

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 |

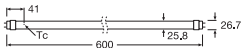


EPREL data spectral diagram PROF
LEDr 6500K

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 |
| Tube diameter | 25.8 mm |
| Base diameter | 26,7 mm |
| Maximum diameter | 27 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 |
|--------------|------------------------------|--------------------------------------|--------------|--------|
|--------------|------------------------------|--------------------------------------|--------------|--------|

| 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 |
| 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.