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

October 2017

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

Independent housing

Independent battery box

LED indicator
Lenght cable is 1 meter

Battery and harness

TrustSight LED Point 3W 3 hour

Independent housing

Independent battery box

LED indicator
Lenght cable is 1 meter

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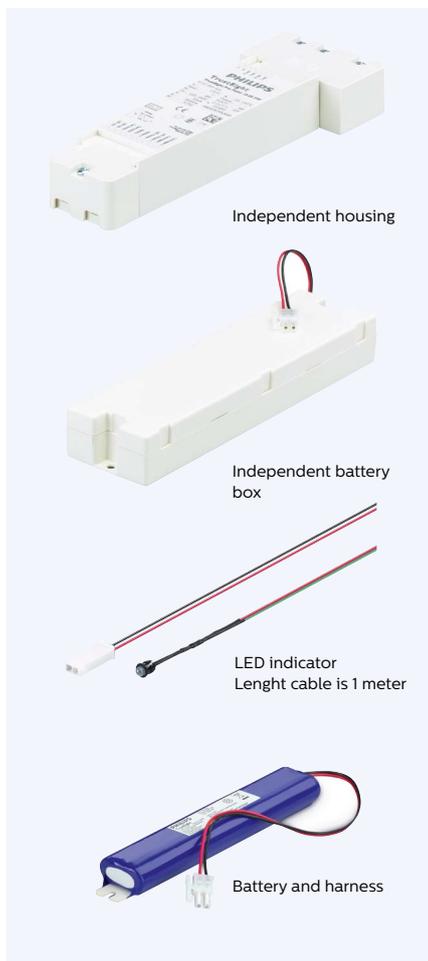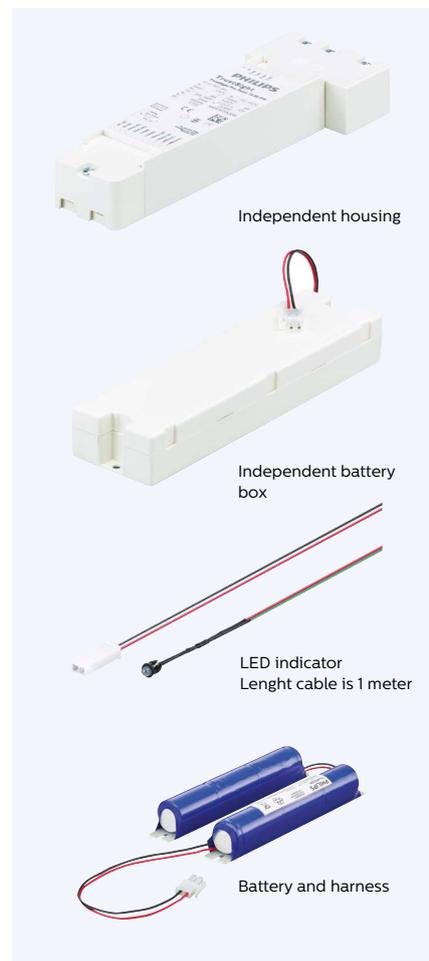
A test switch can be connected to the TrustSight basic. Specification: switch NO. Push to make with a spring relieve. Example given in the picture below

Electrical input data

Specification item	value	Unit	Condition
Nominal input voltage	220...240	Vac	
Nominal input frequency	50...60	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	202...254	Vac	Performance range
Input frequency AC	47.5...63	Hz	Performance range
Switched mains contact current	2.4	A	Maximum permissible current
Maximum input voltage connected to the control gear input	55	V	Permissible voltage

Electrical output data

Specification item	value	Unit	Condition
Regulation method	Constant Power		
Output voltage	15...55	Vdc	SELV
Output voltage max.	60	Vpk	Peak voltage at open load
Output power	3	W	
Output power tolerance	+ 10	%	
Switch over time ac..dc	< 500	ms	Acc. IEC61347-2-7, clause 21

