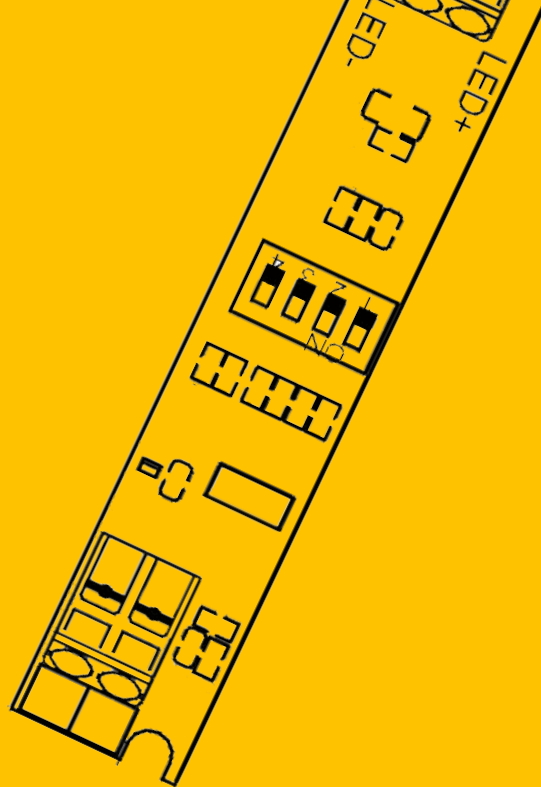




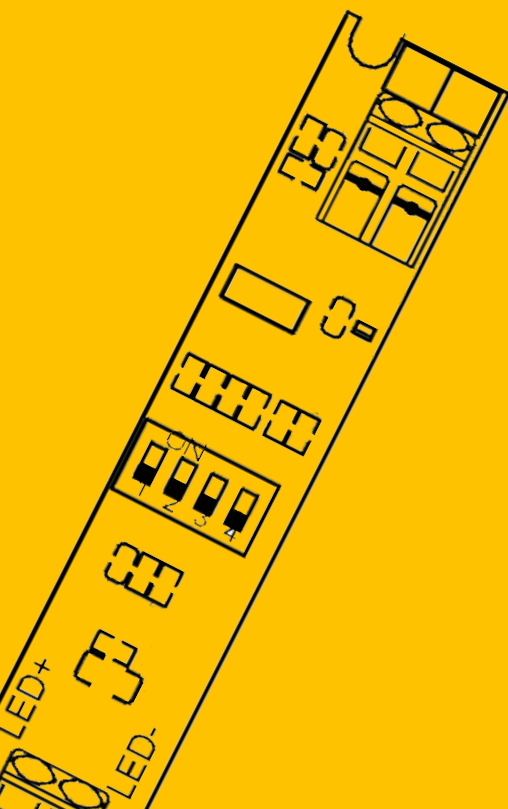
# COLOSSUS<sup>®</sup>

*Excellence inside*

## DATASHEET

**OD32NIDT642700A**

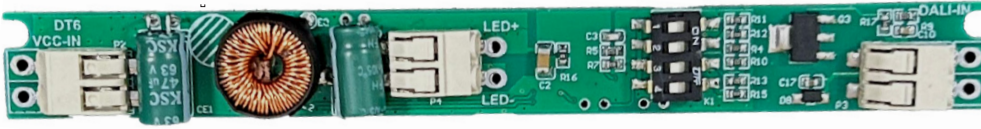
**DALI- 2 DT6**



Engineered with



Version: 01



\*Image is for viewing purpose. Technical Data not to be drawn from above image.

### Approval Markings:



### Product Description

- DALI-2 Dimmable Constant Current Driver For Led Modules
- Adjustable Output Current Via DIP Switch
- Input Voltage 16-48VDC
- Output Ripple Current <5% (@ Full Load, <120 Hz) - Flicker Free
- High Efficiency >95% (48Vdc, Output Current 42Vdc/650-700mA)
- Protection against Abnormal Operating Conditions Like Short Circuit Protection, Open Voltage Protection, Overload Protection.
- Compatible with DALI-2
- Nominal Life Time: 1,00,000 hours @ tc = 45°C

