

**Datasheet** 

# TrustSight LED Emergency Lighting

## TrustSight Point 15-55V 3W

The application of LED technology within the lighting sector also requires integration of reliable emergency lighting equipment inside luminaires. The range of TrustSight Emergency Lighting solutions offers easy design-in and is compatible with all dimmable and non-dimmable LED drivers. The TrustSight emergency driver is designed for Maintained solutions, but can also be used in a non-Maintained Emergency Lighting configuration. It offers Self-testing (IEC 62034) and is available in 1 and 3 hours duration. The TrustSight Pro LED emergency kits come complete with battery packs and are designed for use with constant current LED drivers.

#### **Benefits**

- Compliant with international standards.
- Optimum system integration with LED driver and LED modules

#### **Features**

- · Constant output power
- · Small low profile batteries
- Reinforced Insulated output
- Automatic emergency time selection
- · Loop through

#### **Application**

- For luminaires of protection class I and protection class II
- Used in offices, supermarkets, department stores, schools, etc

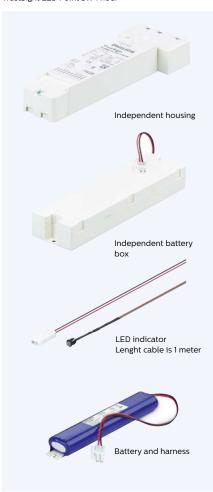
## Logistical data

| Product name                          | 12NC           | Pieces per box |
|---------------------------------------|----------------|----------------|
| TrustSight Basic P 15-55V 3W          | 9137 007 67266 | 10             |
| TrustSight Pro P 15-55V 3W            | 9137 007 66666 | 10             |
| TrustSight DALI P 15-55V 3W           | 9290 009 95866 | 10             |
| TrustSight Batt Box NiMH 7.2V 1300mA  | 9137 007 68166 | 10             |
| TrustSight Batt Box NiMH 7.2V 2500mAh | 9137 007 68266 | 10             |

The TrustSight Pro is equipped with self-test functionality according IEC 62034. The TrustSight Basic can only be tested manually (via mains interruption or with a test switch). Battery connection cable is included in the battery box. LED-indicator is included in the driver box.

## EM system contains of:

TrustSight LED Point 3W 1 hour



2 - 11

TrustSight LED Point 3W 3 hour



A test switch can be connected to the TrustSight basic. Specification: switch NO. Push to make with a spring relieve. Example given in the picture below



### Electrical input data

| Specification item             | value  | Unit | Condition                             |
|--------------------------------|--------|------|---------------------------------------|
| Nominal input voltage          | 220240 | Vac  |                                       |
| Nominal input frequency        | 5060   | Hz   |                                       |
| Nominal input current          | 25     | mA   | @230 V, 130 mA battery charge current |
| Input voltage                  | 230    | Vac  |                                       |
| Nominal input power            | 4      | W    | @230 V, 130 mA battery charge current |
| Total harmonic distortion      | < 20   | %    |                                       |
| Input voltage AC               | 202254 | Vac  | Performance range                     |
| Input frequency AC             | 47.563 | Hz   | Performance range                     |
| Switched mains contact current | 2.4    | Α    | Maximum permissible current           |

## Electrical output data

| Specification item     | value          | Unit | Condition                    |
|------------------------|----------------|------|------------------------------|
| Regulation method      | Constant Power |      |                              |
| Output voltage         | 1555           | Vdc  |                              |
| Output voltage max.    | 60             | Vpk  | Peak voltage at open load    |
| Output power           | 3              | W    |                              |
| Output power tolerance | +10            | %    |                              |
| Switch over time acdc  | < 500          | ms   | Acc. IEC61347-2-7, clause 21 |

#### **Battery duration**

| Specification item | Туре                   | condition        |
|--------------------|------------------------|------------------|
| 3 W                | NiMH 1300 mAh AA-Cells | 1 hour duration  |
| 3 W                | NiMH 2500 mAh sC-Cells | 3 hours duration |

<sup>\*</sup> Batteries are sufficient charged within 24 hours after being discharged.

## DALI

The TrustSight point drivers with DALI functionality comply with DALI standard IEC IEC62386 as well as IEC62386-202 (particular requirement for control gear - Self-contained emergency lighting).

