

# IN.finite DALL DT6 2Ch CV

# LED control gear for DALI DT6

### PRODUCT DESCRIPTION

- Two channel dimmable constant voltage LED control gear
- Dimming range from 0 % to 100 %
- · Compatible with DALI DT6 Network (Individual address for each channel)
- · Usable as stand-alone or build-in unit
- Nominal lifetime up to 60,000 hrs (at Tc= 25 °C)
- · 2 years warranty

#### **TECHNICAL DETAILS**

- Up to 384 W input (at 48 V<sub>DC</sub> supply)
- Pulse Width Modulation (PWM)dimming at 1.6 kHz with non visible flicker in accordance to IEEE P1789
- Compact form factor 21 mm x 30 mm x 220 mm (H x W x L including stand-alone strain relief)
- · Push-in terminal block for easy wiring
- · 2 separate output channels

### **PROTOCOL**

- DALI DT6 according to IEC 62386-207:2009
- 1 10 V through 2 active inputs for potentiometer use





### **RELATED PRODUCTS**

- LED Linear™ light source White / Color: HYDRA PRO, EXL, LUMINARIS ECO, LINUS HD (+),
  VarioLED™ Flex HYDRA, NEXUS, SOL, ECO Color
- · IQ-White: VarioLED™ Flex IQ HYDRA, NEXUS, SOL
- For more detailed information on LED flex tape, please visit our website.

\* Isolated DALI inputs

### **BENEFITS**



### Perfect dimming

Achieve smooth, precise and consistent color mixing with PWM dimming at higher frequency of 1.6 KHz.



#### Non-visible Flicker

Avoid adverse health risks with PWM dimming at very high frequency of 1.6 KHz that has non visible flicker with no observable effect level (NOEL).



### Long run length with one control gear

The compact LED control gear has output power up to 192 W @24  $V_{\rm in}$  enabling to connect approx. 18.2 m @24  $V_{\rm in}$  with cove lighting in white or 6.4 m with cove lighting in tunable white 10 W/m.



### DT6 Compatible

Compatible with any DALI DT6 based control systems.

### **APPLICATION AREAS**



#### Tunable white

Color of the natural light changes during the course of the day, achieve this behaviour with tunable white, design a office or museum whose atmosphere activates and promotes concentration with VarioLED™ Flex IO White SOL. Tunable white with DT6 requires complex and time intensive installation procedures.



#### Cove lighting

A type of indirect or accent lighting providing an overall diffusive illumination, realised by mounting the luminaire in wall or celling. Easily implement cove lighting in combination with LED Linear's XOOCOVE.



### **General lighting**

A uniformly illuminated area with comfortable brightness to enable everyday tasks to be performed comfortably and efficiently.



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## **TECHNICAL CHARACTERISTICS**

All values listed below are measured at an ambient temperature of 25°C (+/-2°C) and after 30 minutes of operation.

### **INPUT**

Voltage	$12 - 50  V_{DC}  (V_{IN} = V_{OUT})$
Current (max.)	8 A @ 24 V <sub>DC</sub>
Max. input power	96 - 384 W @ 12 - 48 V <sub>DC</sub>
Stand-by consumption	395 mW @ 24 V <sub>DC</sub>

## OUTPUT

LED outputs	2
Output voltage	$V_{\text{IN}} = V_{\text{OUT}}$
Output current	I <sub>IN</sub> = I <sub>OUT</sub> (max. 4 A per channel)

### DIMMING

PWM frequency	f = 1.6 KHz	
Digital dimming protocols	DALI DT6 according to IEC 62386-207:2009	
Dimming range	0 % - 100 %	
Dimming curves	Logarithmic	
Dimming resolution	12 bit, 256 control values	
IN.finite control gear commissioning	Via DALI Bus	

## LIFETIME

@ Tc_max = 70°C	30,000 hrs
@ Tc = 25°C	60,000 hrs

### HOUSING

Ingress protection	IP20
Material	PC / ABS VO 125°C (UL listed)
Color	White
Storage conditions	(-40°C to +70°C) / 10 to 95 % humidity (non-condensing)

