

TALEX LED

# TALEX(engine DC-String

















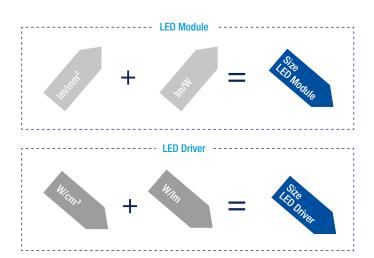


## The LED track light revolution for aesthetic designs

Modern LED technology not only provides maximum efficiency and long life for the luminaire, but also enables luminaires to be miniaturised. With its new TALEX(engine DC-String, Tridonic has the solution to minimise shapes and therefore maximise ceiling harmonics.

#### Size matters

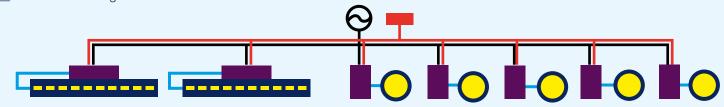
- \_\_ Trend: driven by design
- \_\_ Customers seek slim casing and design
- Design of the modules is getting smaller but still the design of the luminaire itself is limited
- \_\_ Miniaturisation limited by size of LED Driver
- \_\_ Luminaire size and design more and more dominated by the LED Driver



## Comparision old and new systems & components

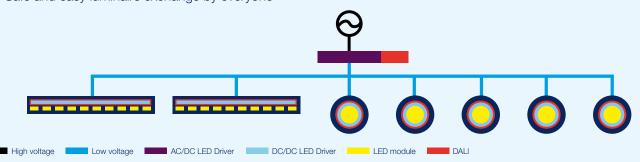
#### **Today: High Voltage AC System**

- \_\_ LED Driver required for each module/luminaire
- \_\_ Luminaire size determined largely by LED Driver dimensions
- \_\_ Communication lines to each individual luminaire
- \_\_ 230 V line running to each LED Driver/luminaire



#### **Tomorrow: Low Voltage DC System (LVDC)**

- \_\_ A LVDC System provides significant benefits in terms of design, installation and maintenance
- \_\_ The Low Voltage DC-String system is driven by one centralised LED Driver
- \_\_ Only DC/DC part remains with each module/luminaire, allowing further miniaturisation of the luminaire
- \_\_ Integrated DALI communication allows individual luminaire control
- \_\_ Safe and easy luminaire exchange by everyone



# Tridonic has the solution: TALEX(engine DC-String



A centralised DC-String Driver offers remarkable freedom in design as the DC-String Driver is fully hidden in the suspended ceiling and makes trackboxes for each spotlight unnecessary.

#### ▼ At a glance: TALEX(engine DC-String

- \_\_ Miniaturisation of luminaires and tracks
  Tridonic's new DC-String provides miniaturisation of luminaires and tracks to achieve a harmonic and aesthetic ceiling.
- \_\_ Individual luminaire control via the DC power lines Despite the miniaturisation, DC-String still offers full control of individual track luminaires by sending the commands via the DC power lines.
- \_\_ Safe and easy luminaire exchange by everyone Due to the low DC voltage in the track, a luminaire replacement is safe and easy for everyone.

## Typical applications to be replaced by DC-String







#### Your benefits

#### **OEM**

New miniaturised luminaire designs

Eliminate trackbox

Smaller tracks possible

Individual luminaire dimming without additional wiring

#### **Architect / Planner**

New ceiling / room design opportunities

Improved ceiling aesthetics through miniaturisation of track light systems

Emergency and DALI compatible to cover track lighting with one design

#### Installer

Quick and easy installation SELV – safe and easy to install

Hot-Plug-In possible – quick commissioning

Quick upgrade to DALI dimmable track lights

#### **End User**

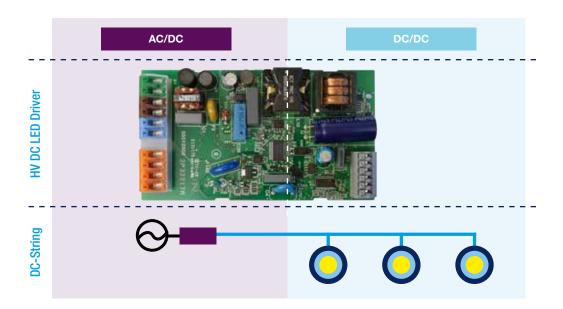
Quick and easy maintenance SELV - no electrician needed for luminaire exchange

