

PRODUCT DATASHEET

ST8A-EM 16.5 W/6500 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

TECHNICAL DATA

Electrical data

Nominal wattage	16.5 W
Construction wattage	16.50 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 λ	> 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)	Daylight
Color temperature	6500 K
Color rendering index Ra	≥80
Light color	865
Standard deviation of color matching	≤6 sdcn

Light technical data

Beam angle	› 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
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Lifespan

Number of switching cycles	50000
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Additional product data

Base (standard designation)	G13
Mercury content	0.0 mg

Capabilities

Dimmable	No
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Certificates & Standards

Type of protection	IP20
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Country-specific categorizations

Order reference	ST8A-1.2M 16,5W
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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 865 230V EM G11APM OSRAM
	Light distribution curve type polar	ST8A 1.2M 16.5W 865 230V EM G11APM OSRAM

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
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Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854035432	Sleeve 1	1,255 mm x 28 mm x 28 mm	194.00 g	1.01 dm ³
4099854035449	Shipping box 25	1,310 mm x 168 mm x 170 mm	5664.00 g	37.41 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.