## Commands supported:

- · Query lamp failure
- Rest
- Inhibit
- Re\_light\_reset\_inhibit
- Start function test
- · Start duration test
- Stop test

3 - 11

- Reset function test done flag
- · Reset duration test done flag
- · Reset lamp time
- Store test execution timeout
- Store prolong time
- · Start identification

- · Query battery charge
- Query test timing
- Query duration test result
- · Query lamp emergency time
- · Query lamp total operation time
- · Query emergency level
- · Query rated duration
- Query emergency mode
- · Query features
- Query Failure status
- · Query Emergency status
- Query Failure status
- Query Emergency status

# Wiring & Connections

| Specification item        | value  | Unit | Condition  |
|---------------------------|--------|------|--|
| Input wire cross-section  | 0.51.5 | mm²  | WAGO250 (3.5mm), solid wire                          |
|                           | 1624   | AWG  | WAGO250 (3.5mm), solid wire                          |
| Input wire strip length   | 8.59.5 | mm   |  |
| Output wire cross-section | 0.51.5 | mm²  | WAGO250 (3.5mm), solid wire                          |
|                           | 1624   | AWG  | WAGO250 (3.5mm), solid wire                          |
| Input wire strip length   | 8.59.5 | mm   |  |
| Maximum cable length      | 600    | mm   | Total length of wiring including LED module, one way |



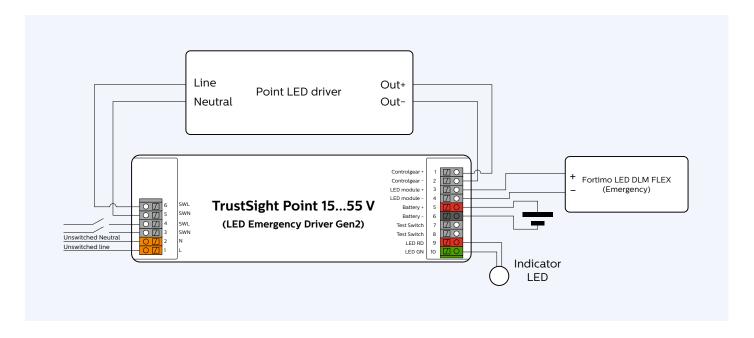
#### Insulation

4 - 11

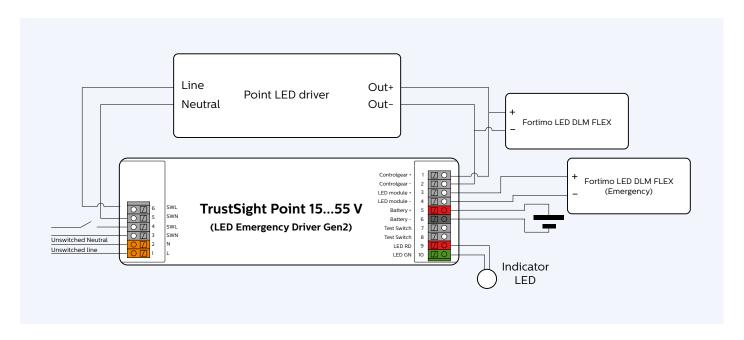
|             | Mains  | battery | LED   | Status LED | Test switch | DALI |
|-------------|--------|---------|-------|------------|-------------|------|
|             |        |         |       |            |             |      |
| Mains       | NA     |         |       |            |             |      |
| Battery     | Basic  | NA      |       |            |             |      |
| LED         | Double | Basic   | NA    |            |             |      |
| Status LED  | Basic  | No      | Basic | NA         |             |      |
| Test switch | Basic  | No      | Basic | No         | NA          |      |
| DALI        | Basic  | Basic   | Basic | Basic      | Basic       | NA   |

