

# PhlatLight® LED Development Kit Product Brief

## DK-105T-1



### Overview

PhlatLight DK-105T-1 development kit is a comprehensive solution designed specifically to support development of PhlatLight SST-90 and SST-50 based solutions. The kit includes highly versatile drivers and control circuitry, efficient thermal management solutions, clean interfaces, and cabling for use with standard laboratory equipment. The inclusion of these components ensures the PhlatLight SST-90 and SST-50 LED modules can be operated optimally at any drive condition. Whether this is low power for maximum efficiency, high power for maximum brightness or anywhere in between, the PhlatLight DK-105T Development Kit ensures the right performance.

This plug and play solution can easily be connected to standard laboratory equipment through standard connectors and allows system designers to save weeks in their development cycles.

### Key Features

- Compatible with SST-90 and SST-50 PhlatLight LEDs
- Driver board supply currents of 1.75A, 3.2A and 5A
- On board PWM controller supports duty cycles ranging from 0% to 100%
- Dimmable using 0-10V analog input
- Included PAR-20 format Synjet cooling system
- Typical thermal resistance of 1.67°C/W to 2.5°C/W from heat sink to ambient
- Driver circuitry based off of TI TPS71530 IC

## PhlatLight Evaluation Kit Contents

- 1 comprehensive driver board capable of providing 1.75A, 3.15A or 5A to the LED
- 1 high performance, Synjet thermal solution
- Simple interfaces to user supplied equipment
- Thermal interface materials and mounting hardware
- User manual including step-by-step instructions for set-up and operation of the kit.

## User Equipment Required

- Standard 12V/50W power supply.
- Standard laboratory instrumentation - volt meter, oscilloscope, photodetector.
- 0-10V dimmer or power supply for dimming

*Note: PhlatLight LED products are not included in the development kits and must be purchased separately.*

## Product Compatibility

Development Kit Part Number	Compatible PhlatLight LEDs
DK-105T-1	SST-90*, SST-50*

*Note \*: Development kit thermal solution is predrilled for SSR-50 and SSR-90. It is recommended to specify SSR-90 or SSR-50 (SST-90 or SST-50 premounted on star format MCPCB) for evaluation.*

## Ordering Information

Ordering Part Number	Product	Description
DK-105T-1	DK-105T PhlatLight Development Kit	Single channel development kit, with 5A driver, PAR-20 Synjet and user manual

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Luminus Devices  
1100 Technology Park Drive  
BillERICA, MA 01821

978-528-8000 (T)  
978-528-8001 (F)

E-mail: [sales@luminus.com](mailto:sales@luminus.com)

[www.luminus.com](http://www.luminus.com)

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