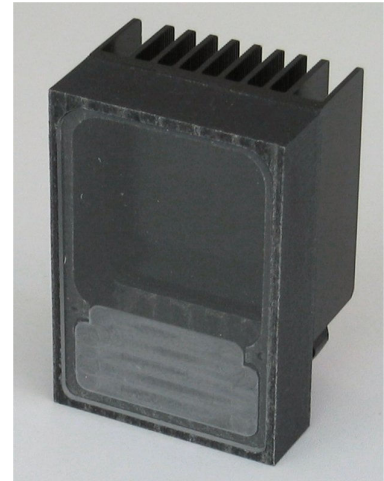


## LLK-12 LED Lighting Enclosure Kit

The LLK-12 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 12W of lighting. RGB or other specific coloured LED 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-12 is designed to perform in professional as well as general lighting applications. Whether you need a portable work/area light, video light, strobe or a headlight, the LLK-12 will provide years of maintenance-free service.



### Features:

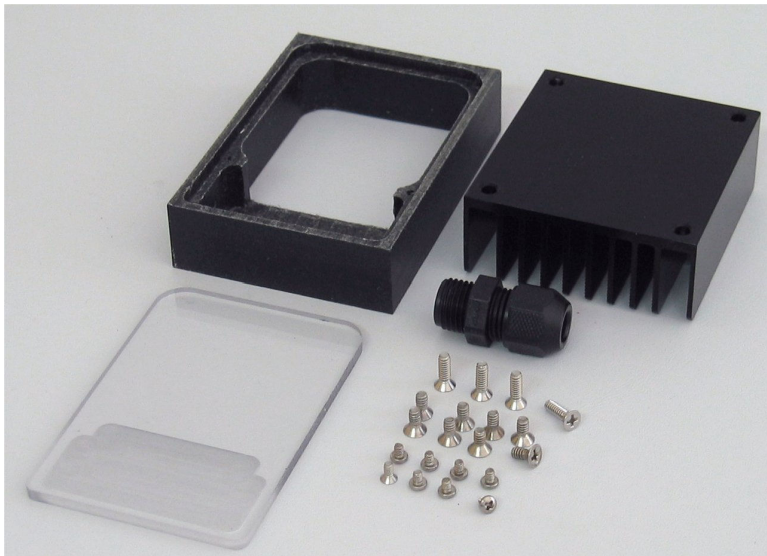
- Large aluminum heatsink, up to 12W
- CNC machined window and case
- Compact, small, light weight, durable
- Easy mounting and installation
- Easy to drill plastic and aluminum parts.
- Corrosion resistant parts and hardware
- High-power, multi-purpose design
- Assembly hardware included

### Benefits:

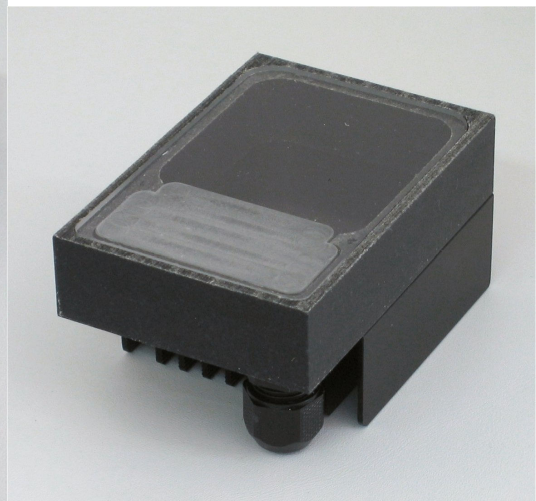
- Maximise and maintains peak LED performance
- Configurable for various lighting applications.
- Efficient and low cost, long life illumination

### Applications:

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



LLK-12 LED Lighting Enclosure Kit parts



Assembled LLK-12 enclosure

**Technical Specifications:**

LLK-12 LED Lighting Unit:

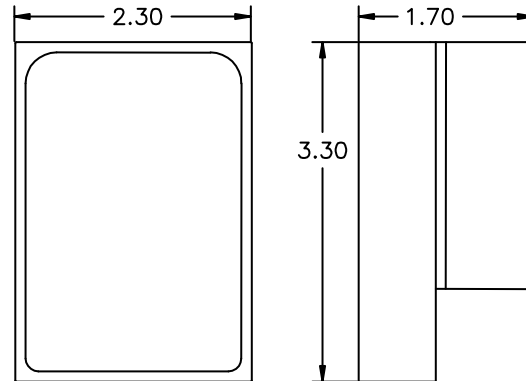
Dimension: 2.3"(W) x 3.3"(H) x 1.7"(D)

 Material: 3/4" CNC plastic body, black  
Aluminum LED mounting heatsink,  
anodised black finish.  
1/8" clear Lexan, CNC machined

Hardware: All stainless steel

Cabling: PG7 gland for cable.