### Functions

- Seamless Control via DALI-2
- Dimming Control
- Energy Efficiency
- Compatible with DALI-2 accessories
- Application oriented operation for maximum compatibility

### Benefits

- 1-100% Deep Dimming
- Low Standby Power
- Smooth Transition over wide range of Intensity

### Applications



Commercial  
Spaces



Industrial  
Spaces



Residential  
Spaces



Hospitality

### Technical Data

#### Mains Voltage Supply

|                                         |          |
|-----------------------------------------|----------|
| Rated Voltage Range                     | 48VDC    |
| Rated Frequency                         | 0 Hz     |
| Max. Admissible Input Voltage Range(DC) | 16-48VDC |

#### Output Data

##### Constant current

|                                           |                                  |
|-------------------------------------------|----------------------------------|
| Output current tolerance                  | ±5%                              |
| Max. Ripple output current(with LED Load) | <5% (@ Full Load, <120 Hz)       |
| Max starting Time                         | <1s (@ Full Load by DALI System) |

#### Interface And Dimming Operation

|                   |                                                                                                        |
|-------------------|--------------------------------------------------------------------------------------------------------|
| Dimming Interface | DALI Dimming                                                                                           |
| DALI Function     | DALI dimming (Max. lead wire length:300m) logarithm or linear dimming curve selectable 251,252,253,CLO |
| Dimming Range     | DALI dimming: 0.1%-100% ,Dim to off .                                                                  |

#### Efficiency(typ.)

|           |      |
|-----------|------|
| Full Load | >95% |
|-----------|------|

#### Protections

|                                 |        |
|---------------------------------|--------|
| Open Circuit                    | <48VDC |
| Output Short Circuit Protection | YES    |
| Overload Protection             | YES    |

#### Connection Terminals

|                                  |                                |
|----------------------------------|--------------------------------|
| Type                             | Push-in Terminal / Soldering   |
| PRI Wire Cross Section / Length  | 0.5-1.0mm <sup>2</sup> / 6-9mm |
| SEC Wire Cross Section / Length  | 0.5-1.0mm <sup>2</sup> / 6-9mm |
| DALI Wire Cross Section / Length | 0.5-1.0mm <sup>2</sup> / 6-9mm |

#### Wire Lengths

|                                |     |
|--------------------------------|-----|
| Max. Wire Length To Led Module | <2m |
|--------------------------------|-----|

### Temperatures (Operation)

| Model No.       | Ambient(ta)    |
|-----------------|----------------|
| OD32NIDT642700A | -25°C... +50°C |

### Product Specifications

| Model No.       | Input Current (max) | Input Power (max) | THD | Power Factor | Efficiency | Output Current | Output Voltage | Output Power (max) |
|-----------------|---------------------|-------------------|-----|--------------|------------|----------------|----------------|--------------------|
| OD32NIDT642700A | 700mA               | 35W               | NA  | NA           | >95%       | 100-700mA      | 16-42V         | 32W                |