Battery duration

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

* 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
- 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	0.5..1.5	mm²	WAGO250 (3.5mm), solid wire/stranded wire
	16..24	AWG	WAGO250 (3.5mm), solid wire/stranded wire
Input wire strip length	8.5..9.5	mm	
Output wire cross-section	0.5..1.5	mm²	WAGO250 (3.5mm), solid wire/stranded wire
	16..24	AWG	WAGO250 (3.5mm), solid wire/stranded wire
Input wire strip length	8.5..9.5	mm	
Maximum cable length	600	mm	Total length of wiring including LED module, one way

10	DA out	Controlgear +	1
9	DA in	Controlgear −	2
8	DA out	LED module +	3
7	DA in	LED module −	4
6	SWL	Battery +	5
5	SWN	Battery −	6
4	SWL	Test Switch	7
3	SWN	Test Switch	8
2	N	LED RD	9
1	L	LED GN	10

TrustSight Point 15...55 V

(LED Emergency Driver Gen2)
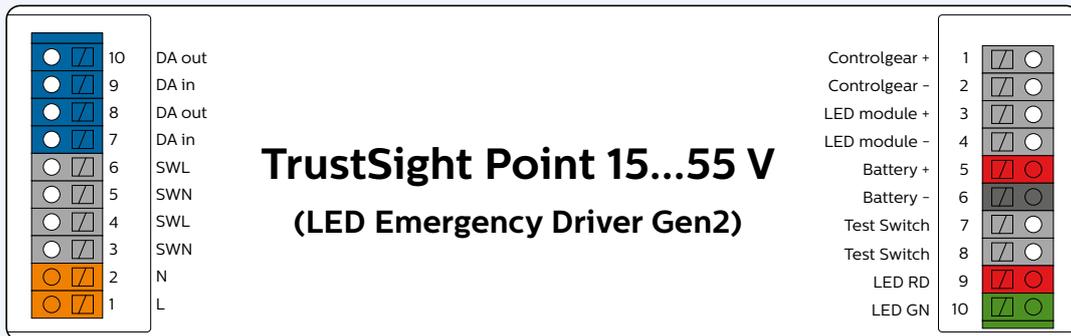
Insulation

	Mains	battery	LED	Status LED	Test switch	DALI
Mains	NA					
Battery	Basic	NA				
LED	Double/SELV	Basic	NA			
Status LED	Basic	No	Basic	NA		
Test switch	Basic	No	Basic	No	NA	
DALI	Basic	Basic	Basic	Basic	Basic	NA

Connection schemes

For DLM FLEX / SLM

Line
Neutral

Point LED driver

Out+
Out−

TrustSight Point 15...55 V

(LED Emergency Driver Gen2)

6	SWL
5	SWN
4	SWL
3	SWN
2	N
1	L

Unswitched Neutral
Unswitched line

Controlgear +	1
Controlgear −	2
LED module +	3
LED module −	4
Battery +	5
Battery −	6
Test Switch	7
Test Switch	8
LED RD	9
LED GN	10

+ Fortimo LED DLM FLEX
− (Emergency)

