

- Smooth dimming from 100% to <0.3%
- Programmable max. forward current
- Compliant to DALI BS EN 62386-101:2009
- 88% efficiency & PFC >0.9 at full load
- Fully isolated; SELV output up to 42W
- Healthy lighting compliant (no PWM)

Product Overview

The iDrive® range of high performance LED drivers are the lighting industry's perfect solution for powering high-brightness LEDs and LED arrays from a mains supply.

The new iDrive® DALI+ is one of the most complete DALI ballasts available on the market today and implements over 90 DALI commands from the official DALI BS EN 62386-101:2009 standard, including Part 107, which covers extended commands specifically for LED ballasts.

The iDrive® DALI+ is no ordinary DALI driver, enabling the maximum forward current to be software configured through DALI commands between 10% and 100%. If a 1A driver is configured to operate @ 700mA, the user still gets 8-bit resolution and minimum dimming to 0.3%.

The iDrive® DALI+ implements smooth constant current dimming support from 100% to 0.3% of the output current, with the ability to turn LEDs completely off. Employing a continuous analogue dimming current, the iDrive® DALI+ overcomes health and LED flicker problems associated with driving LEDs using PWM techniques.

The iDrive® DALI+ incorporates an advanced microprocessor design to achieve up to 88% efficiency and combines this with high quality components to offer extended driver life. The iDrive® DALI+ uses active power factor control to optimise PFC > 0.9 at full load, whilst full galvanic isolation ensures it meets Class II double insulation requirements.

The iDrive® DALI+ comes in a compact design and offers over 24 models, covering all of the major LED and LED array vendors in a power range from 10W to 42W, ensuring it is the most comprehensive and high performance DALI driver series yet.

Standards & Approvals

EN 55015:2006,FCC; EN 61547/61047; EN62384;
EN 60929:2009; EN 61000-3-2; CEIEC/EN61347-2-13;
EMC CLASS A & B COMPLIANT

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Electrical Specifications

Input

Input Voltage Range: 200V AC to 240V AC +/-10%
Input Frequency: 47Hz to 63Hz
Consumption: 12-48W max.
Power Factor: >0.9 @ full load
Efficiency: Up to 88% typical @ full load
AC Mains Connection: 5mm pitch screw terminals
LED/IP Connector: 5 pole 5mm pitch screw terminals
Insulation: Double insulated (Class II)
Inrush Current: <3A

Output Options

Output Voltage: +9V to +55V DC*
Output Power: 42W max.
Line Regulation: 1% max.
Load Regulation: 5% max.

* Output voltage and power depend on model selected

** Technical and mechanical parameters subject to change

Control Input

Dimming Control: Standard DALI interface
DALI Connector: 2-pole 5mm pitch screw terminals
Dimming Range: <0.3% to 100% of output load current
Maximum current: 10% to 100% (programmable)

Mechanical

Mounting: Two M4 screw mounting holes
Construction: ABS Housing at IP 20

Environmental

Operating Ambient Temperature: -20°C to +50°C
Storage Ambient Temperature: -20°C to +70°C
Relative Humidity: 85% max, non-condensing
Maximum Case Temp. Tc: 85°C

Protection

Overload, OVP, Short Circuit and Open Circuit Protection

Dimensions:

150.1 x 50.7 x 31mm (max.)

Weight:

