

PRODUCT DATASHEET

ST8AU-EM 23.1 W/4000 K 1500 mm EM

SubstiTUBE T8 EM ADVANCED ULTRA OUTPUT | LED tubes for electromagnetic control gear (CCG)



Areas of application

- General illumination within ambient temperatures from -20...+50 °C
- Illumination of production areas
- Traffic zones and corridors
- Supermarkets and department stores

Product benefits

- No bending thanks to glass tube
- Quick, simple and safe replacement without rewiring
- Energy savings of up to 60 % (compared to T8 fluorescent lamp on CCG)
- Very high resistance to switching loads
- High luminous flux for sophisticated lighting tasks
- Also suitable for operation at low temperatures
- Instant-on light, therefore ideally suitable in combination with sensor technology

Product features

- LED replacement for classic T8 fluorescent lamps with G13 socket for use in CCG luminaires or on AC mains
- Low flicker according to EU 2019-2020 (SVM $\leq 0,4$ / PstLM ≤ 1)
- Tube made of glass
- For especially uniform illumination
- Mercury-free and RoHS compliant
- Type of protection: IP20



TECHNICAL DATA

Electrical data

Nominal wattage	23.1 W
Construction wattage	23.10 W
Nominal voltage	220...240 V
Claimed equiv. conventional lamp power	58 W
Nominal current	106 mA
Type of current	AC
Inrush current	3.96 A
Operating frequency	50...60 Hz
Mains frequency	50...60 Hz
Max. lamp no. on circuit break. 10 A (B)	43
Max. lamp no. on circuit break. B10 A - CCG without compensation	43
Max. lamp no. on circuit break. B10 A - CCG with compensation	8
Max. lamp no. on circuit break. 16 A (B)	69
Max. lamp no. on circuit break. B16 A - CCG without compensation	69
Max. lamp no. on circuit break. B16 A - CCG with compensation	14
Total harmonic distortion	< 20 %
Power factor λ	> 0.90

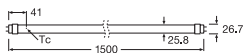
Photometrical data

Luminous flux	3700 lm
Luminous efficacy	160 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 sdcn

Light technical data

Beam angle	190 °
Warm-up time (60 %)	< 0.50 s
Starting time	< 0.5 s
Rated beam angle (half peak value)	190.00 °

Dimensions & Weight



Overall length	1513.00 mm
Length with base excl. base pins/connection	1500 mm
Diameter	26.70 mm
Tube diameter	25.8 mm
Base diameter	26,7 mm
Maximum diameter	27 mm
Product weight	225.00 g

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Maximum temperature at tc test point	75 °C

Lifespan

Lifespan	50000 h
Number of switching cycles	200000
Lumen maintenance at end of serv	0.70
Rated lamp survival factor at 6,000	≥ 0.90

Additional product data

Base (standard designation)	G13
Mercury content	0.0 mg
Mercury-free	Yes
Design / version	Frosted

Capabilities

Dimmable	No
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Certificates & Standards

Energy efficiency class	C 1)
Energy consumption	24.00 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	ST8AU-1.5M 23,1
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LOGISTICAL DATA

Temperature range at storage	-20...+80 °C
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Energy labelling regulation data acc EU 2019/2015

Light source cap-type (or other electric interface)	G13
Length	1513.00 mm
Height	26.70 mm
Width	26.70 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

DOWNLOAD DATA	
	User instruction
	PRODUCT DATASHEET
	Declarations Of Conformity CE
	Installation guide
	Installation guide

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075454705	Sleeve 1	1,605 mm x 29 mm x 29 mm	259.00 g	1.35 dm ³
4058075454712	Shipping box 10	1,652 mm x 210 mm x 115 mm	3390.00 g	39.90 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.

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.