

# SubstiTUBE® T8 Connected Advanced UO 0.6m/1.2m/ 1.5m EM Generation 2

## Datasheet



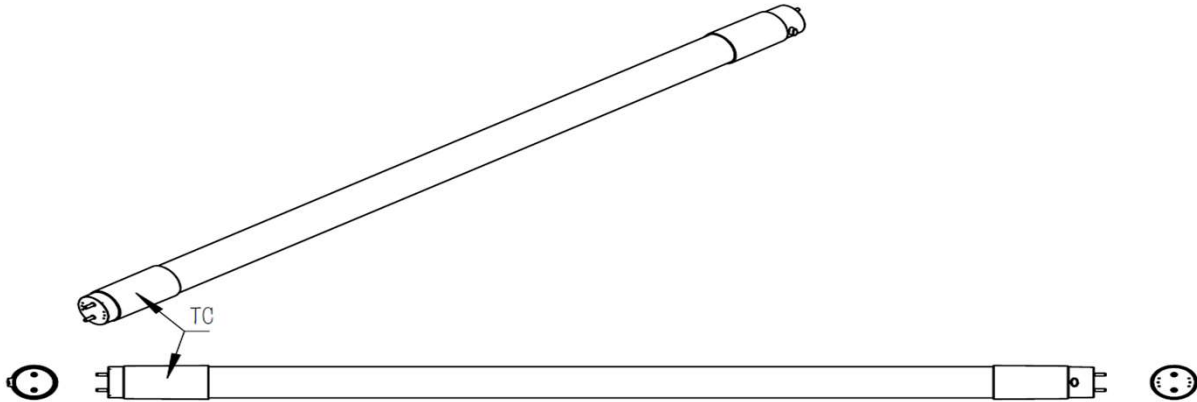
- Suitable to Electro Magnetic Ballast (EM) / Mains
- No bending thanks to glass technology
- Lower maintenance cost thanks to longer lifetime and lower energy consumption
- Glass tube with coated protection sheet.
- Applicable in car parks, industry area
- Works with LEDVANCE Connected Sensor. Wireless connection. **Zigbee 3.0**
  - Connected Sensor ST8 LB Gen2: **4058075232969**
  - Connected Sensor ST8 HB Gen2: **4058075232983**

## Technical Features

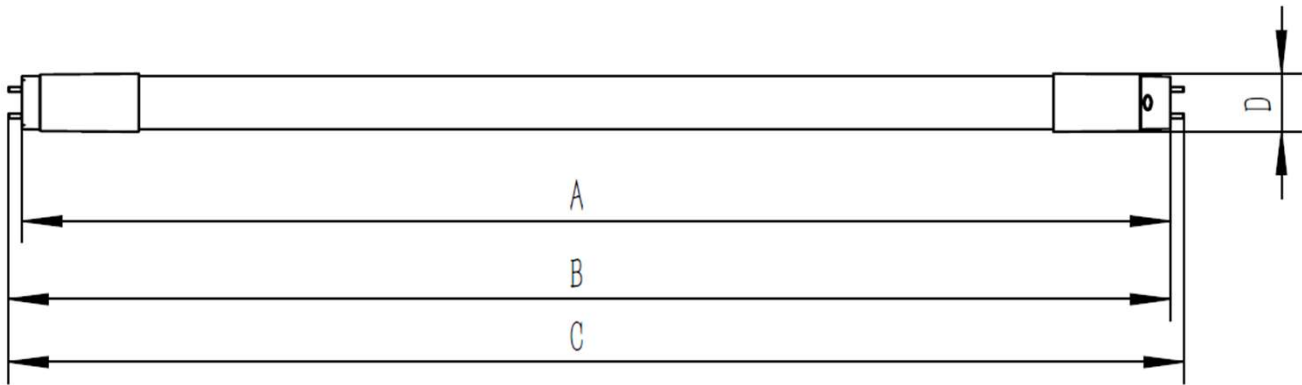
- T8 LED tube made of glass with G13 socket
- Weight: 0.6m: 117g 1.2m: 214g 1.5m: 252g
- No bending thanks to glass technology
- Direct retrofit for CCG / Mains\*
  - Power factor > 0.9
- Up to 50.000 h lifetime (L70/B50)
- Switching cycles: 200.000
- Color Rendering Index (CRI): 83
- Overpower and short circuit protected
- RoHS-conformity, no mercury
- **Dimmable only with LEDVANCE Connected Sensor**
- Energy Efficiency Class: A++
- Beam angle: >160°