Hot-Plug-In possible – quick & safe exchange

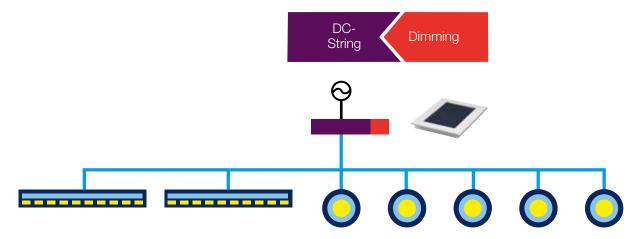
Reduced maintenance costs by concentrating critical building blocks to central supply

# Where does it all go?

- \_\_ Most of the space within a LED Driver is required for AC/DC conversion
- \_\_ The DC-String has a central AC/DC LED Driver, seperated from the LED modules
- \_\_ Only the DC/DC LED Driver is part of the luminaire itself



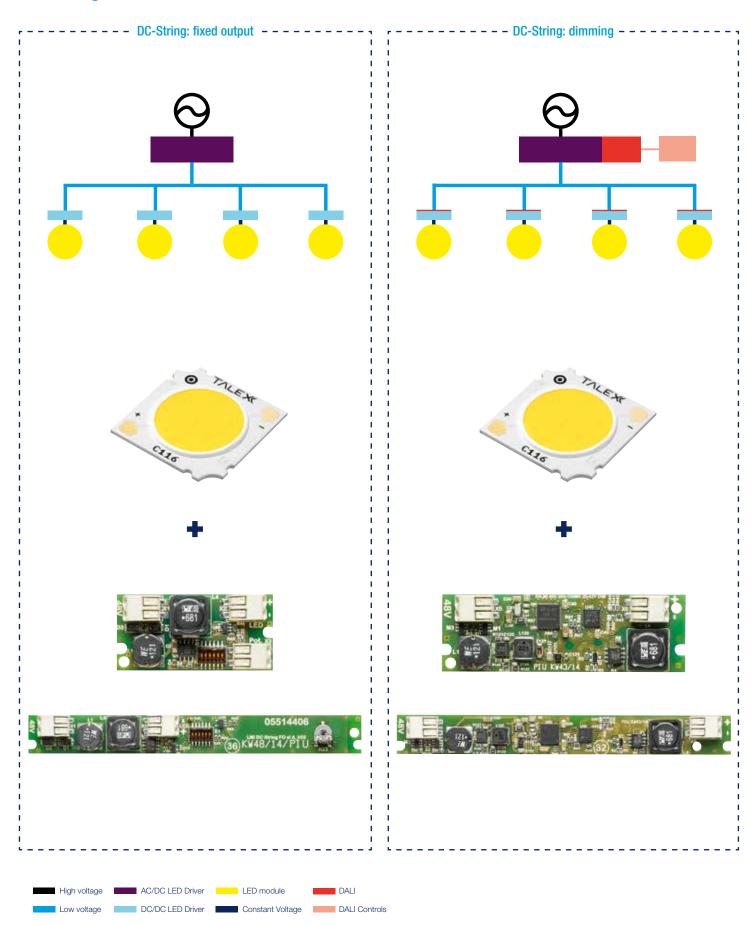
# DC-String: components and functionality of the power line



#### Dimming via power line

- Control via DC Power Line Communication (PLC) no extra wiring for individual luminaire dimming
- \_\_ DALI to PLC bridge fully integrated into AC/DC Driver
- \_\_ Guaranteed DALI compatibility for use of standard DALI controls
- \_\_ Each node appears individually at the DALI system as a regular AC/DC light

