

ACULED® Power Supply

700 mA

E001674

PSU-ACL01-700



Product Overview

Within the wide range of LED applications, new installation ideas in lighting technology require appropriate power supply units. Especially power supplies that can easily be integrated in solutions are highly appreciated. The demand for solutions with multi-Watt LEDs like the ACULED product line respectively arrays of ACULEDs is increasing constantly. Excelitas therefore offers the ACULED® Power Supply product line. The version PSU-ACL01 700 provides 700 mA of output current and is ready for connection of 4-channel LED assemblies. It therefore ideally fits multi-color ACULED applications. With this device up to six 4-channel LEDs may be operated in series.

The wide range input of 100 V-240 V at 50 Hz to 60 Hz the LED-drive can easily be connected to various country specific mains supplies via clamp holders. The output current of constant 700 mA can be dimmed manually for each channel separately. The device is short-circuit-proof and resistant against overheating, no-load and overload conditions. Main application of the device is color mixing of RGYB- or RBGW-LEDs, but any kind of ACULED-DYO combination can also be operated easily.

Features and Benefits

- Electronic power supply for POWER LEDs
- 700 mA output current
- 4-channel device
- Manual adjustment of each channel

Applications

- Mixture of up to four different LED channels
- Mood lighting, architectural lighting
- Specialty lighting
- General lighting

Technical support

- For technical support, please contact us at: generalinquiries@excelitas.com.

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Revision History

This table provides a summary of the document revisions.

Date	Revision	Description
September 2008	initial release of document to customers	

Product Description

The ACULED Power Supply PSU-ACL01 700 provides 700 mA of output current and is ready for connection of 4-channel LED assemblies. The device is designed to be used for Power LEDs like the ACULED.

The device offers 4 channels with 350 mA output current at 12 V voltage per channel. The intensity for each channel can be controlled manually by Pulse Width Modulation (PWM) in 265 steps. Thus up to six* ACULEDs can be operated with four different channels, ideally for manual color mixing and adjustment.

The 4-channel-device is a perfect solution for ACULED VHL™ / DY0™ applications in lighting technology where LEDs have to be operated from 0-100% output power.