180-220 grams

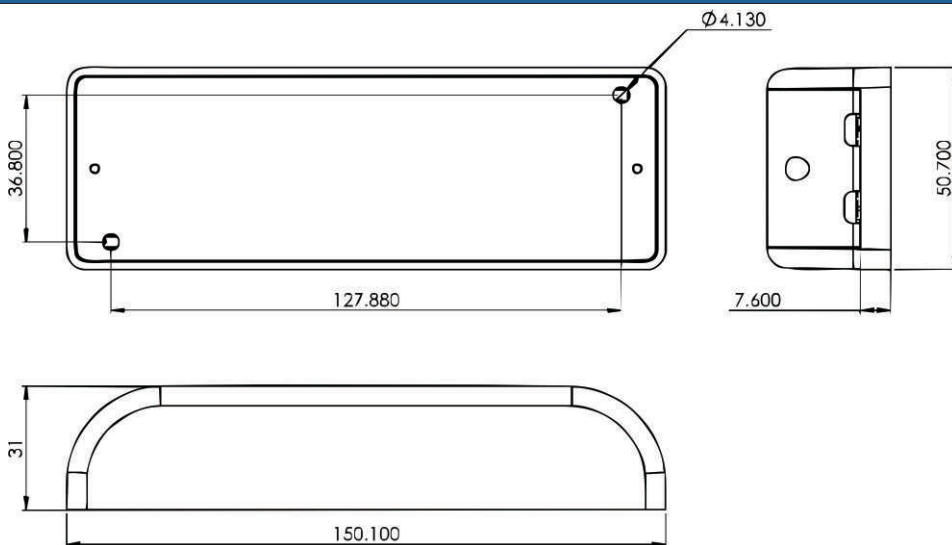


Model Selection Table (5-pin version)

IST Model Number	Input(AC)	Frequency	Output LEDs	Output V	Output A	Output W max.	Inrush Current (A)	Operation ambient (Ta)
IDD2005150350	220-240V	50~60	3~5	8~15	0.35	5	+0.6 -1.1	50°C
IDD2011150700	220-240V	50~60	3~5	8~15	0.7	11	+1.0 -1.3	50°C
IDD2015151000	220-240V	50~60	3~4	8~15	1	15	+1.2 -1.7	50°C
IDD2011310350	220-240V	50~60	B'lux	11~31	0.35	11	+1.0 -1.6	50°C
IDD2007210350	220-240V	50~60	B'lux	11~21	0.35	7	+0.6 -0.9	50°C
IDD2011210500	220-240V	50~60	B'lux	11~21	0.5	11	+1.3 -1.4	50°C
IDD2019161200	220-240V	50~60	Array	9~16	1.2	19	+1.1 -1.5	50°C
IDD2029181600	220-240V	50~60	Array	9~18	1.6	29	+1.8 -1.4	50°C
IDD2032181800	220-240V	50~60	Array	9~18	1.8	32	+1. -1.5	50°C
IDD2015300500	220-240V	50~60	B'lux	11~30	0.5	15	+1.3 -1.4	50°C
IDD2020290700	220-240V	50~60	3~9	11~29	0.7	20	+1.5 -1.8	50°C
IDD2029291000	220-240V	50~60	3~9	11~29	1	29	+1.9 -1.9	50°C
IDD2014410350	220-240V	50~60	7~12	18~41	0.35	14	+1.1 -1.8	50°C
IDD2021410500	220-240V	50~60	7~12	18~41	0.5	21	TBC	50°C
IDD2029410700	220-240V	50~60	B'lux	18~41	0.7	29	TBC	50°C
IDD2029211400	220-240V	50~60	Array	11~21	1.4	29	+1.6 1.3	50°C
IDD2017400420	220-240V	50~60	Special	18~40*	0.42	17	+1.6 -1.3	50°C
IDD2032400800	220-240V	50~60	Special	18~40*	0.8	32	+1.9 -1.8	50°C
IDD2037221700	220-240V	50~60	Special	11~22	1.7	37	TBC	50°C
IDD2015210700	220-240V	50~60	Xicato 700	11~21	0.7	15	+1.3 -1.7	50°C
IDD2023231000	220-240V	50~60	Xicato 1300	11~23	1	23	+1.8 -1.5	50°C
IDD2032301050	220-240V	50~60	Xicato	11~30	1.05	32	TBC	50°C
IDD2041411000	220-240V	50~60	Xicato 2000	18~41	1	41	+1.8 -1.4	40°C
IDD2019540350	220-240V	50~60	5~18	18~54	0.35	19	TBC	50°C
IDD2027540500	220-240V	50~60	5~18	18~54	0.5	27	+1.7 -1.8	50°C
IDD2038540700	220-240V	50~60	5~18	18~54	0.7	38	+1.8 -2.0	40°C
IDD2040261540	220-240V	50~60	Special	11~26	1.54	40	+1.6 -1.6	40°C
IDD2042470900	220-240V	50~60	Citizen array	18~47	0.9	42	+1.7 -1.4	40°C
IDD2042301400	220-240V	50~60	4~9	11~30	1.4	42	TBC	40°C

*Bespoke versions available on request

Dimensions



iDrive® products are covered by IST's worldwide patent portfolio. For more information please refer to www.istl.com/patents.

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Version 2.0