Indicator
LED
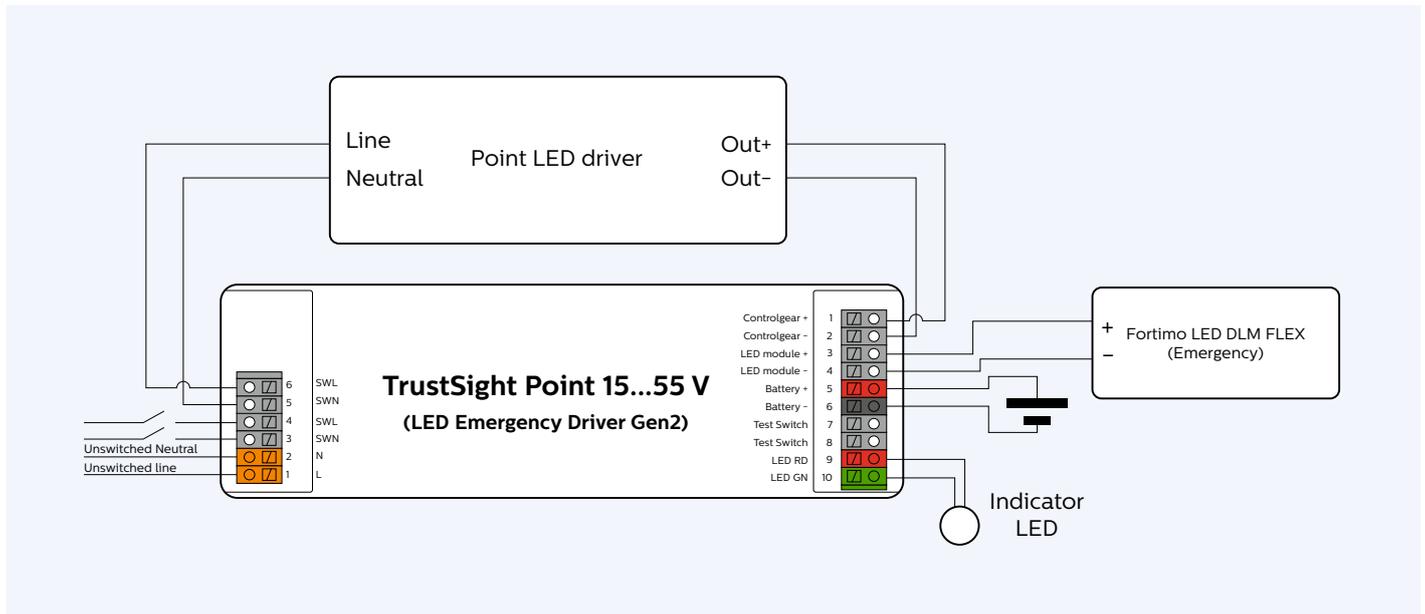
Connection schemes

For SLM GEN4 (in parallel)
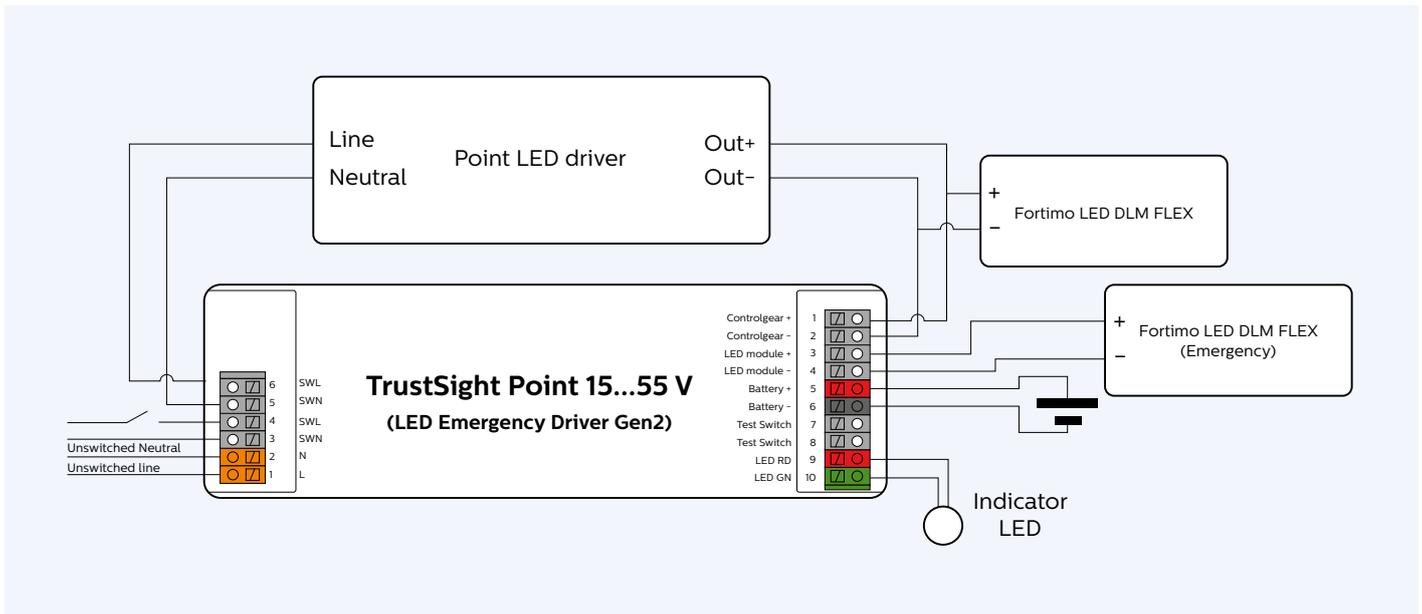
For Fortimo LED line SQ
