

Datasheet POWERdrive 106/A, 106/S, 106/M

ACSeries



100W Full-Colour Dimmable LED Driver

POWERdrive AC is a constant current LED driver with multiple LED outputs that are controlled over four channels. It is targeted at larger networked and smaller standalone installations that require dimmable, high-power full-colour static or dynamic LED lighting. POWERdrive AC is DALI, DMX/RDM and LedSync compatible.

Applications

- · Entertainment lighting
- · Stage lighting
- · Full-colour architectural lighting
- · Signage / advertising lighting
- · Façade lighting
- · Retail display lighting

- · Full-colour / tunable white applications
- · Decorative lighting

Features & benefits

Input

- Voltage: AC 120-277V DC 120-275V
- Current, max:

 1A at 120V/60Hz
 0.5A at 230V/50Hz
 0.45A at 277V/60Hz
- Frequency: 50/60Hz

Output

- Voltage: 57V max
- · Current range: configurable from 200mA to 1,050mA
- Power: 100W max

General

- Power factor: > 0.94
- · DALI, DMX/RDM and LedSync compatible
- · Hybrid HydraDrive: 20-bit resolution
- Dimming control: smooth dimming from 100% to 0%, choice of linear or logarithmic dimming curve
- High efficiency over a wide power and voltage range:
 90% at full load, ≥ 87% above 50W output
- Maximum (rated) power available over wide LED voltage (30-57V) and LED current range (200-1,050mA)
- · LED current configurable for each output separately
- Intuitive 3-button user interface for on-the-fly configuration
- Interface for external control device: $10k\Omega$ potentiometer or momentary switch
- · LEDcode/NTC interface for robust thermal management
- ShowMaster: 9 default shows, up to 20 user-defined shows, uploadable via TOOLbox pro and ShowMaster DMX software





POWERdrive 106/S



POWERdrive 106/M

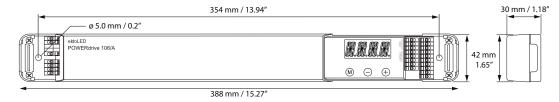
Product offering

Description	Product	Order no.
POWERdrive AC, 100W, DMX/DALI/EXT, 4 control channels, const current, 4x LED outputs, long metal/plastic	POWER 106/A	PWR106A1
POWERdrive AC, 100W, DMX/DALI/EXT, 4 control channels, const current, 4x LED outputs, square metal	POWER 106/S	PWR106S1
POWERdrive AC, 100W, DMX/DALI/EXT, 4 control channels, const current, 4x LED outputs, long metal	POWER 106/M	PWR106M1

Dimensions, weight, packaging

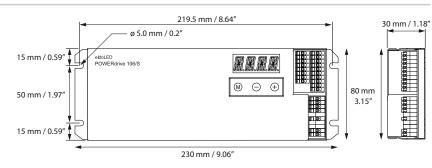
POWERdrive 106/A

- · Weight: 705 g, 26 oz
- · Packaging: 20 pcs/carton



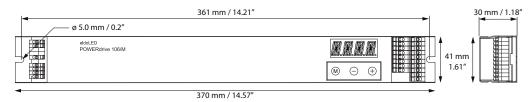
POWERdrive 106/S

- · Weight: 880 g, 31 oz
- · Packaging: 20 pcs/carton



POWERdrive 106/M

- Weight: 880 g, 31 oz
- · Packaging: 20 pcs/carton



Connections

Connectors

- · Power: Line, Neutral and Ground
- DALI: + and (x2)
- · DMX in: +, and shield
- LedSync out: +, and shield
- Ext in: + and -

Connectors (cont'd)

- LED outputs: + and (x4)
- · LEDcode/NTC: + and -

Wiring

- Cross section: 0.5 1.5 mm², AWG 20 16
- Strip length: 9 mm / 0.35 in.

Other information

Certifications

- EN 61347-1 / -2-7 / -2-13, EN 62384, EN 55015, EN 55022, EN 61000-3-2, EN 61547, EN 62386-101 / -102 / -207
- CE
- ENEC by VDE
- UL: Recognized Component for US and Canada (file no. E333135), according to UL1310 and UL8750.

((W LE CAN US DMX RDM DALL) SHOW master

US: Class 2 output. Canada: Non-Class 2 output.

Environmental ratings

- Ta range: -40 °C...50 °C / -40 °F...122 °F
- Tc max: 90 °C / 194 °F (106/A), 85 °C / 185 °F (106/M), 83 °C / 181 °F (106/S)
- For use in damp and dry locations

Control compatibility

- · DALI control gear
- · DMX512A and RDM explore & address (ANSI E1.20) control gear

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Other documentation and support

Visit www.eldoled.com/ACsupport for further documentation such as quick start guide, wiring diagram, tech sheet and 3D IGES files.

Warranty

eldoLED represents and warrants that for a period of 3 (three) years, as of the date of invoice, Products materially meet the specifications and specifically agreed upon quality, both as stated in the applicable datasheet and/or written design-in specifications, or as stated in writing otherwise by eldoLED, provided that these specifications are explicitly designated by eldoLED as "warranted specifications".

For the complete warranty text, visit www.eldoled.com/terms.