

Power Line Designer Kit

0.5-Watt LED Modules



OVPL5W3K

Contents:

- Five (5) PCBs 8" in length
- Three (3) 0.5-Watt white LEDs per PCB, on-board regulator included
- Wire harness with connector
- Hand insertion tool



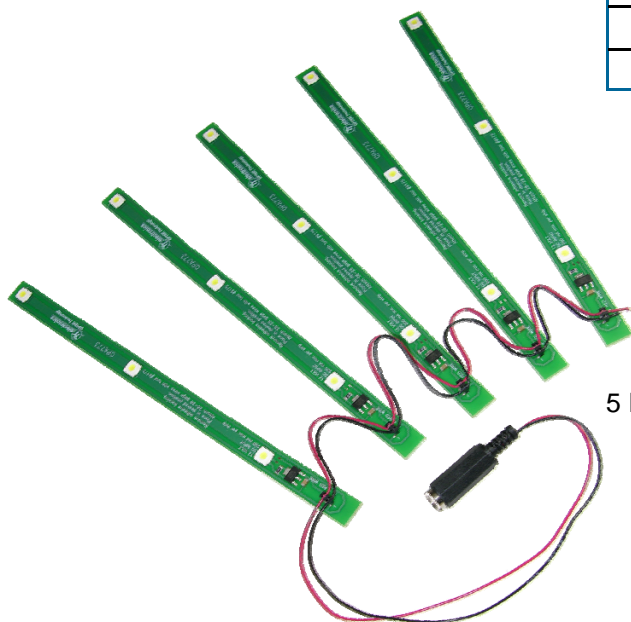
The self-contained **Power Line Designer Kit** is a flexible and scalable lighting solution using mid-power LEDs to supply high luminous flux without additional heatsinking requirements. The kit includes components and instructions to allow a designer to configure LED placement as needed for uniform illumination in his application. With a 15-volt power supply (see Notes), the Power Line Kit is a total lighting solution.

Applications

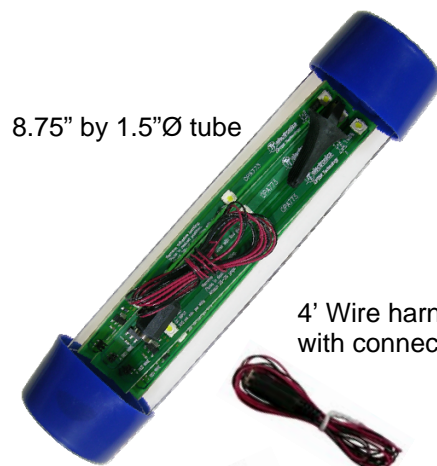
- Architectural accent lighting
- Under-counter lighting
- Media illumination
- Lighting for large channel letters
- Backlighting for light boxes
- Point-of-sale displays

| PCB with 3LEDs Optek Part No. OPA773 | Viewing Angle | Typical CCT | Typical Luminous Flux (lm) @ 15V* |
|--|------------------|----------------|--------------------------------------|
| 1 board | 120° | White 5750K | 50 |
| 2 boards | | | 100 |
| 3 boards | | | 150 |
| 4 boards | | | 200 |
| 5 boards | | | 250 |

*125mA per board stabilized



5 PCBs 8.00" x 0.425" wide
(.062 FR4 material)



8.75" by 1.5"Ø tube

4' Wire harness
with connector

Hand Insertion Tool

Notes:

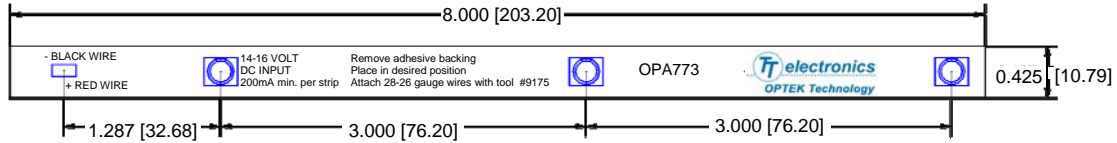
- All electrical and optical characteristics of the LEDs remain the same as specified in **Optek Datasheet OVS5WBCR4**.
- Maximum storage and operating temperature $-40^{\circ} \sim +100^{\circ}\text{C}$
- ESD threshold (HBM) 2000V
- 14-16V power supply not included. 1.0A minimum rating required, regulated or unregulated.

**DO NOT LOOK DIRECTLY
AT LED WITH UNSHIELDED
EYES OR DAMAGE TO
RETINA MAY OCCUR.**



OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

OPA773 Dimensions



Suggested Design Options

| Optek Part Number | Number of LEDs per Strip | Number of Strips per Buss | LED Drive Current per Strip | AWG | Supply Voltage |
|--------------------------|--------------------------|---------------------------|-----------------------------|-------|----------------|
| OPA773 (included in kit) | 3 | 1 to 5 | 125mA | 26-28 | 14-16V |
| OPA775 | 3 | 1 to 30 | 125mA | 18 | 14-16V |
| OPA776 | 3 | 2 to 60* | 125mA | 18 | 24V |
| Optek Custom Assembly** | Other | Other | Other | Other | Other |

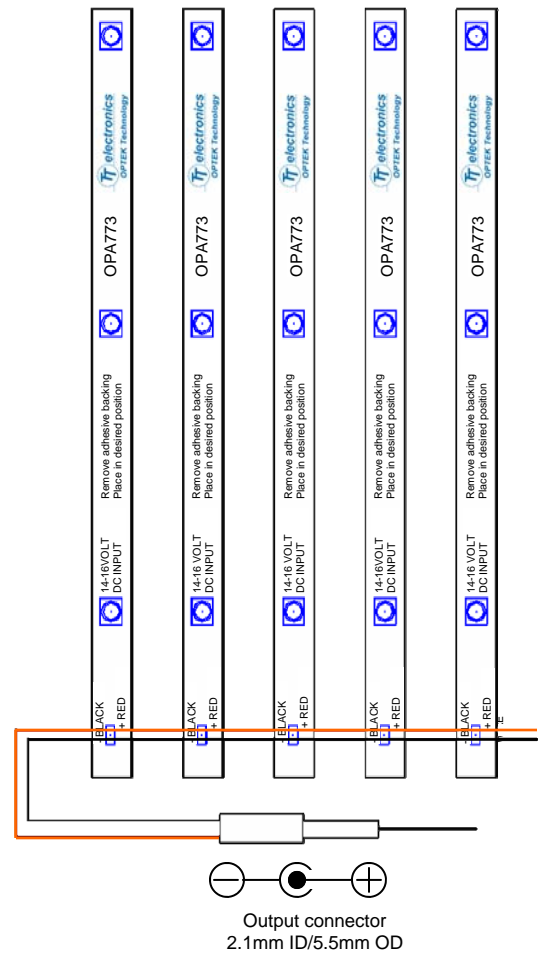
*Multiples of 2 only

**Contact Optek or an authorized distributor to discuss your application.

Instructions

1. Install backplane (not included) behind panel to be illuminated.
2. Use masking tape (not included) to temporarily position the boards on backplane.
3. Route wire harness to each strip:
 - Start with loose end and work toward 2.1mm jack.
 - Use insertion tool to insert red and black wires on each board.
 - Leave several inches of slack between each strip.
4. Connect the 2.1mm jack to 14-16V power supply (not included, must be rated at 1.0A minimum).
5. Reposition all boards until optimal illumination is achieved.
6. Peel tape backing from boards.
7. Permanently apply boards to backplane.

Note: Steps 6 and 7 are optional—do not peel off backing if the kit will be reused.



OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.