## For DLM FLEX / SLM

5 - 11

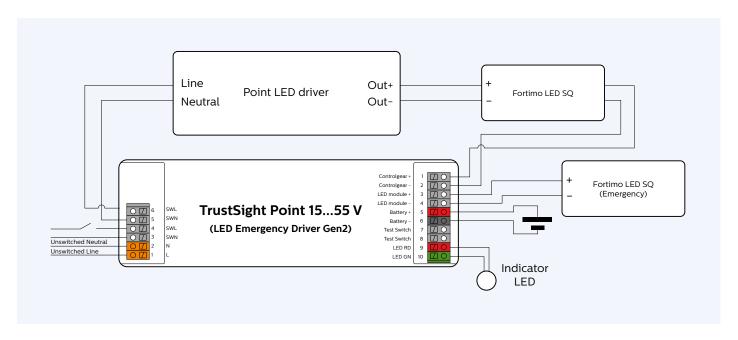


#### For SLM GEN4 (in parallel)



#### For Fortimo LED line SQ

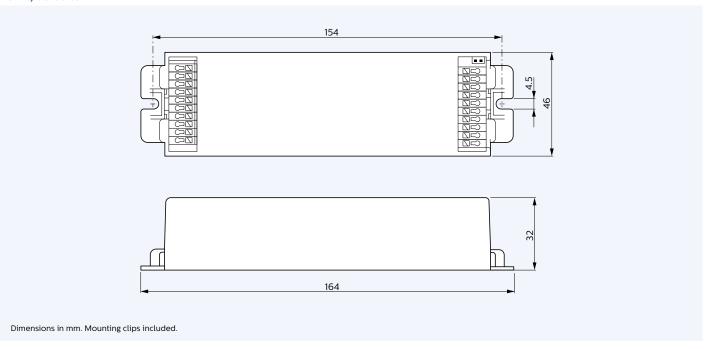
6 - 11



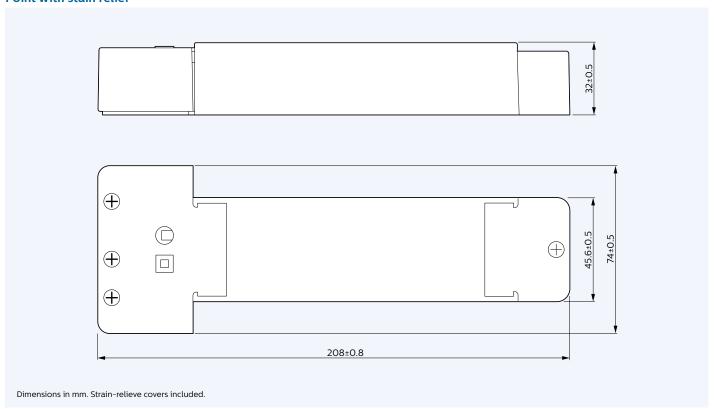
# Dimensions and weight

|                           | 1     | 1    |           |
|---------------------------|-------|------|-----------|
| Specification item        | value | Unit | Condition |
| Length (A1)               | 164   | mm   |           |
| Width (B1)                | 46    | mm   |           |
| Height (C1)               | 32    | mm   |           |
| Fixing hole diameter (D1) | 3.1   | mm   |           |
| Fixing hole distance (A2) | 154   | mm   |           |
| Weight                    | 190   | gram |           |

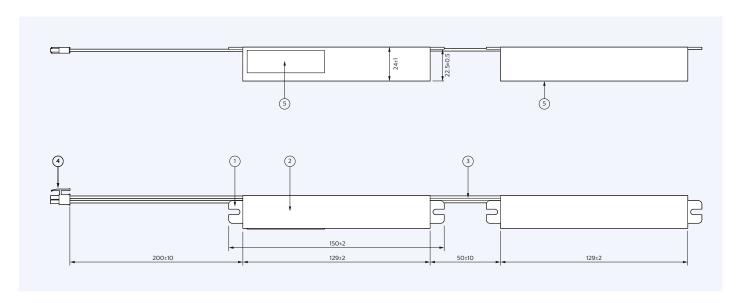
## Point, as build in



## Point with stain relief



## 2500 mAh battery

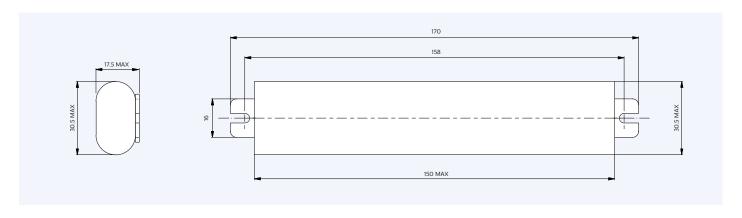


## **Parts List**

| Item | Quantity | Part number | Description                   |
|------|----------|-------------|-------------------------------|
| 1    | 1        |             | PCB material CEM1 (no copper) |
| 2    | 6        |             | Cell H-SC2500BT 42.4*22.2     |
| 3    | 1        |             | Battery/PCB insulator wrap    |
| 4    | 1        |             | Connector + Wire (red/black)  |
| 5    | 1        |             | Label                         |

