designed to reject false alarms, such as a flashing lamp.

The distance of use depends on some factors: bulb and battery wear, battery charging state, illumination angle, cleanliness of the window, direct exposure front of the cartridge to the sun etc.

Given the above variables, the distance generally used to test the detectors is between 2 meters and 5 meters.

Details of test modes are normally found in the operating manual for the flame detector (Dependant on detector version).

We recommend to fully charging the LT15 before use.

Position the LT15 in the axis of the flame detector to be tested. The test lamp (light beam) should be pointed directly at the flame detector. Oscillating the illumination point on the surface of the detector improves the detectivity.

Switch on the lamp by pressing to the push button "ON", and keep it pressed until the flame detector goes into alarm. After 10 seconds of operation, either continuous or intermitted, cool during 4 minutes before using the lamp again.

To provoke an alarm from the detector to be tested, please note that both the distance to the test lamp, as well as the charge state of the accumulator will influence the signal level. If you need to get closer than to meters from the detector to provoke an alarm, then the test lamp battery most likely would need a recharge.

The lamp needs to be cooled for 4 minutes after 10 seconds of usage. The usage time may be in burst adding up to 10 seconds, or continuous for 10 seconds.

4 Maintenance

4.1 Charging

A fully charged test lamp will have power for approximately 30 to 45 minutes of operation. This corresponds to more than 10 hours of usage, when adding the 4 minute cooling down intervals.

Use the supplied battery charger only (Labelled TELEDYNE OLDHAM SIMTRONICS and "10-20 cells, 0.9A").

The battery charger is not Ex proof. The LT15 Test Lamp is not Ex proof when opened.DO NOT RE-CHARGE THE LT15 TEST LAMP IN HAZARDOUS AREA.

The battery service life is extended if you let the battery discharge properly before re-charging. At least this should be done at periodic intervals. You will recognise full discharge by the reduction of light power and change in the pulse frequency.

The LT15 charger is an automatic fast charger especially adapted.

How to charge the batteries?

- Unscrew the sight glass located on the front of the lamp after having unfastened the stop ring screw located on the side part with a 1.5 Allen wrench.
- Remove the reflector by pulling the bulb. Use a soft cloth or paper to avoid touching the lamp with your fingers. Shift the reflector to one side, being careful not to strain the wires. The charger input (connector) should now be visible beneath.
- Connect the charger to the mains 100-240V AC 50-60Hz. The LED lights in yellow (not connected battery).
- Connect the plug of the charger to the charger inlet of the LT15. The LED remains yellow a few seconds during the initialization and test phase.
- The LED changes to an orange light to indicate charging in progress which may last for approximately 2 hours.
- At the end of the fast charge, the LED will flash green/yellow during the Top-offcharge
- After the Top-offcharge, the mode will change to trickle charge, showing a steady green LED light.

In case of emergency, you may interrupt the charge progress, but depending on the battery state, the LT15 may have reduced power.

- When charging is finished, first disconnect the charger from the LT15, then from the AC outlet.
- Replace the reflector; do not touch the bulb directly with your fingers, make sure the reflector steering pin matches the socket on the housing.
- Re-assemble the LT15 lamp glass. Please note that doing this properly is important for the Ex safety. Screw on the lamp glass and tighten the stop ring screw located on the side of the lamp glass. Be careful not using excessive force.

The battery can be left for a few hours on trickle charge without damage, but we do not recommend putting the unit on permanent trickle charge. If the LT15 is not used for an extended period, we recommend charging the unit monthly to avoid battery self discharge and hence reduce its usable lifetime.

The LT15 power source is a NiCd 12V 2Ah moulded battery unit, integrated in the lamp housing, equipped with various safety devices. In the event of failure of the battery unit, the complete LT15 test lamp shall be returned to the TELEDYNE OLDHAM SIMTRONICS factory for replacement of the battery. Any other intervention will void the ATEX protection.

