

PRODUCT DATASHEET

ST8S-EM 7.3 W/6500 K 600 mm

SubstiTUBE T8 EM STAR | Economic LED tubes for electromagnetic control gears



Areas of application

- Corridors, stairways, parking garages
- Cooling and storage rooms
- Warehouses
- Domestic applications
- General illumination within ambient temperatures from -20...+45 °C

Product benefits

- High color homogeneity
- Energy savings of up to 68 % compared to conventional T8 fluorescent lamps
- Instant flickerfree starting

Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- T8 LED tube made of glass with G13 base
- Low flicker according to EU 2019-2020 ($SVM \leq 0.4$ / $PstLM \leq 1$)
- Mercury-free and RoHS compliant
- Single and tandem operation on conventional control gear (0.6 m version)
- Type of protection: IP20



TECHNICAL DATA**Electrical data**

Nominal wattage	7.3 W
Construction wattage	7.30 W
Nominal voltage	220...240 V
Nominal current	35 mA
Type of current	AC
Inrush current	30 A
Operating frequency	50...60 Hz
Mains frequency	50...60 Hz
Max. lamp number on MCB B10 A	200
Max. lamp number on MCB B10 A - CCG without compensation	200
Max. lamp number on MCB B10 A - CCG with compensation	20
Max. lamp number on MCB B16 A	320
Max. lamp number on MCB B16 A - CCG without compensation	320
Max. lamp number on MCB B16 A - CCG with compensation	32
Total harmonic distortion	< 20 %
Power factor λ	> 0.90

Photometrical data

Luminous flux	800 lm
Luminous efficacy	109 lm/W
Lumen main.fact.at end of nom.life time	0.70
Light color (designation)	Cool Daylight
Color temperature	6500 K
Color rendering index Ra	≥80
Light color	865
Standard deviation of color matching	≤6 sdcn
Flickering metric (Pst LM)	1
Stroboscope effect metric (SVM)	0,9

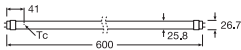


EPREL data spectral diagram PROF
LEDr 6500K

Light technical data

Beam angle	190 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s

Dimensions & Weight



Overall length	603.00 mm
Length with base excl. base pins/connection	600,00 mm
Diameter	26.70 mm
Base diameter	26,7 mm
Product weight	100.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+45 °C
Maximum temperature at tc test point	75 °C

Lifespan

Lifespan L70/B50 at 25 °C	30000 h
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
Design / version	Frosted

Capabilities

Dimmable	No
----------	----

Certificates & Standards

Energy efficiency class	F 1)
Energy consumption	8.00 kWh/1000h
Type of protection	IP20
Standards	CE
Photobiological safety group acc. to EN62778	RG0

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

Country-specific categorizations

Order reference	ST8S-0.6M 7,3W/
-----------------	-----------------

LOGISTICAL DATA

Temperature range at storage	-20...+80 °C
------------------------------	--------------

Energy labelling regulation data acc EU 2019/2015

Lighting technology used	LED
Non-directional or directional	NDLS
Mains or non-mains	MLS
Light source cap-type (or other electric interface)	G13
Connected light source (CLS)	No
Color-tuneable light source	No
Envelope	No
High luminance light source	No
Anti-glare shield	No
Correlated colour temperature type	SINGLE_VALUE
Standby power	0 W
Networked standby power for CLS	0 W
Claim of equivalent power	No
Length	603.00 mm

Height	26.70 mm
Width	26.70 mm
Chromaticity coordinate x	0,3123
Chromaticity coordinate y	0,3282
R9 Colour rendering index	0.00
Beam angle correspondence	SPHERE_360
Survival factor	0,90
Displacement factor	0,9
LED light source replaces a fluorescent light source	Yes
EPREL ID	1403069
Model number	AC25360




EQUIPMENT / ACCESSORIES

- Suitable for operation on magnetic control gear

Safety advice

- Operation in outdoor applications in suitable damp-proof luminaires possible according to data sheet and installation instruction.
- The Tc Point is located underneath the product label on the front side of the lamp.

DOWNLOAD DATA

Documents and certificates		Document name
	User instruction / safety instructions	SubstiTUBE STAR
	Declarations of conformity	EC Declaration of Conformity ST8S EM Gen10
Photometric and lighting design files		Document name
	Spectral power distribution	EPREL data spectral diagram PROF LEDr 6500K

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075455429	Sleeve 1	27 mm x 27 mm x 710 mm	145.00 g	0.52 dm ³

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075455436	Shipping box 8	755 mm x 184 mm x 130 mm	1590.00 g	18.06 dm ³

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/substitute

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.