

## PRODUCT DATASHEET

# SubstiTUBE T8 EM Connected 16 W/6500 K 1200 mm

SubstiTUBE T8 EM CONNECTED | LED tube for electromagnetic control gears works with Connected Sensors



### Areas of application

- General illumination within ambient temperatures from -20...+50 °C
- Parking lots, warehouses, production areas, stairways
- Industry
- Offices

### Product benefits

- No bending thanks to glass technology
- Shatter protection thanks to special PET coating
- Short payback period thanks to low energy consumption and maintenance costs

### Product features

- Network protocol: ZigBee 3.0 (2.4 GHz mesh network)
- Connected tube can be only operated with Connected sensor
- Dimmable only with LEDVANCE Connected Sensor



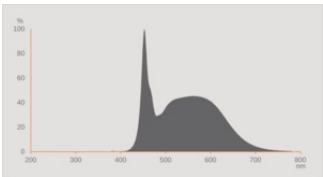
TECHNICAL DATA

Electrical data

|                           |                                               |
|---------------------------|-----------------------------------------------|
| Nominal wattage           | 16 W                                          |
| Construction wattage      | 16.00 W                                       |
| Nominal voltage           | 220...240 V                                   |
| Operating mode            | Conventional control gear (CCG), Line voltage |
| 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                           | 2400 lm             |
| Luminous efficacy                       | 150 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    | ≤5 sdc <sub>m</sub> |
| Flickering metric (Pst LM)              | 1                   |
| Stroboscope effect metric (SVM)         | 0,4                 |

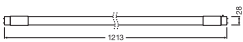


Light technical data

|                     |          |
|---------------------|----------|
| Beam angle          | 160 °    |
| Warm-up time (60 %) | < 2.00 s |

|               |         |
|---------------|---------|
| Starting time | < 0.5 s |
|---------------|---------|

Dimensions & Weight



|                                             |            |
|---------------------------------------------|------------|
| Overall length                              | 1213.00 mm |
| Length with base excl. base pins/connection | 1200 mm    |
| Diameter                                    | 28.00 mm   |
| Tube diameter                               | 26,5 mm    |
| Base diameter                               | 28,0 mm    |
| Maximum diameter                            | 28 mm      |
| Product weight                              | 214.00 g   |

Temperatures & operating conditions

|                           |              |
|---------------------------|--------------|
| Ambient temperature range | -20...+50 °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 | Yes |
|----------|-----|

Certificates & Standards

|                         |                 |
|-------------------------|-----------------|
| Energy efficiency class | D 1)            |
| Energy consumption      | 16.00 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 G (lowest efficiency)

Country-specific categorizations

|                 |                 |
|-----------------|-----------------|
| Order reference | LEDTUBE T8 EM C |
|-----------------|-----------------|

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)                         | Yes          |
| Color-tuneable light source                          | No           |
| Envelope                                             | No           |
| High luminance light source                          | No           |
| Anti-glare shield                                    | No           |
| Correlated colour temperature type                   | SINGLE_VALUE |
| Standby power                                        | <0,5 W       |
| Claim of equivalent power                            | No           |
| Length                                               | 1213.00 mm   |
| Height                                               | 28.00 mm     |
| Width                                                | 28.00 mm     |
| Chromaticity coordinate x                            | 0,312        |
| Chromaticity coordinate y                            | 0,328        |
| R9 Colour rendering index                            | 0.00         |
| Beam angle correspondence                            | SPHERE_360   |
| Survival factor                                      | 0.9          |
| Displacement factor                                  | 0.9          |
| LED light source replaces a fluorescent light source | No           |
| EPREL ID                                             | 642881       |
| Model number                                         | AC35446      |

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.
- The operating temperature range of LED tube is restricted. In case of doubt regarding suitability of the application please measure Tc max temperature on the product prior to installation.

## DOWNLOAD DATA

| Documents and certificates                                                         |                                 |
|------------------------------------------------------------------------------------|---------------------------------|
|    | User instruction                |
|    | Addon Technical Information     |
|    | Declarations Of Conformity CE   |
|    | Declarations Of Conformity UKCA |
| Photometric and lighting design files                                              |                                 |
|  | Spectral power distribution     |

## LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4058075187399 | Sleeve<br>1                  | 1,305 mm x 29 mm x 29 mm             | 243.00 g     | 1.10 dm <sup>3</sup>  |
| 4058075187405 | Shipping box<br>10           | 1,352 mm x 210 mm x 115 mm           | 3121.00 g    | 32.65 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.

## DISCLAIMER

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