

# PRODUCT DATASHEET ST8A-EM 21 W/4000 K 1500 mm

SubstiTUBE T8 EM ADVANCED | LED tubes for electromagnetic control gear (CCG)



## Areas of application

- General illumination within ambient temperatures from -20...+50 °C
- Illumination of production areas
- Traffic zones and corridors
- Supermarkets and department stores
- Industry

## **Product benefits**

- No bending thanks to glass tube
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 64 % (compared to T8 fluorescent lamp on CCG)
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Very high resistance to switching loads
- Also suitable for operation at low temperatures

#### **Product features**

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- Low flicker according to EU 2019-2020 (SVM  $\leq$  0.4 / PstLM  $\leq$  1)
- Single and tandem operation on conventional control gear (0.6 m version)
- Tube made of glass



- Mercury-free and RoHS compliant
- Uniform illumination
- Type of protection: IP20

## TECHNICAL DATA

## Electrical data

Nominal wattage	21 W
Construction wattage	21.00 W
Nominal voltage	230 V
Nominal current	97 mA
Type of current	AC
Power factor $\lambda$	> 0.95

## Photometrical data

Luminous flux	2400 lm
Luminous efficacy	114 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool White
Color temperature	4000 K
Color rendering index Ra	> 83
Light color	840
Standard deviation of color matching	≤5 sdcm

# Light technical data

Beam angle	170 °
Warm-up time (60 %)	< 1.00 s
Starting time	< 0.5 s

## **Dimensions & Weight**

Overall length	1513.00 mm
Diameter	25.50 mm
Tube diameter	27,5 mm
Base diameter	25,7 mm
Maximum diameter	26 mm
Product weight	238.5 g

# Temperatures & operating conditions

## Lifespan

Number of switching cycles	200000
Lumen maintenance at end of service lifetime	0.70
Rated lamp survival factor at 6,000 h	≥ 0.90

#### Additional product data

Base (standard designation)	G13
Mercury content	0.0 mg
Mercury-free	Yes

## Capabilities

Dimmable	No
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## Certificates & Standards

Energy efficiency class	A+ <sup>1)</sup>
Energy consumption	25.00 kWh/1000h
Type of protection	IP20
Standards	CE

1) Energy efficiency class (EEC) on a scale of A++ (highest efficiency) to E (lowest efficiency)

## Country-specific categorizations

Order reference	ST8A-1.5M 21W/8
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## LOGISTICAL DATA

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Temper	rature range at storage	-20+80 °C

## Energy labelling regulation data acc EU 2019/2015

Light source cap-type (or other electric interface)	G13
Length	1513.00 mm
Height	25.50 mm
Width	25.50 mm

## EQUIPMENT / ACCESSORIES

- Suitable for operation with low-loss and conventional control gears

## Safety advice

- Not suitable for operation with electronic control gear.

- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.

## DOWNLOAD DATA

Photometric and lighting design files	Document name
IES file (IES)	ST8 21W 2400lm - AC02468

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075034273	Sleeve 1	1,607 mm x 30 mm x 30 mm	307.52 g	1.45 dm <sup>3</sup>
4058075034280	Shipping box 25	1,645 mm x 157 mm x 170 mm	8652.00 g	43.91 dm <sup>3</sup>

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

#### **References / Links**

- For current information see www.ledvance.com/substitube

#### Legal advice

- When used to replace a T8 fluorescent lamp the total energy efficiency and light distribution depends on the design of the lighting system.

#### DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.