5 Marking

The LT15 has been certified according to European Directive 2014/34/UE, According to the Directive ATEX 2014/34/UE, a marking located on the side indicates the following informations:

Manufacturer:	TELEDYNE OLDHAM SIMTRONICS
Type:	Test Lamp LT15
Serial number:	S/N : xxxxxxxxx
Certification number:	LCIE 07 ATEX 6001 X
Warning:	Do not open in the presence of a gas explosive atmosphere.
	Do not charge in explosive atmosphere
	Intermittent use: On 10 s / Off 4 min

TELEDYNE OLDHAM SIMTRONICS does not allow any repairs of the flameproof joints and shall not be responsible for any modification of material.

6 Spare parts

Spare parts	Part Number
CHARGER (Current regulated)	CHARGEUR-LT15

7 UE Declaration of Conformity

TELEDYNE OLDHAM SIMTRONICS
Everywhereyoulook™

DECLARATION UE DE CONFORMITÉ

EU CONFORMITY DECLARATION

Réf : UE LT15_NOSP0017348_3.doc

Nous,
We,

Teledyne Oldham Simtronics S.A.S., ZI Est, 62000 Arras France

Déclarons, sous notre seule responsabilité, que le matériel suivant :
Declare, under our sole responsibility that the following equipment :

Type / *Type*	LAMPE TEST / *TEST LAMP*
Modèle / *Models*	LT 15
Marquage / *ATEX marking*	CE 0080 Ⓔx II2G/ Ex db IIC T6-T5 Gb -20°C ≤ Ta ≤ +60°C
N° attestation CE de type / ***EC type-examination certificate N°***	LCIE 07 ATEX 6001 X
Notification de l'Assurance Qualité de la production / ***Quality Assurance Notification Number***	INERIS 00ATEXQ403
L'organisme notifié en charge du suivi de la Directive ATEX est **The notified body in charge of monitoring the ATEX Directive is**	INERIS, Parc Alata 60550 Verneuil en Halatte, France
Numéro d'identification / Identification Number :	0080

Est conçu et fabriqué en conformité avec les Directives et normes applicables suivantes :
Is designed and manufactured in compliance with the following applicable Directives and standards:

ATEX	Directive 2014/34/UE *Directive 2014/34/EU*	EN 60079-0 : 2006 (*) EN 60079-1 : 2004 (*)
CEM /EMC	Directive 2014/30/UE *Directive 2014/30/EU*	NF EN 61000-6-2 :2006 NF EN 61000-6-4 :2007+A1 :2011

(*) Le produit n'est pas impacté par les modifications majeures apportées par les versions ultérieures des normes jusqu'à EN 60079-0 : 2018 et EN 60079-1 : 2014.
The product is not impacted by the major modifications of standards evolutions until EN 60079-0 : 2018 and EN 60079-1 : 2014.

Ce matériel ne doit être utilisé qu'à ce pour quoi il a été conçu et doit être installé en conformité avec les règles applicables et suivant les recommandations du fabricant.
This equipment shall be used for the purpose for which it has been designed and be installed in accordance with relevant standards and with manufacturer's recommendations.

A Arras, le 25/06/2021 / *Arras, June 25th, 2021*

AM. Dassonville
Certification Responsible

Teledyne Oldham Simtronics S.A.S.
Z.I. EST - C.S. 20417
62027 ARRAS Cedex – FRANCE
Tel. : +33(0)3 21 60 80 80
www.teledyneGFD.com

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TELEDYNE
OLDHAM SIMTRONICS
Everywhereyoulook™

AMERICAS
14880 Skinner Rd
CYPRESS
TX 77429,
USA
Tel.: +1-713-559-9200

EMEA
Rue Orfila
Z.I. Est – CS 20417
62027 ARRAS Cedex,
FRANCE
Tel.: +33 (0)3 21 60 80 80

ASIA PACIFIC
Room 04, 9th Floor, 275
Ruiping Road, Xuhui District
SHANGHAI
CHINA
Tel.: +86-134-8229-5057

www.teledynegasandflamedetection.com

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