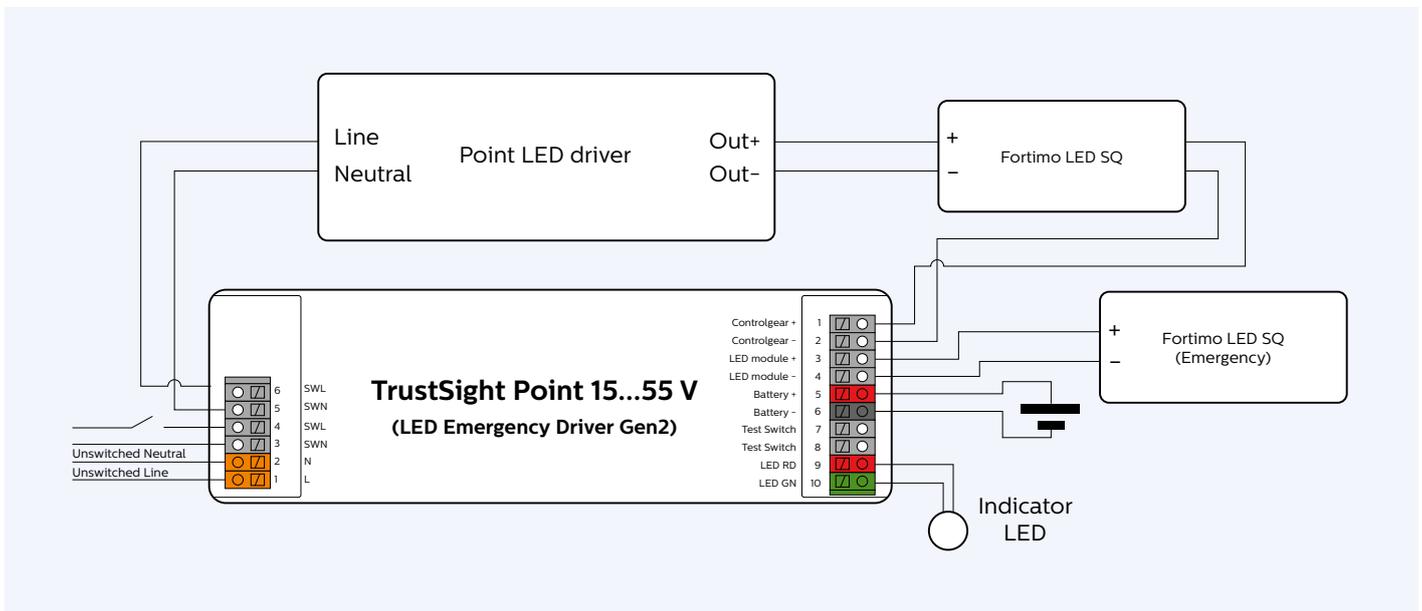
Dimensions and weight

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
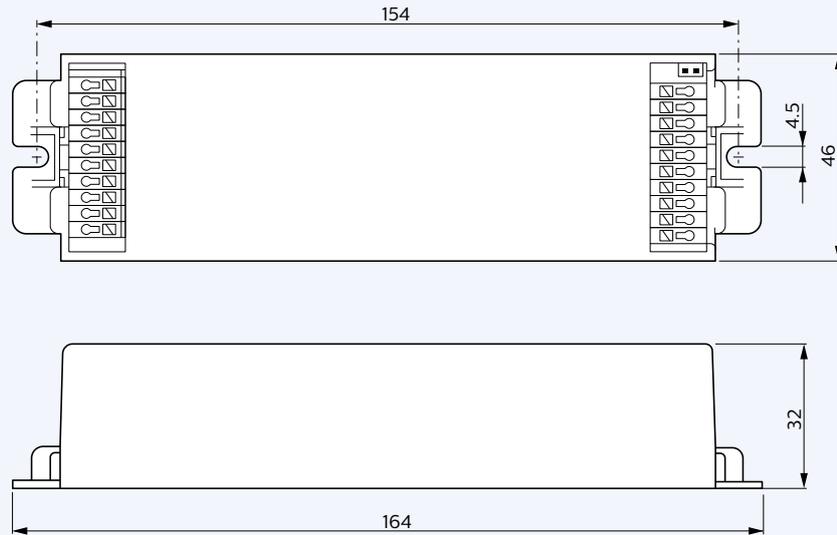
Dimensions in mm. Mounting clips included.

