

# Operating Manual

## LT15 Flame Detector Test Lamp



## Note

This manual must be carefully read by those who have or will have the responsibility for the operation or maintenance of this product. The product may not perform as designed if it is not used and maintained in accordance with the manufacturer's instructions.

The warranties made by Simtronics with respect to the product are voided if the product is not used and maintained as described in this manual.

Please read the general warnings in chapter 7.

© Simtronics SAS, all rights reserved.

## Table of contents

1.	Product Description .....	4
1.1.	Construction.....	4
1.2.	Application areas.....	4
2.	Technical Specifications.....	5
2.1.	Outline dimensions.....	6
3.	Operation .....	7
4.	Maintenance .....	8
4.1.	Charging.....	8
5.	Warnings.....	10
5.1.	Ownership and confidentiality.....	10
5.2.	Liability.....	10
6.	Warranty .....	11
7.	Certifications and standards.....	11
7.1.	Standards.....	11
7.2.	Marking .....	11
7.3.	Declaration of Conformity .....	12
8.	Spare parts .....	13
9.	Contact details.....	15

## 1. PRODUCT DESCRIPTION

The LT15 is a flashing test lamp for functional test of flame detectors.

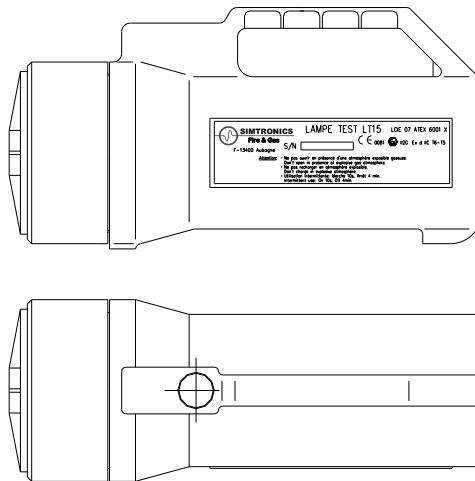
The emission spectrum of the lamp covers from the UV (250 nm) to the IR (4.3  $\mu\text{m}$  detection range). The emission is modulated to simulate the typical flickering of flames.

### 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 IIC T6-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	Typical 2 to 9 meters (practical test range)