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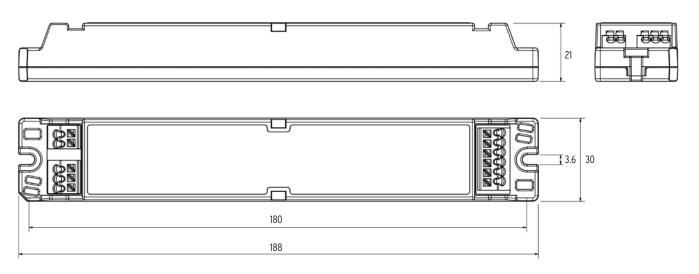


# IN.finite DALI DT6 2Ch CV

Art.-#: 16000268-DT6

# LED control gear for DALI DT6

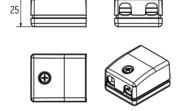
## **DIMENSIONS**

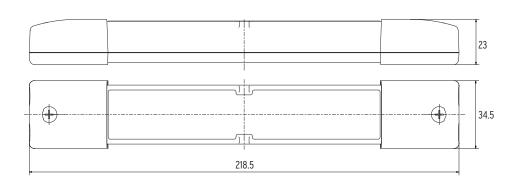


## ACCESSORIES - END CAPS FOR STAND-ALONE

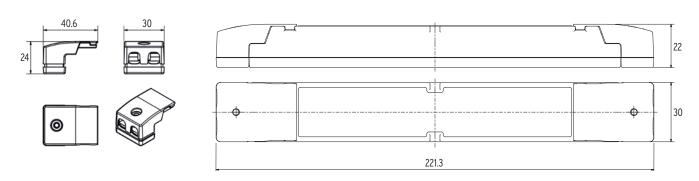
VarioPSU Slim Cap Stand-alone (Set of 2) Art.-#: 14000068

40 34.5





VarioPSU Slim Cap (Set of 2) Art.-#: 16000091



IN.finite dimensions (without end caps)	L x H x W - 188 mm x 21 mm x 30 mm				
Weight	66 g				
Min. order quantity	10 pcs				

# IN.finite DALI DT6 2Ch CV

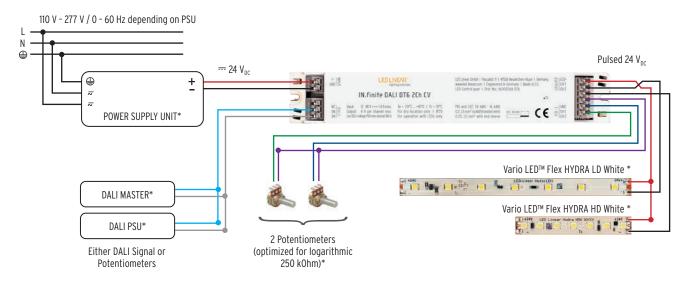
Art.-#: 16000268-DT6

# LED control gear for DALI DT6

### **INPUT**

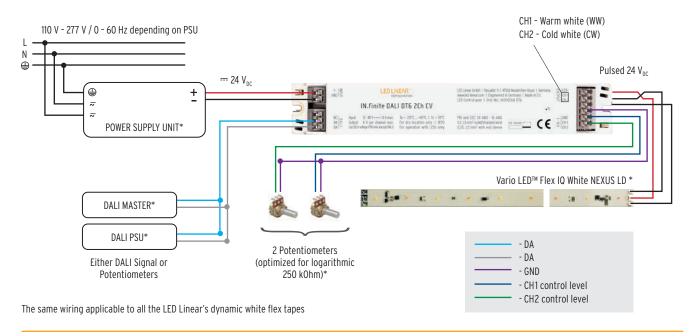
Wire type	0.2 – 1.5 mm² (solid wire / stranded wire) 0.25 – 1.0 mm² (with electrical connection terminal)
Wire preparation	8.5 – 9.5 mm wire stripping

## TYPICAL WIRING - STATIC WHITE FLEX TAPES



The same wiring applicable to all the LED Linear's static white flex tapes

### TYPICAL WIRING - DYNAMIC WHITE FLEX TAPES



### **IMPORTANT SAFETY NOTE**

Mounting of both protective covers is recommended to ensure strain relief.

<sup>\*</sup> Not included. To be ordered separately.

