

LLK-25 LED Illuminator Enclosure Kit



The LLK-25 LED lighting enclosure kit is a high-quality and high-performance multi-purpose solid-state lighting unit. The large aluminum heatsink provides high thermal conductivity, light weight and high strength for optimum performance of high power LEDs up to 25W of lighting. RGB, coloured, white, or infrared LEDs could be used for special effects or applications. The CNC machined plastic window cover and case provides a precision finish and look to the product. The LLK-25 is designed to perform in professional as well as general lighting applications. Whether you need a portable work/area light, video light, machine vision or CCTV, the LLK-25 will provide years of maintenance-free service.

Features:

- Large aluminum heatsink, up to 25W
- CNC machined window and case
- Compact, small, light weight, durable
- Easy mounting and installation
- Easy to drill plastic and aluminum parts.
- Corrosion resistant parts and hardware
- High-power, multi-purpose design
- Assembly hardware included

Benefits:

- Maximise and maintains peak LED performance
- Configurable for various lighting applications.
- Efficient and low cost, long life illumination

Applications:

- Portable lighting, area/architectural lighting
- Field-use lighting, machine vision lighting
- CCTV lighting



LLK-25 LED Lighting Enclosure Kit parts



Assembled LLK-25 enclosure

Technical Specifications:

LLK-25 LED Illuminator Enclosure Kit.

Power: 25W Max.

LEDs: 5mm LED arrays or MCPCB star LEDs.

Dimension: 5.35" (L) x 4.8" (W) x 2.15" (D)

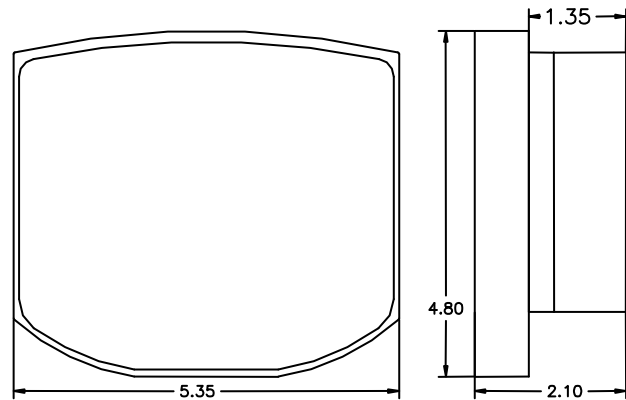
 Material: Extruded aluminum heatsink.
3/4" UHMW plastic shell, CNC, black.

Window: 1/8" clear Lexan, CNC machined.

Weight: 1.36kg (3lb)

Hardware: All stainless steel

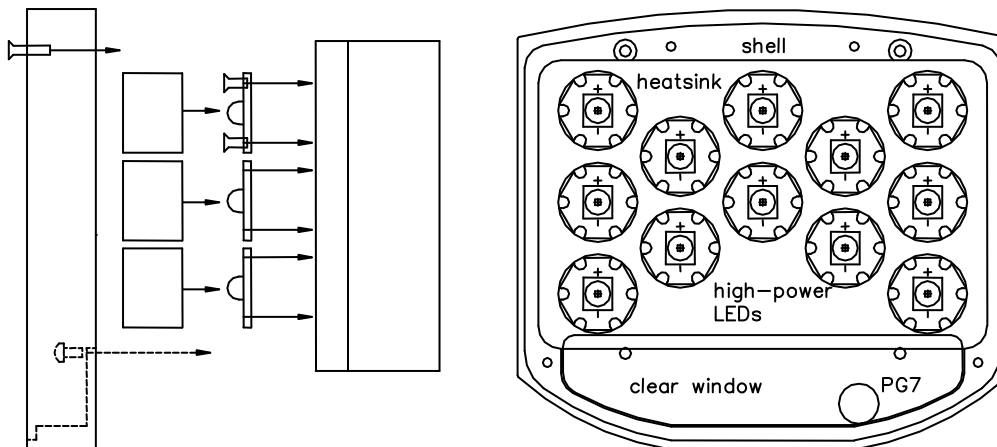
Cabling: PG7 gland for cable.



DO NOT STARE DIRECTLY INTO THE LED LIGHT

Assembly:

Maximize airflow to LED array for best performance. The LEDs and components get warm during operation. Do not install in an enclosed area or expose to high temperatures. LEDs are sensitive to heat and static. Use proper care during soldering and assembly. Follow the assembly procedure sequentially for quick and easy assembly.



Mounting for star-type LEDs

Mounting for PCB-type array

Assembly layout

1. Put LED heatsink on the back of the plastic shell. Center holes and align side edges. On heatsink side, mark-off mounting holes (4x) on plastic shell with 3/32" drill bit.. Trace inside clearance area of plastic shell on heatsink for use later to determine LED mounting area. Drill with 3/32" drill bit to 1/4" depth. Thread holes to 4-40 thread. Do not over torque tap.
2. If 1/4-20 mount and bracket are required. Drill bottom on heatsink with 7/32" hole and thread.
3. If using 4-40 screws for LED mounting, drill with 3/32" bit and thread to 4-40. The LEDs can also be mounted with adhesive. Mount LEDs.
4. Solder LEDs. The LED driver maintains correct current to the LEDs and should not be omitted. The LED driver can be externally mounted if it does not fit inside the plastic shell.
5. Thread PG7 gland into hole. Insert power cable into PG7 gland. Tighten. Connect power wires.
6. Mount plastic shell onto heatsink. Do not over tighten screws.
7. The clear window can be glued or mounted onto the plastic case. Use the four 1/8" holes on the shell for mounting. Drill and taper for 6-32 screw on clear window plate.
8. Test LED light.

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		Turn Night Into Light™

LLK-25 Parts:

Bill-of-Materials for LLK-25 LED lighting heatsink enclosure kit.
Enclosure, heatsink, window and hardware.

QTY	Application	Description
1	LED plastic shell	5.35"x4.8" 3/4" thick CNC machine shell
1	LED heatsink	LED heatsink, 5.35"x3.6"
1	Window cover plate	1/8" PC, clear Lexan window.
1	PG7 wire strain relief, 1/8"-1/4" cable	PG7 cable gland, black
2	Heatsink and shell mounting, top holes	4-40 x 3/4" flat head phillips drive bolts, SS
4	Heatsink and shell mounting, bottom holes	4-40 x 1/4" pan head phillips drive bolts, SS
4	Window plate mounting.	6-32 x 1/4" flat head phillips drive bolts, SS
24	PCB/Star-type LED mounting hardware/ window mounting	4-40 x 1/4" flat head phillips drive bolts, SS

Optional materials (not supplied) for LLK-25 LED lighting unit.
LEDs, LED lens and holder, LED driver

Part	QTY	Application	Description
Star-PCB LED	12	high brightness star-type white LED.	Star-type or similar.
PCB-LLIA90	2	5mm LED array, trim unused area.	90 LED array PCB.
Power cable	1	LED power cable, 2 conductor	Power cable, 2 conductor, 18AWG
LED driver	1	Provide constant current to LEDs	LED driver and regulator
Collimator	12	Plastic holder for lens collimator	Lens holder
	12	Various lens for different beam angles	20mm Lens collimator
Bracket		Mounting bracket	
hardware		Mounting	hardware