### 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

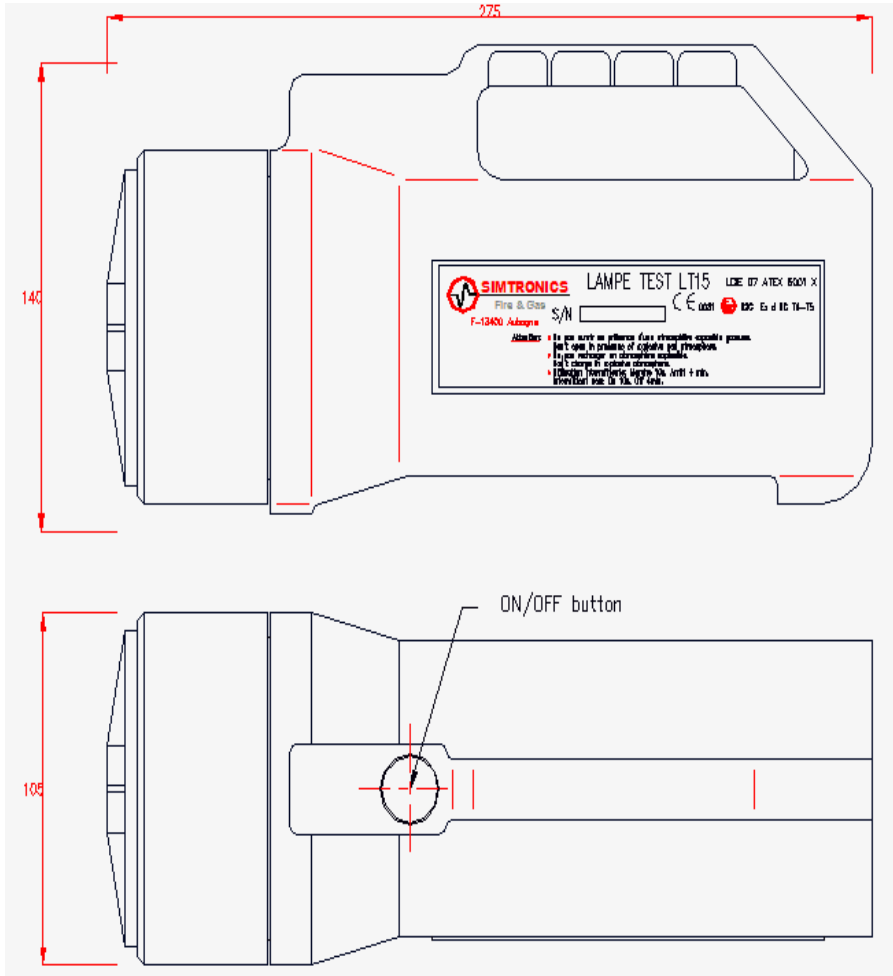
### HOUSING

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

### APPROVALS

ATEX	ATEX II 2 G Ex d IICT6-T5
------	---------------------------

## 2.1. 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. You may have to the distance to less than 1 meter in order to get a response from the flame detector if the detector is not put in test LT15 mode.

In LT15 mode, working distance is comprised between 2 to 9 m depending on the level of batteries and on the target flame detector version.

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.

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 bursts 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 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 Simtronics factory for replacement of the battery. Any other intervention will void the ATEX protection.

## 5. WARNINGS

This document is not contractual. The specifications may be modified without notice to improve the product, or to meet applicable standards.

### 5.1. Ownership and confidentiality

The information, design data, drawings and diagrams contained in this document remain the property of SIMTRONICS and are confidential.

The information contained in this document cannot be used, either partially or wholly, nor divulged or reproduced without the prior agreement of SIMTRONICS

### 5.2. Liability

The liability of SIMTRONICS shall be limited to any direct prejudice resulting from failure on SIMTRONICS part to fulfil the contract. SIMTRONICS shall decline all liability for any indirect prejudice caused.

By explicit agreement between the parties, the term “indirect prejudice” shall refer in particular to any financial loss, moral damage, loss of profit, earnings, clients or order, or any action taken against the client by a third party.

Moreover, any damages due from SIMTRONICS for any reason whatsoever shall not exceed the tax-exclusive value of the contract, except in the event of an intentional or fraudulent offence on the part of SIMTRONICS.

Application of the equipment warranty is subject to compliance with the state of the art and the operating instructions contained in this manual.

The SIMTRONICS warranty shall not apply, furthermore SIMTRONICS declines all liability, for damage to equipment or harmful accidents caused by negligence, failure to supervise the equipment or failure to use the equipment in compliance with the applicable recommendations, standards and regulations stipulated in the present manual.

The SIMTRONICS warranty shall not apply to faults resulting either, from materials supplied by the Purchaser, from design imposed by the Purchaser, from servicing or maintenance carried out on SIMTRONICS equipment by a third party not explicitly authorized, or from the use of unsuitable storage conditions.


In order to guarantee correct operation of the system, any addition of equipment to the system or any modification of the installation must be validated by SIMTRONICS.

## 6. WARRANTY

The LT15 comes with a 1 year warranty on the product. The warranty covers correct function inside specified tolerances. Faulty units under warranty will be repaired or replaced.

