

PRODUCT DATASHEET

ST8MS-EM 7.3 W/4000 K 600 mm EM

SubstiTUBE T8 EM MOTION SENSOR | LED tubes with integrated microwave sensor for electromagnetic control gears (CCG), shatterproof



Areas of application

- General illumination within ambient temperatures from -20...+50 °C
- Corridors, stairways, parking garages
- Warehouses
- Walkways and corridors
- Storage rooms
- Logistics areas, transport facilities and corridors
- Car parks

Product benefits

- Suitable for closed luminaires thanks to microwave technology
- No bending thanks to glass tube
- Shatter protection thanks to special PET coating
- Support the implementation of the HACCP concepts from production through to presentation
- Very high resistance to switching loads
- Energy savings of up to 90 % compared to conventional fluorescent lamp
- Quick, simple and safe replacement of fluorescent lamps without rewiring the CCG
- 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
- Integrated microwave sensor with motion detection
- Automatic dimming to 20 % light output after 5 minutes without motion detection
- Automatic light switch off 7 minutes after the last motion detection



- Microwave sensor with 5,8 GHz
- Motion detection up to 5 m
- Low flicker according to EU 2019-2020 (SVM $\leq 0,4$ / PstLM ≤ 1)

TECHNICAL DATA

Electrical data

| | |
|--|---|
| Nominal wattage | 7.3 W |
| Construction wattage | 7.30 W |
| Nominal voltage | 220...240 V |
| Operating mode | Conventional control gear (CCG), Line voltage |
| Nominal current | 35 mA |
| Type of current | AC |
| Inrush current | 6.72 A |
| Operating frequency | 50...60 Hz |
| Mains frequency | 50...60 Hz |
| Max. lamp no. on circuit break. 10 A (B) | 130 |
| Max. lamp no. on circuit break. B10 A - CCG without compensation | 130 |
| Max. lamp no. on circuit break. B10 A - CCG with compensation | 15 |
| Max. lamp no. on circuit break. 16 A (B) | 208 |
| Max. lamp no. on circuit break. B16 A - CCG without compensation | 208 |
| Max. lamp no. on circuit break. B16 A - CCG with compensation | 25 |
| Total harmonic distortion | < 20 % |
| Power factor λ | > 0.90 |

Photometrical data

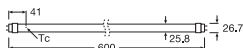
| | |
|---|---------------------------|
| Luminous flux | 1100 lm |
| Luminous efficacy | 150 lm/W |
| Lumen main.fact.at end of nom.life time | 0.70 |
| Light color (designation) | Cool White |
| Color temperature | 4000 K |
| Color rendering index Ra | 83 |
| Light color | 840 |
| Standard deviation of color matching | ≤ 5 sdc _m |
| Flickering metric (Pst LM) | 1 |
| Stroboscope effect metric (SVM) | 0,9 |



Light technical data

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

Dimensions & Weight



| | |
|---|-----------|
| Overall length | 604.00 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 | 110.00 g |

Temperatures & operating conditions

| | |
|--------------------------------------|--------------|
| Ambient temperature range | -20...+50 °C |
| Maximum temperature at tc test point | 62 °C |

Lifespan

| | |
|--|---------|
| Lifespan L70/B50 at 25 °C | 50000 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 |

Capabilities

| | |
|----------|----|
| Dimmable | No |
|----------|----|

Certificates & Standards

| | |
|--|-----------------|
| Energy efficiency class | D ¹⁾ |
| Energy consumption | 8.00 kWh/1000h |
| Type of protection | IP20 |
| Standards | CE; VDE |
| 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 | ST8MS-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 | 604.00 mm |
| Height | 26.70 mm |

| | |
|--|------------|
| Width | 26.70 mm |
| Chromaticity coordinate x | 0,3818 |
| Chromaticity coordinate y | 0,3797 |
| 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 | 1403003 |
| Model number | AC17919 |

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.
- Recommended maximum mounting height: 5 m

DOWNLOAD DATA

Documents and certificates



User instruction



Installation guide



Declarations Of Conformity CE

Photometric and lighting design files



UGR file (UGR table)



Spectral power distribution

LOGISTICAL DATA

| Product code | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075292413 | Sleeve 1 | 708 mm x 36 mm x 29 mm | 155.00 g | 0.74 dm ³ |
| 4058075292420 | Shipping box 8 | 753 mm x 182 mm x 125 mm | 2018.00 g | 17.13 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.