Point with stain relief
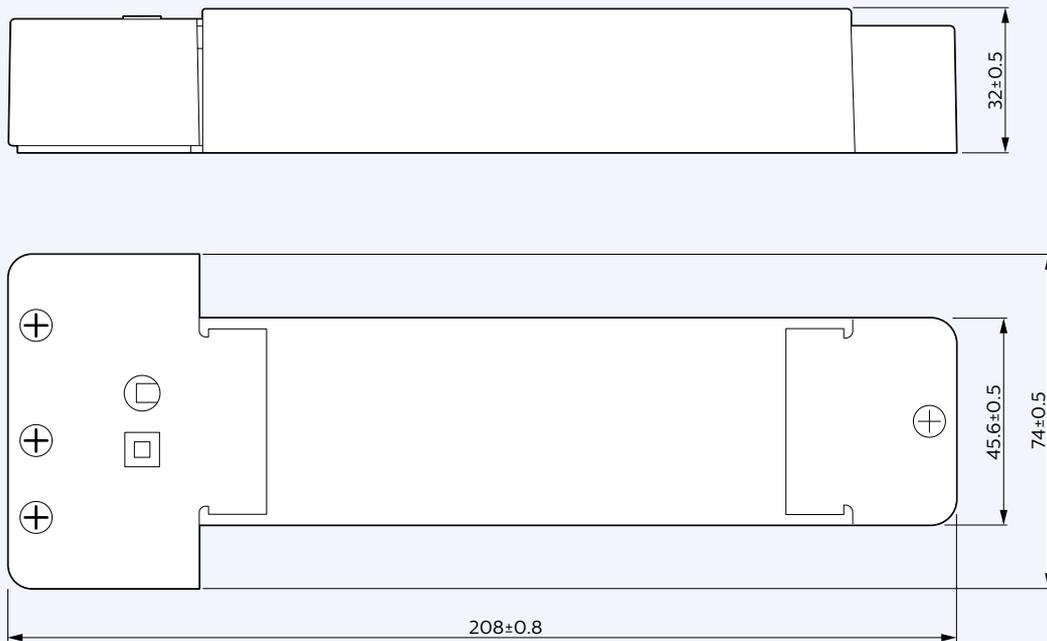
Dimensions in mm. Strain-relieve covers included.