## 7. CERTIFICATIONS AND STANDARDS

### 7.1. Standards


The LT15 has been certified according to European Directive 2014/34/UE for products intended for operation in explosive atmospheres (normally called the ATEX directive), which, for the certified equipment, is shown on the detector's label by the symbol , along with the required protection rating and the number of the approval obtained from a certified laboratory. The directive refers to the harmonized European Standards satisfied by the detector as listed below:

\* EN60079-0

\* EN60079-1

### 7.2. Marking

The product label has the following entries:


Manufacturer:	SIMTRONICS
Type:	Test Lamp LT15
Serial number:	S/N : xxxxxxxxx
Certification:	CE 0081  II2G / Ex d IIC T6-T5
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

### 7.3. Declaration of Conformity

	<b>DECLARATION UE DE CONFORMITÉ</b> <b>EU CONFORMITY DECLARATION</b>	Réf : +NOSP0017348 Rév. 0
	Nous, <b>SIMTRONICS</b> We, <b>792, Avenue de la Fleuride</b> <b>13400 AUBAGNE</b>	

Nous, **SIMTRONICS**  
 We, **792, Avenue de la Fleuride**  
**13400 AUBAGNE**

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 0081  II 2 G/ Ex d IIC T6-T5 -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	LCIE 03 ATEX Q 8046

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

ATEX	Directive 94/9/CE (jusqu'au 19 avril 2016) Directive 2014/34/UE (à partir du 20 avril 2016)	EN 60079-0 : 2012+A11 :2013 (*) EN 60079-1 : 2014 (*)
	Directive 94/9/EC (up to 19 April 2016) Directive 2014/34/EU (from 20 April 2016)	
CEM /EMC	Directive 2004/108/CE (jusqu'au 19 avril 2016) Directive 2014/30/UE (à partir du 20 avril 2016)	NF EN 61000-6-2 :2006 NF EN 61000-6-4 :2007+A1 :2011
	Directive 2004/108/EC (up to 19 April 2016) Directive 2014/30/EU (from 20 April 2016)	

La Directive Basse Tension 2006/95/CE ou 2014/35/UE n'est pas applicable à ce produit  
*Low Voltage Directive 2006/95/EC or 2014/35/EU is not applicable to this equipment.*

L'organisme notifié en charge du suivi de la Directive ATEX est <i>The notified body in charge of monitoring the ATEX Directive is</i>	LCIE 33, Avenue du Général Leclerc 92260 FONTENAY AUX ROSES France
Numéro d'identification / Identification Number :	0081

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.*

Nous, soussignés SIMTRONICS, déclarons par la présente que le produit spécifié ci-dessus est conforme aux Directives et aux Normes listées.  
*We, undersigned SIMTRONICS, declare that the product specified above conforms to the listed Directives and standards.*

A Aubagne le 13 avril 2016/ Aubagne, April 13th , 2016

Salvator LA PIANA  
 Directeur d'établissement  
 Plant Manager

Eric CALVO  
 Responsable ATEX  
 ATEX Manager

Elodie VENEZIANO  
 Responsable qualité  
 Quality Manager





(\* ) La conformité à la EN 60079-0 et EN 60079-1 a été obtenue sur la base de la version 2006 et 2004, cependant les modifications apportées par les versions 2013 et 2014 ne la remettent pas en cause / Compliance with the EN 60079-0 and EN 60079-1 has been obtained on the basis of the 2006 and 2004 version, however, the changes of the 2013 and 2014 version does not affect it.

## 8. SPARE PARTS

Spare Parts	Description	Part Number
CHARGER	Current regulated	LT15 Battery Charger

This page is intentionally left blank

## 9. CONTACT DETAILS

You will find an updated list of distributors on our web pages:

[www.tycoGFD.com](http://www.tycoGFD.com)

Email address for general enquiries: [contact@simtronics.fr](mailto:contact@simtronics.fr)

Simtronics ASA  
Kabelgaten 4 B, Økern Næringspark  
PO Box 314, Økern, NO-0511 Oslo, Norway  
Tel: +47 2264 5055

Simtronics SAS  
792, av de la Fleuride  
BP 11016, 13781 AUBAGNE CEDEX – FRANCE  
Tel: +33 (0) 442 180 600