## 1300 mAh battery

8 - 11



# Operational temperatures and humidity

| Specification item               | value  | Unit | Condition                     |
|----------------------------------|--------|------|-------------------------------|
| Ambient temperature              | -20+55 | °C   |                               |
| Ambient temperature battery pack | 0+50   | °C   |                               |
| Tcase-max                        | 75     | °C   | lifetime 70 khrs              |
| Tcase-max battery pack           | 55     | °C   | Lifetime 4 years in operation |
| Maximum housing temperature      | 90     | °C   | In case of failure            |
| Relative humidity                | 1090   | %    | Non-condensing                |

## Storage temperature and humidity

| Specification item               | value  | Unit | Condition      |
|----------------------------------|--------|------|----------------|
| Ambient temperature TrustSight   | -25+70 | °C   |                |
| Ambient temperature battery pack | -20+30 | °C   | For 6 months   |
| Relative humidity                | 595    | %    | Non-condensing |

#### Lifetime

| Specification item | value  | Unit  | Condition                                       |
|--------------------|--------|-------|---|
| Driver lifetime    | 70,000 | hours | Measured temperature at Tc-point is Tcase- max. |
|                    |        |       | Maximum failures = 10%                          |

## Features / protections

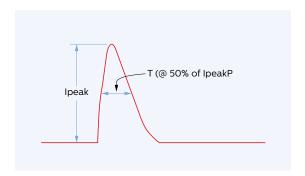
| Specification item                          | value | Remark | Condition            |
|---|-------|--------|----------------------|
| Open load protection – LED                  | Yes   |        | Automatic recovering |
| Short circuit protection - LED              | Yes   |        | Automatic recovering |
| Hot wiring -LED                             | No    |        |                      |
| Suitable for fixtures with protection class | 1/11  |        |                      |
| Open load protection – battery              | Yes   |        | Automatic recovering |
| Short circuit protection – battery          | Yes   |        | Automatic recovering |
| Reverse polarity protection – battery       | Yes   |        | Automatic recovering |

## Certificates and standards

| Specification item               | value                                |  |  |
|----------------------------------|--------------------------------------|--|--|
| Approval marks                   | CE / ENEC / RCM                      |  |  |
| ngress Protection classification | 20                                   |  |  |
| Compliances and approvals        | • IEC 61347-2-7                      |  |  |
|                                  | • IEC 60598-2-22                     |  |  |
|                                  | • EL (F-mark) acc. IEC61347-1 ed 8.0 |  |  |
|                                  | · IEC61347                           |  |  |
|                                  | • EN 55015/CISPR15                   |  |  |
|                                  | • IEC / EN 61000-3-2                 |  |  |
|                                  | • IEC / EN 61000-3-3                 |  |  |
|                                  | • IEC 62384                          |  |  |
|                                  | • EN 61951-2                         |  |  |
|                                  | • EN 60598-1 (650 °C/850 °C)         |  |  |
|                                  | • AS 2293.1-2005 (+A1)               |  |  |
|                                  | • AS 2293.2-1995 (+A2)               |  |  |
|                                  | • AS 2293.3-2005                     |  |  |
|                                  | • IEC 62386                          |  |  |
|                                  | • IEC 62386-202                      |  |  |

## Inrush current

| Specification item                 | value | Unit | Condition  |
|------------------------------------|-------|------|--|
| Inrush current I <sub>peak</sub>   | 5     | A    | Input voltage 230 V                                    |
| Mains current pulse time half peak | 109   | μs   | Input voltage 230 V, measured at 50% I <sub>peak</sub> |



# Earth leakage current

| Specification item    | value | Unit | Condition                           |
|-----------------------|-------|------|-------------------------------------|
| Typical touch current | < 0.7 | mApk | To all accessible parts, LED module |
|                       |       |      | contribution not included           |

# Surge capability

10 - 11

| Specification item                  | value | Unit | Condition |
|-------------------------------------|-------|------|-----------|
| Mains surge capability (diff. mode) | 1     | kV   |           |
| Mains surge capability (comm. mode) | 2     | kV   |           |