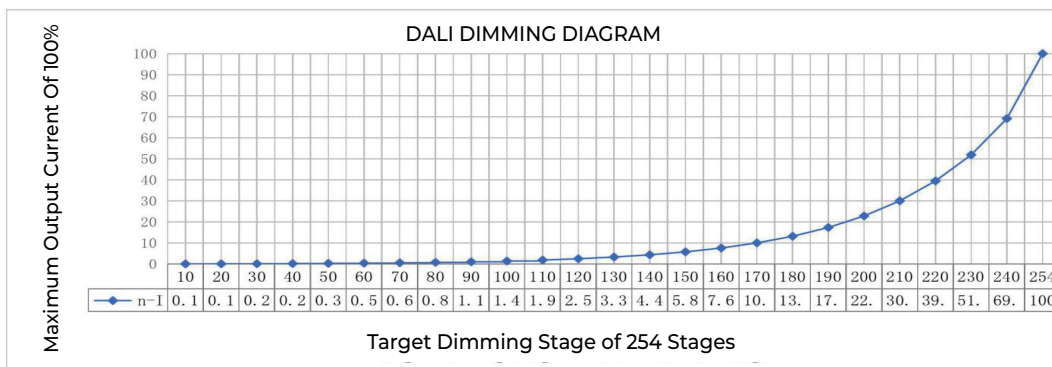
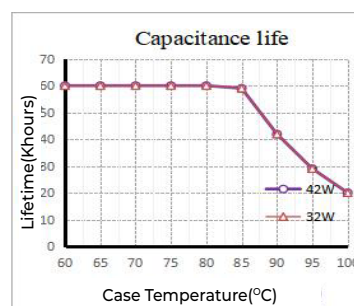
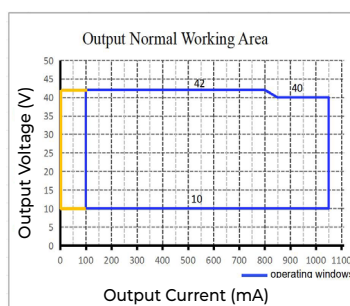
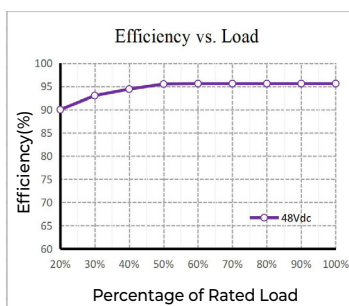
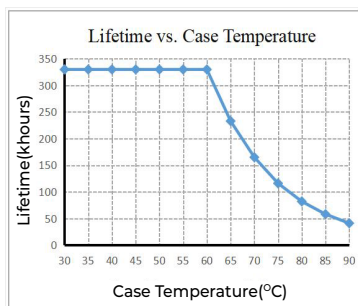
All specifications with 240 VAC are nominal operation and 100% load.

### LED Current Selection

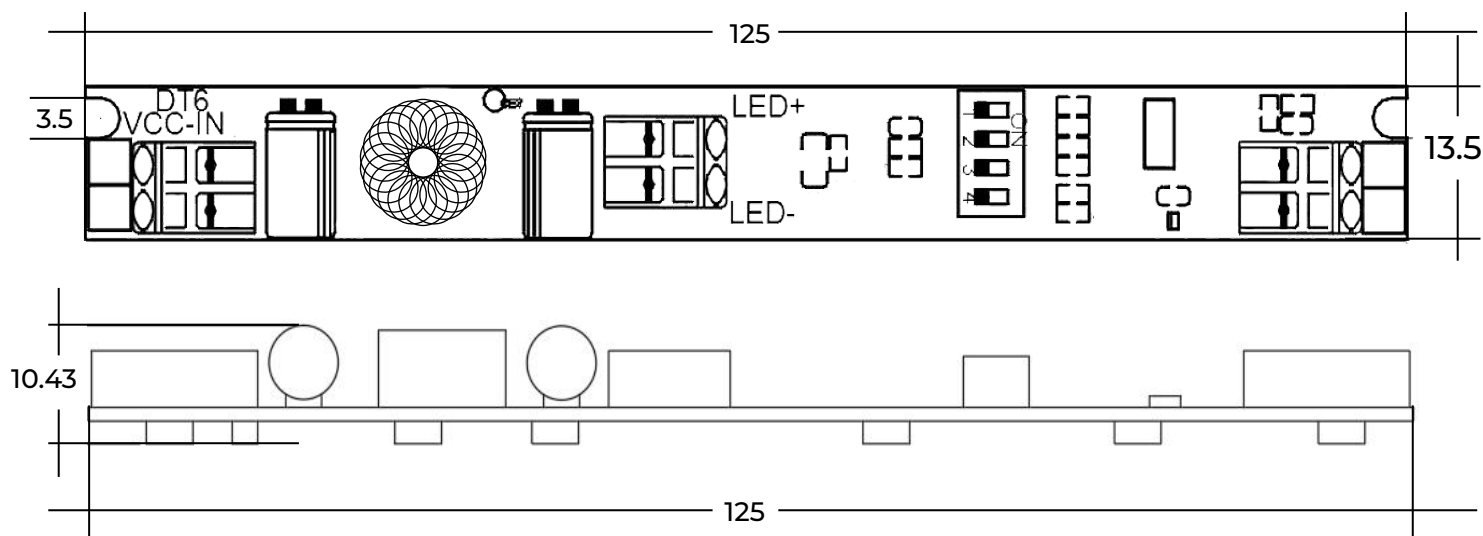
#### Output Current Configurable via NFC

|                |           |
|----------------|-----------|
| Output Current | 100-700mA |
| Output Voltage | 10-42V    |
| Output Power   | 1-29.4W   |