Technical operating data	Color	Colortemp. [K]	Lum. Flux [lm]	Voltage [V] / Frequency [Hz] / Input Current [mA]	Power [W]	Energy Consumption kWh/1000h
ST8AU-0-6m7.5W-840-CON	Cool White	4000	100	35 mA ( CCG/ Mains)	7.5	8 kWh
ST8AU-0-6m7.5W-865-CON	Cool Daylight	6500	100			
ST8AU-12m-16W-840-CON	Cool White	4000	2400	73 mA ( CCG/ Mains)	16	16 kWh
ST8AU-12m-16W-865-CON	Cool Daylight	6500	2400			
ST8AU-15m-24W-840-CON	Cool White	4000	3600	106 mA ( CCG/ Mains)	24	24 kWh
ST8AU-15m-24W-865-CON	Cool Daylight	6500	3600			

Minimum / Maximum ratings	Ambiant temperature Ta	Maximum temperature at Tc test point	Storage temperature Ts
ST8AU-0.6M-CON		59°C	
ST8AU-1.2M-CON	-20°C ... 50°C	67°C	-20°C...80°C
ST8AU-1.5M-CON		68°C	



TC measurement point is where OSRAM lamp logo is positioned



Drawings	A [mm]	B [mm]	C [mm]	D [mm]
ST8AU-0.6M-CON	588.7	595.7	602.7	27.8
ST8AU-1.2M-CON	1198.3	1205.5	1212.3	27.8
ST8AU-1.5M-CON	1499	1506	1513	27.8

## Safety and Application notes

The SubstiTUBE® Connected tube must not be damaged or operated in a damaged condition.

- When operating with CCG,



*Lamp to be used in dry conditions or in a luminaire that provides protection*



*Lamp not suitable for high frequency operation*



*Lamp suitable for 50 Hz or 60 Hz operation*



*Lamp not suitable for emergency operation*



*LED replacement starter*



*Dimming works with LEDVANCE Connected Sensor*

- The SubstiTUBE® emits light only with a limited angle (>160°), not like a fluorescent tube with 360° output.
- Due to the characteristic light distribution of the SubstiTUBE®, the resulting luminaire light characteristic is likely to change.
- It is not guaranteed that e.g. standards for lighting at working places will be complied to after replacement. A photometric check of the installation is recommended.
- SubstiTUBE® products differ in their diameters and geometries from fluorescent lamps. Their use in open batten luminaires with gaskets is possible if no excessive force is expended during the fixing. Obtaining the necessary IP protection in open batten luminaires with gaskets cannot be ensured.
- SubstiTUBE® may also be driven directly on line voltage 220-240V. In order to grant a safe operation mode please refer to the installation instructions for further information.
- Photobiological Safety of lamps and lamp systems according to IEC 62471. Risk Group: Exempt

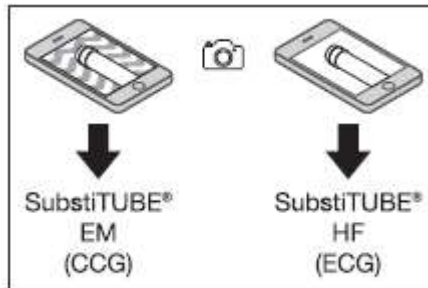
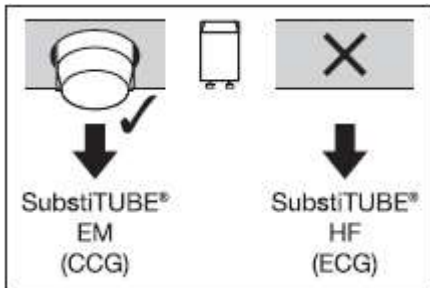


The SubstiTUBE® is protected according to IP20. Applications with external risk of moisture and dust can be served with an adequately protected luminaire.

## Installation instructions for SubstiTUBE® T8 ADVANCED UO CONNECTED EM

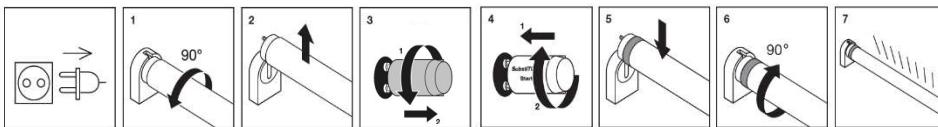
**Starter-Test:** See whether the luminaire has a starter. If it does not have a starter, you need an operation on an Electronic Ballast (HF).

**Camera-Test:** Examine with a smart phone camera. If the light does not flicker you need an operation on an Electronic Ballast (HF).