# DC-String — Tridonic's solution

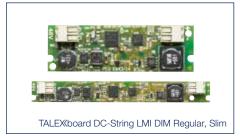


# TALEX(engine DC-String









# TALEX(driver DC-String | Linear Low Profile and Independent

Designation	Output current at full load (mA)	Output voltage range (V)	Output power (W)	SELV 60 V	Input voltage (V)	Size (mm)	Order No.				
TALEX/driver DC-String   Linear Low Profile											
LCU 48V 75W DC-STR FO Ip	358	48	75	yes	220~240	360 x 30 x 21	28000816				
LCU 48V 75W DC-STR DIM Ip	360	48	75	yes	220~240	360 x 30 x 21	28000815				
LCU 48V 150W DC-STR FO lp	708	48	150	yes	220~240	360 x 40 x 21	28001234				
LCU 48V 150W DC-STR DIM Ip	710	48	150	yes	220~240	360 x 40 x 21	28001235				
TALEX(driver DC-String   Independent											
LCU 48V 75W DC-STR FO SR	359	48	75	yes	220~240	235 x 100 x 31	28001232				
LCU 48V 75W DC-STR DIM SR	359	48	75	yes	220~240	235 x 100 x 31	28001233				
LCU 48V 150W DC-STR FO SR	707	48	150	yes	220~240	235 x 100 x 31	28001045				
LCU 48V 150W DC-STR DIM SR	710	48	150	yes	220~240	235 x 100 x 31	28001044				

# TALEX(board DC-String | fixed output and dimming

Designation	Output current (mA)	Output voltage range (V)	Output power (W)	Output power (W)	Input voltage (V)	Size (mm)	Order No.				
TALEX(board DC-String   fixed output											
LMI G2 48V 350-700mA 3-20V FO Slim	350–700	3–20	7–14	yes	46~50	125 x 14,8 x 12,5	28000730				
LMI 48V 350-700mA 20-42V FO Slim	350–700	20–42	14,7–29,4	yes	46~50	125 x 14,8 x 12,5	28000947				
LMI 48V 350-700mA 20-42V FO Regular	350–700	20–42	14,7–29,4	yes	46~50	49,3 x 23,8 x 12,5	28000728				
LMI G2 48V 700-1050mA 3-20V FO Slim	700–1,050	2,5–20	14–21	yes	46~50	125 x 14,8 x 12,5	28001582				
TALEX(board DC-String   dimming											
LMI G2 48V 350-700mA 3-20V DIM Slim	350–700	3–20	7–14	yes	46~50	125 x 14,8 x 12,5	28000731				
LMI 48V 350-700mA 20-42V DIM Slim	350–700	20–42	15,4–30,9	yes	46~50	125 x 14,8 x 12,5	28000948				
LMI 48V 350-700mA 20-42V DIM Regular	350–700	20–42	15,4–30,9	yes	46~50	75 x 23,8 x 12,5	28000729				
LMI G2 48V 700-1050mA 3-20V DIM Slim	700–1,050	3–20	14–21	yes	46~50	125 x 14,8 x 12,5	28001583				



#### Support and advice from a single source

We will help you to create lighting solutions that are unbeatable in terms of economy and functionality, according to the slogan: We devote all our energy to your light.









TALEX(engine DLE

TALEX(engine CLE

TALEX(engine CLE Integrated

TALEX(engine LLE-FLEX









TALEX(engine SLE

TALEX(engine FLE

TALEX(engine LLE

TALEX(engine QLE

As an international company, Tridonic is represented worldwide by 30 branch offices and partners in 73 countries.



#### Headquarters

Tridonic GmbH & Co KG Färbergasse 15 | 6851 Dornbirn, Austria T +43 5572 395-0 | F +43 5572 20176 www.tridonic.com | sales@tridonic.com

Light you want to follow.