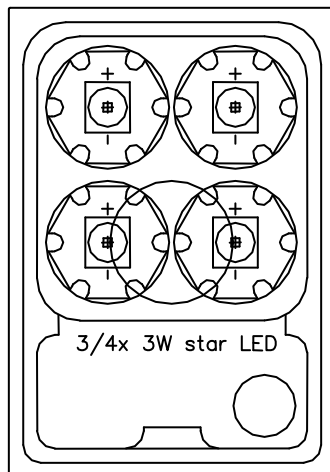
Weight: 130g



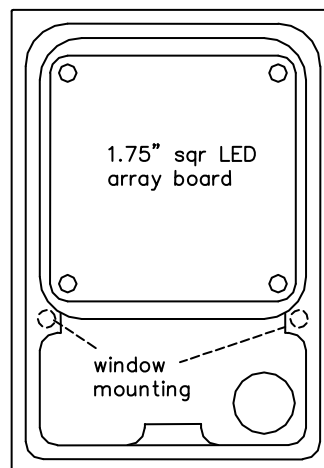
## DO NOT STARE DIRECTLY INTO THE LED LIGHT

**Assembly:**

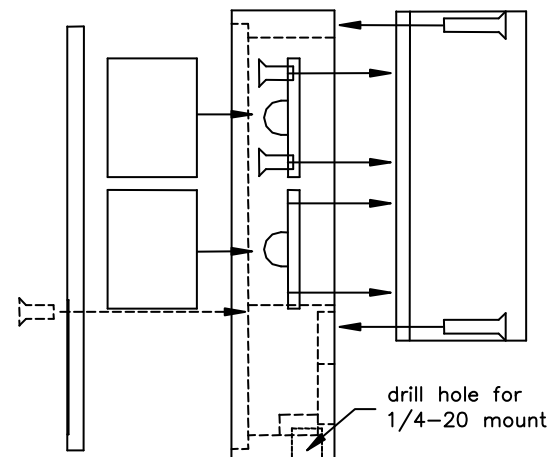
Maximize airflow to LED array for best performance. The LEDs and components get warm during operation. Do not install in an enclosed area or expose to high temperatures. LEDs are sensitive to heat and static. Use proper care during soldering and assembly. Follow the assembly procedure sequentially for 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 and align to top edge. On heatsink side, mark-off mounting holes (4x) on plastic shell. Trace inside clearance area of plastic shell on heatsink for use later to determine LED mounting area. Drill with 3/32" drill bit to 3/8" depth. Thread holes to 4-40 thread. Do not over torque on plastic.
2. If 1/4-20 mount is required. Drill bottom on plastic shell with 7/32" hole to 1/4" depth. Thread 1/4-20.
3. If using 4-40 screws for LED mounting, drill with 3/32" bit and thread to 4-40. If using 2-56 screws, drill holes with 5/64" bit. 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. Mount heatsink onto plastic case. Do not over tighten screws.
6. Thread PG7 gland into hole. Insert power cable into PG7 gland. Tighten. Connect power wires.
7. The clear window can be glued or mounted onto the plastic case. Drill and thread 4-40 on plastic case. Drill and taper for 4-40 screw on clear window plate.
8. Test LED light.

 <b>Onstate Technologies</b>	<b>LLK-12 LED Lighting Kit</b> Enclosure Kit	Technical Information- LED Lighting LED Lighting Kits And Accessories
		Turn Night Into Light™

**LLK-12 Parts:**

Bill-of-Materials for LLK-12 LED lighting heatsink enclosure kit.  
Enclosure, heatsink, window and hardware.

Part	QTY	Application	Description
BPS-LL-05	1	LED plastic shell	2.3"x3.3" 3/4" thick CNC machine shell
HSK-LL-02	1	LED heatsink	LED heatsink, 2.3"x2.4"
WCF-LL-05	1	Window cover plate	1/8" clear Lexan window.
HWG-LWTPG7-1	1	PG7 wire strain relief, 1/8"-1/4" cable	PG7 cable gland, black
HWF-BLTI406-01	4	HSK-LL-O2/BPS-LL-05 mounting, center hole	4-40 x 3/8" flat head phillips drive bolts, SS
HWF-BLTI404-02	10	PCB/Star-type LED mounting hardware/window mounting	4-40 x 1/4" flat head phillips drive bolts, SS
HWF-BLTI202-01	8	PCB/Star-type LED mounting hardware	2-56 x 1/8" pan head phillips drive bolts, SS

Required materials (not supplied) for LLK-12 LED lighting unit.  
LEDs, LED lens and holder, LED driver

Part	QTY	Application	Description
LED array	4	high brightness star-type LED or 1.75" square LED array.	LED array. Star-type or similar.
Power cable	1	LED power cable, 2 conductor	Power cable, 2 conductor
LED driver	1	Provide constant current to LEDs	LED driver and regulator
Collimator	4	Plastic holder for lens collimator	Lens holder
	4	Various lens for different beam angles	20mm Lens collimator