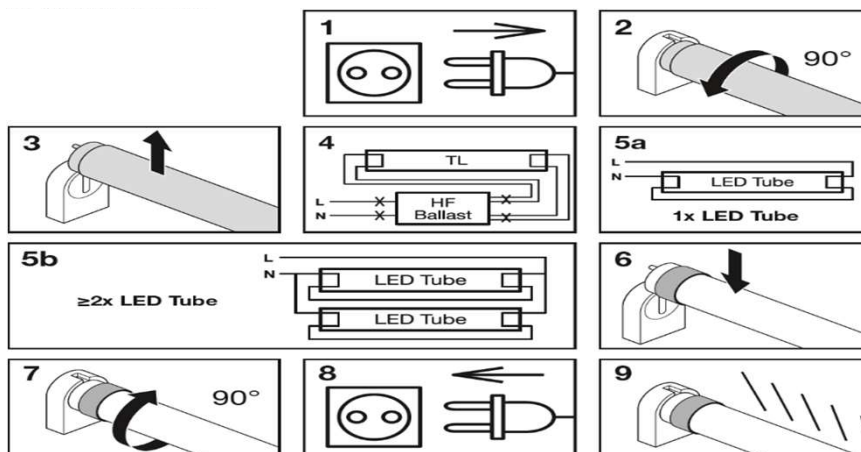
### Installation Instructions for CCG (EM)

- Make sure that the supply voltage is disconnected.
- Turn the conventional lamp 90° and take it out of the socket carefully
- Remove **conventional starter** from the luminaire
- **Insert and latch the LEDStarter into socket.**
- Insert SubstiTUBE® Connected into socket and locate into position by turning 90°.
- Check light emission direction.



### Installation Instructions for Mains ( 230V)

- Make sure that the supply voltage is disconnected
- Turn the conventional lamp 90° and take it out of the socket carefully
- Rewiring according to installation guideline, **cut and remove ballast.**
- Insert SubstiTUBE® into socket and locate into position by turning 90°
- Connect SubstiTUBE® to supply voltage
- Check light emission direction.
- **Please do not insert fluorescent lamp into socket after rewiring.**



### Maximum amount of SubstiTUBE® T8 Advanced UO CONNECTED EM on 1 circuit breaker

#### 0.6m

Circuit breaker 10 A (B type) // CCG without compensation 200 pcs  
 // CCG with compensation 18 pcs  
 // Direct mains operation 230v 200 pcs

Circuit breaker 16 A (B type) // CCG without compensation 320 pcs  
 // CCG with compensation 30 pcs  
 // Direct mains operation 230v 320 pcs

#### 1.2m

Circuit breaker 10 A (B type) // CCG without compensation 95pcs  
 // CCG with compensation 16pcs  
 // Direct mains operation 230v 95pcs

Circuit breaker 16 A (B type) // CCG without compensation 155pcs  
 // CCG with compensation 27pcs  
 // Direct mains operation 230v 155pcs

#### 1.5m

Circuit breaker 10 A (B type) // CCG without compensation 65 pcs  
 // CCG with compensation 14 pcs  
 // Direct mains operation 230v 65 pcs

Circuit breaker 16 A (B type) // CCG without compensation 105 pcs  
 // CCG with compensation 24 pcs  
 // Direct mains operation 230v 105 pcs

Ordering guide	Light color	EAN*	S-Unit**
ST8AU-0.6M-7.5W-840-CON	Cool White / 4000 K	<b>4058075187337</b>	10 x 1
ST8AU-0.6M-7.5W-865-CON	Cool Daylight / 6500 K	<b>4058075187351</b>	
ST8AU-1.2m-16W-840-CON	Cool White / 4000 K	<b>4058075187375</b>	10 x 1
ST8AU-1.2m-16W-865-CON	Cool Daylight / 6500 K	<b>4058075187399</b>	
ST8AU-1.5m-24W-840-CON	Cool White / 4000 K	<b>4058075187634</b>	10 x 1
ST8AU-1.5m-24W-865-CON	Cool Daylight / 6500 K	<b>4058075187658</b>	

\* EAN: Ordering number per single module

\*\* S-Unit: Lamps per shipping unit

### Sales and Technical Support

Sales and technical support is given by the local LEDVANCE subsidiaries. On our worldwide homepage all LEDVANCE subsidiaries are listed with complete address and phone numbers.

### Further Information

Downloads: Eulumdat / IES files, CE declaration  
[www.ledvance.com/Substitube](http://www.ledvance.com/Substitube)