Mechanical drawings

2500 mAh battery
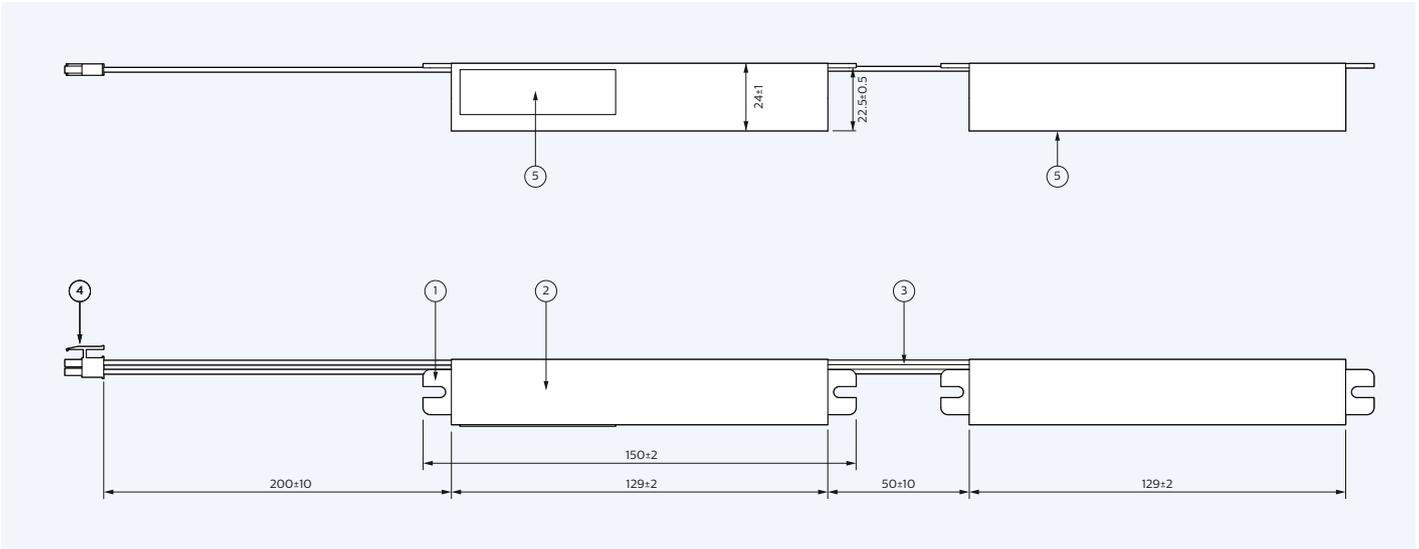
Parts List

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
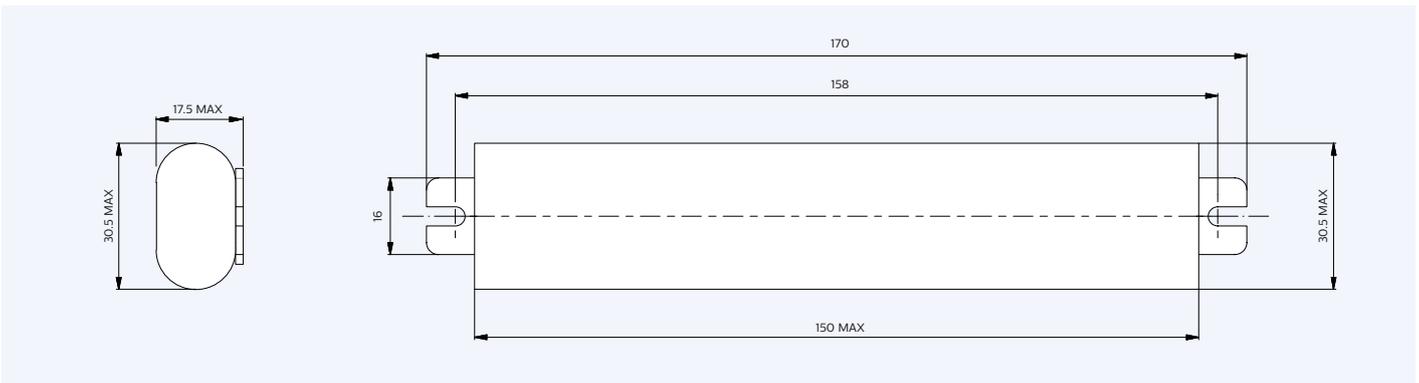
Operational temperatures and humidity

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	during charging
Tcase-max battery pack	50	°C	Lifetime 4 years in operation
Maximum housing temperature	90	°C	In case of failure
Relative humidity	10...90	%	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	5...95	%	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	I / II		
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
Ingress 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$_{peak}$	5	A	Input voltage 230 V
Mains current pulse time half peak	109	µs	Input voltage 230 V, measured at 50% I$_{peak}$
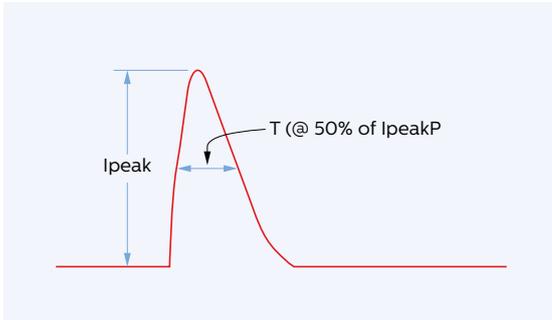
Earth leakage current

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

Surge capability

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

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www.philips.com/xitanium

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Data subject to change