### Graphs



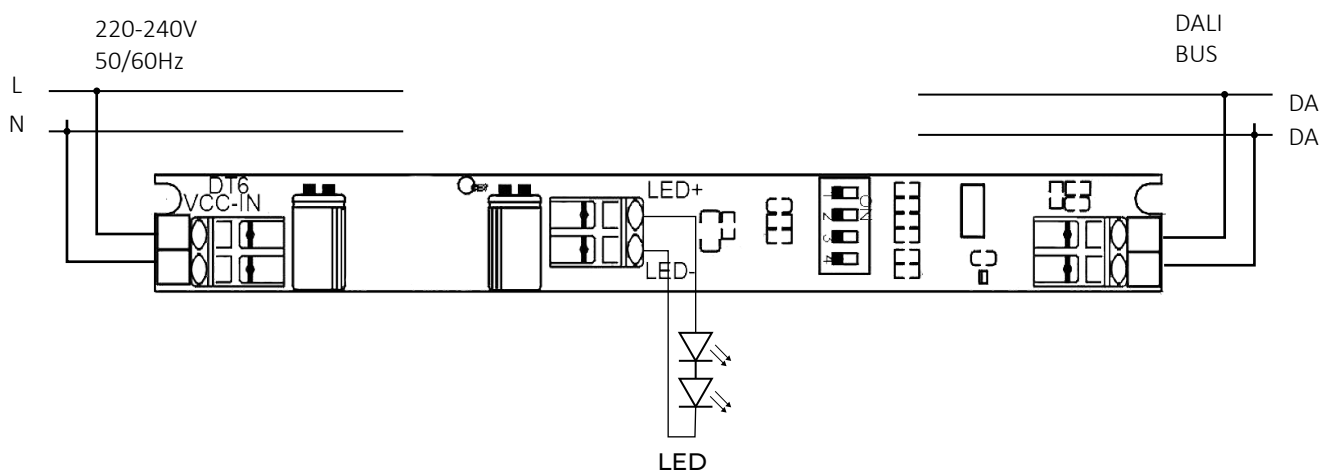
### Housing Dimensions



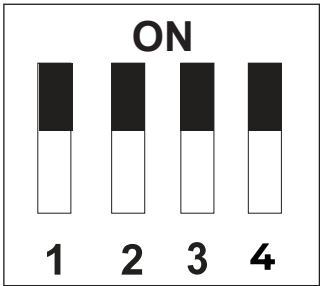
|                    |                  |
|--------------------|------------------|
| Dimensions (LxWxH) | 125X13.5X10.43mm |
| Tolerance          | ± 1mm            |
| Weight             | 12.5 gm          |

### Wiring Diagrams

#### • DALI Dimming



Switch Configuration



DS Output Current Settings

| S/W1 | S/W2 | S/W3 | S/W4 | DRIVE<br>CURRENT<br>(mA) |
|------|------|------|------|--------------------------|
| OFF  | OFF  | OFF  | OFF  | 100                      |
| OFF  | OFF  | OFF  | ON   | 150                      |
| OFF  | OFF  | ON   | OFF  | 200                      |
| OFF  | OFF  | ON   | ON   | 250                      |
| OFF  | ON   | OFF  | OFF  | 300                      |
| OFF  | ON   | OFF  | ON   | 350                      |
| OFF  | ON   | ON   | OFF  | 400                      |
| OFF  | ON   | ON   | ON   | 450                      |
| ON   | OFF  | OFF  | OFF  | 500                      |
| ON   | OFF  | OFF  | ON   | 550                      |
| ON   | OFF  | ON   | OFF  | 600                      |
| ON   | OFF  | ON   | ON   | 650                      |
| ON   | ON   | OFF  | OFF  | 700                      |

Expected Lifetime

|          |              |
|----------|--------------|
| Lifetime | 50,000 hours |
| Warranty | 5 years      |

Logistics Data

|             |                 |
|-------------|-----------------|
| Model No.   | OD32NIDT642700A |
| Weight (gm) | 12.5 gm         |