

## PRODUCT DATASHEET

### ST8A-EM 16.5 W/3000 K 1200 mm GEN11

SubstiTUBE Advanced Standard Output | High performance LED tubes for electromagnetic control gears



#### Areas of application

- General illumination within ambient temperatures from -20...+45 °C
- Illumination of production areas
- Traffic zones and corridors
- Supermarkets and department stores
- Industry
- Train stations
- Offices

#### Product benefits

- No bending thanks to glass technology
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 60 % (compared to T8 fluorescent lamp on CCG)
- Instant-on light, therefore ideally suitable in combination with sensor technology
- Also suitable for operation at low temperatures
- TRI Colour 3000K/4500K/6500K

#### Product features

- LED alternative to classic T8 fluorescent lamps in CCG luminaires
- Bright, robust and durable
- Uniform illumination
- Integrated ECG with high power factor



- T8 LED tube made of glass with G13 base
- Luminous efficacy: up to 127 lm/W
- Mercury-free and RoHS compliant

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## TECHNICAL DATA

### Electrical data

|                           |             |
|---------------------------|-------------|
| Nominal wattage           | 16.5 W      |
| Nominal voltage           | 220...240 V |
| Nominal current           | 73 mA       |
| Type of current           | AC          |
| Operating frequency       | 50/60 Hz    |
| Mains frequency           | 50/60 Hz    |
| Total harmonic distortion | < 20 %      |
| Power factor $\lambda$    | > 0.90      |

### Photometrical data

|                                         |            |
|-----------------------------------------|------------|
| Luminous flux                           | 2100 lm    |
| Luminous efficacy                       | 127 lm/W   |
| Lumen main.fact.at end of nom.life time | 0.70       |
| Light color (designation)               | Warm White |
| Color temperature                       | 3000 K     |
| Color rendering index Ra                | ≥80        |
| Light color                             | 830        |
| Standard deviation of color matching    | ≤6 sdcn    |

### Light technical data

|               |            |
|---------------|------------|
| Beam angle    | ˆ 160.00 ° |
| Starting time | < 0.5 s    |

### Dimensions & Weight

|                |            |
|----------------|------------|
| Overall length | 1200.00 mm |
| Diameter       | 28.00 mm   |
| Product weight | 175.00 g   |

### Temperatures & operating conditions

|                           |              |
|---------------------------|--------------|
| Ambient temperature range | -20...+45 °C |
|---------------------------|--------------|

### Lifespan

|                            |       |
|----------------------------|-------|
| Number of switching cycles | 50000 |
|----------------------------|-------|

### Additional product data

|                             |        |
|-----------------------------|--------|
| Base (standard designation) | G13    |
| Mercury content             | 0.0 mg |

### Capabilities

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

### Certificates & Standards

|                    |      |
|--------------------|------|
| Type of protection | IP20 |
|--------------------|------|

### Country-specific categorizations

|                 |                 |
|-----------------|-----------------|
| Order reference | ST8A-1.2M 16,5W |
|-----------------|-----------------|

### Energy labelling regulation data acc EU 2019/2015

|                                                     |            |
|-----------------------------------------------------|------------|
| Light source cap-type (or other electric interface) | G13        |
| Length                                              | 1200.00 mm |
| Height                                              | 28.00 mm   |
| Width                                               | 28.00 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)                      | ST8A 1.2M 16.5W 830 230V EM G11APM OSRAM |
|  | Light distribution curve type polar | ST8A 1.2M 16.5W 830 230V EM G11APM OSRAM |

### LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume               |
|---------------|------------------------------|--------------------------------------|--------------|----------------------|
| 4099854035395 | Sleeve<br>1                  | 1,255 mm x 28 mm x 28 mm             | 194.00 g     | 1.01 dm <sup>3</sup> |

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854035401 | Shipping box<br>25           | 1,310 mm x 168 mm x 170 mm           | 5663.00 g    | 37.41 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.

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### References / Links

- For current information see [www.ledvance.com/substitute](http://www.ledvance.com/substitute)

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### 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.

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### DISCLAIMER

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