* depending on chip forward voltage

Dimensions

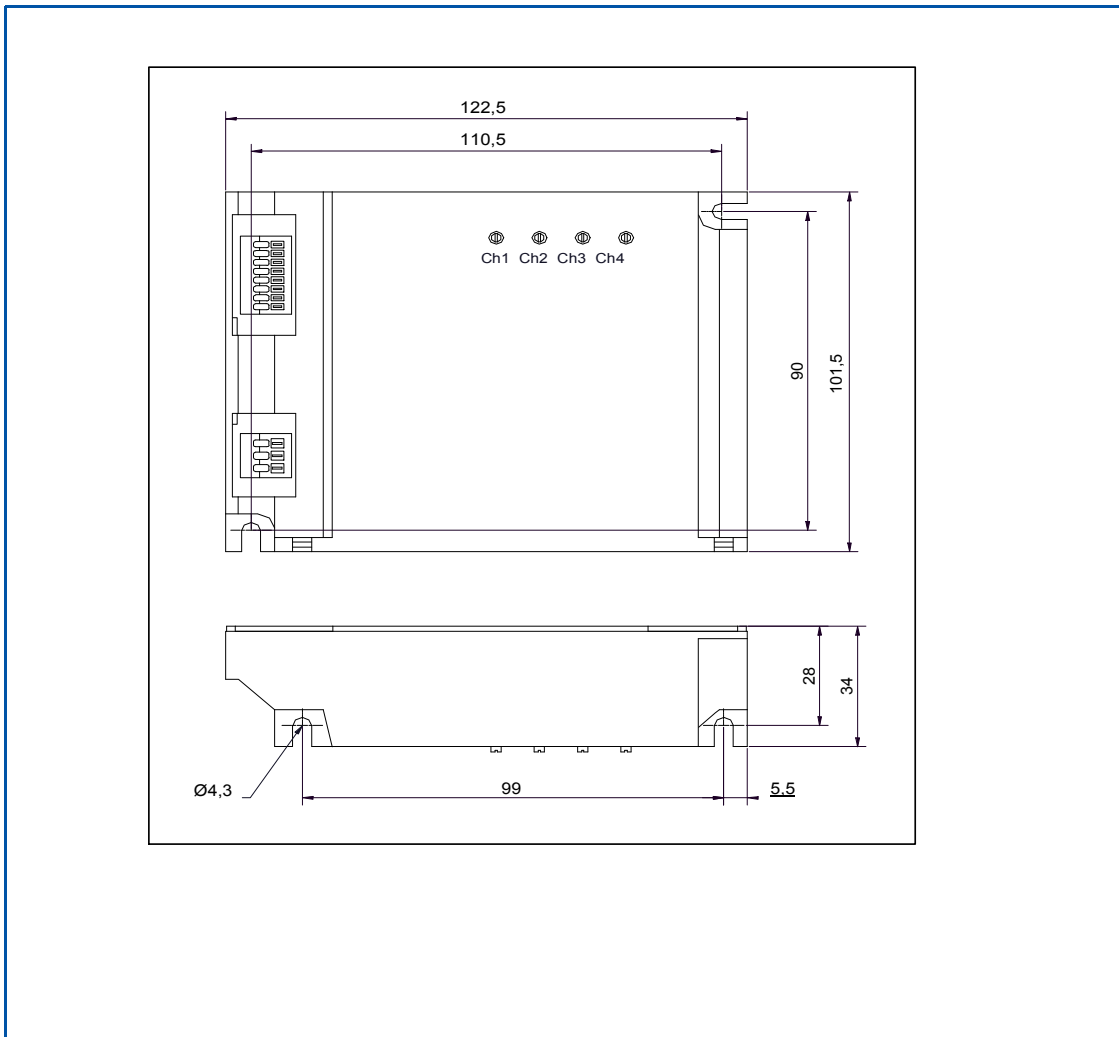


Figure 1

Dimensions of the power supply unit

Schematic Diagram

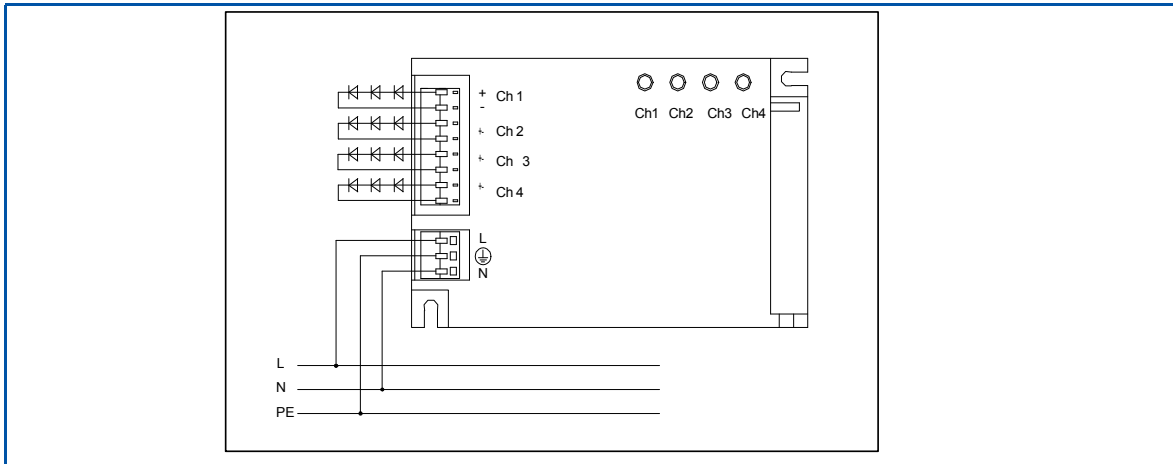


Figure 2
Schematic diagram of the power supply unit

Technical Data

Parameter	Symbol
Nominal voltage	100 - 240 V AC, $\pm 10\%$ 50 / 60 Hz
Inrush current	< 0.2 A at 15 ms
Power range per channel	Max. 9.5 W
Output current	700 mA $\pm 10\%$
dimnable	Yes
Protection class	I
Open circuit voltage	24 V
output voltage	0 - 13.5 V
Max. length of secondary line	3 m
Operating temperature range *	0 °C to +40 °C
Storage temperature	-20 °C to +85 °C
Housing temperature Tc	max. +65 °C
Dimming range (PWM)	0...100 %
Standards compliancy	EN 55015 / EN 61547 / EN 61347-2-2 / EN 6100-3-2
Dimensions (LxWxH) / mm:	123 x 102 x 34

* Depending on the installation location, sufficient cooling should be provided. The Tc point must not be exceeded!

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