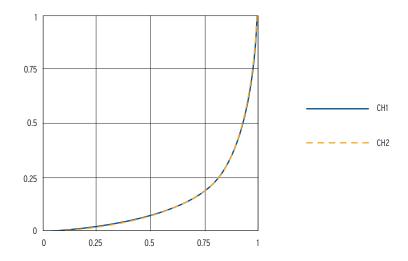


# IN.finite DALI DT6 2Ch CV

LED control gear for DALI DT6

### **DIMMING CURVE**

LOGARITHMIC - Two channels log curve



**NOTE:** In case of hybrid installation combining IN.finite DALI DT6/DT8 and IN.finite CASAMBI, the upload of the 2CH\_LOG dimming profile in the CASAMBI units will enable a match of the dimming curves between DALI and CASAMBI based units.

### **CERTIFICATIONS & STANDARDS**

- CE
- EN61347-1 (04/2009)
- EN61347-1 (04/2002)
- EN55015 (11/2009)
- EN61547 (03/2010)
- · UL (for built-in). Provided on request.

### **SAFETY DETAILS**

Safety standard	EN 61437-1, DALI input is SELV acc. to EN60065
Electrical protection class	Isolated DALI interface
Separation (Primary - Secondary)	No
Ambient temperature range (ta)	(-20°C to +45°C)
Relative humidity range	0 – 85 % humidity (non-condensing)
IP protection	IP20

## IN.finite DALI INSTALLATION NOTE

Power Supply Unit for IN.finite LED control gear	IN.finite LED control gear must not be directly connected to mains voltage (220 V).
	It should be connected using VarioPSU with SELV output without integrated dimmer.

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# IN.finite DALI DT6 2Ch CV

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### IN.FINITE CASAMBI CONTROL GEAR IN COMBINATION WITH LED LINEAR'S FLEX TAPES

The IN.finite LED control gear can be used to connect to any of the LED Linear™ Flex tapes

Voltage  $24 V_{IN}$ 

Current 4 A per channel Power 96 W per channel

### STATIC WHITE FLEX TAPE

Max. length of tape per IN.finite unit (ideal case)	Power range W/m								
	<=6,5 W/m	6,5 - 10 W/m	10 - 15 W/m	15 - 20 W/m	20 - 25 W/m	25 - 30 W/m	30 - 35 W/m	35 - 40 W/m	40 - 45 W/m
LUMINARIS ECO P12	38 m	21 m	•	12 m	9 m	•		•	
LUMINARIS ECO P23	32 m	21 m	•	12 m	9 m			•	•
LINUS HD	38 m		16 m	11 m		7 m		•	4 m
LINUS HD+	•		19 m	11 m	•	7 m	•	•	4 m
VarioLED™ Flex HYDRA LD	38 m	•	19 m	12 m	•	7 m	•	•	4 m
VarioLED™ Flex HYDRA HD	32 m		19 m	12 m	•	7 m		5 m	•
VarioLED™ Flex NEXUS LD	38 m	•	19 m	12 m	•	7 m	•	•	4 m
VarioLED™ Flex NEXUS HD	32 m	•	19 m	12 m	•	7 m	•	•	4 m
VarioLED™ Flex NEXUS UHD	•		•	12 m	•	7 m	•	•	•
HYDRA ECO	•	27 m	14 m	10 m	8 m		•	•	
HYDRA PRO	48 m	27 m	14 m	10 m	8 m	•	•	5 m	
HYDRA EXL	48 m	32 m	17 m	12 m	9 m		6 m	•	
VarioLED™ Flex SOL LD	•		•	12 m		7 m	•	•	•
VarioLED™ Flex SOL HD		•	•	12 m	•	7 m	•	5 m	•
VarioLED™ Flex ECO Color P12	•	•	19 m			•	•	•	•

## DYNAMIC WHITE FLEX TAPE

Max. length of tape per IN.finite unit (ideal case)	Power range W/m								
	<=6,5 W/m	6,5 - 10 W/m	10 - 15 W/m	15 - 20 W/m	20 - 25 W/m	25 - 30 W/m	30 - 35 W/m	35 - 40 W/m	40 - 45 W/m
VarioLED™ Flex IQ White HYDRA LD		•		•	•	7 m	•	•	•
VarioLED™ Flex IQ White HYDRA HD	•		16 m	•	8 m	•	•		•
VarioLED™ Flex IQ White NEXUS LD			•			•	•		4 m
VarioLED™ Flex IQ White NEXUS HD	•		16 m	•	8 m			•	4 m
VarioLED™ Flex IQ White SOL LD	•	•	•	•	9 m	•	•	•	•

For more information on our flex tapes and application areas, please visit our official website www.led-linear.com

