

### LLK-18 LED Light Enclosure Kit

The LLK-18 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 aluminum-based PCB LEDs up to 18W 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-18 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-18 will provide years of maintenance-free service. It performs as well as other high-quality LED illuminators and configurable for different applications without the initial cost of custom manufacturing a LED light.

**Features:**

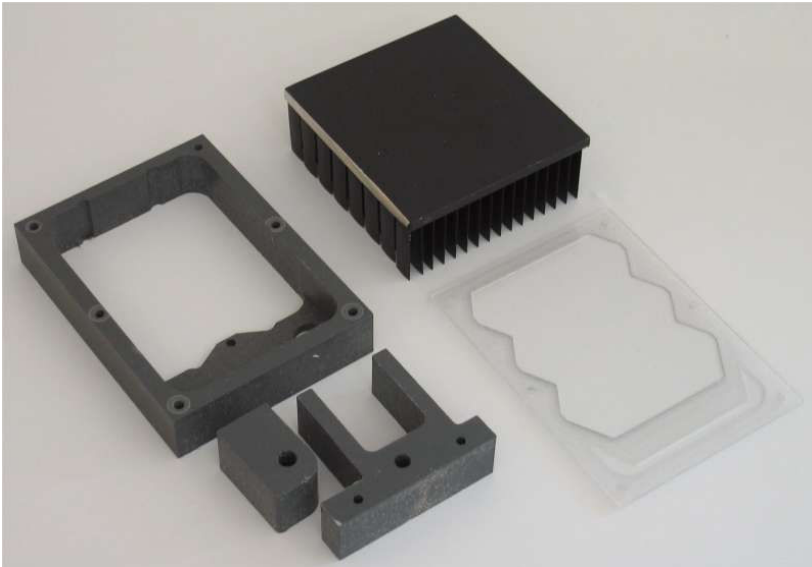
- Large aluminum heatsink, up to 18W
- CNC machined window and case
- Compact, small, light weight, durable
- Easy mounting and installation
- Easy to drill plastic and aluminum parts.
- Corrosion resistant parts and hardware
- High-power, multi-purpose design
- Assembly hardware included

**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, CCTV lighting
- Machine vision lighting



LLK-12 LED Lighting Enclosure Kit parts (hardware not shown)



Assembled LLK-12 enclosure

**Technical Specifications:**

LLK-18 LED Lighting Unit:

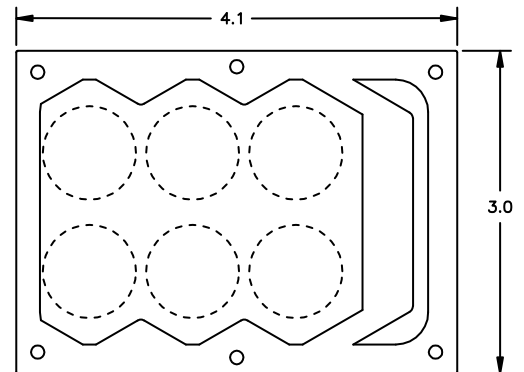
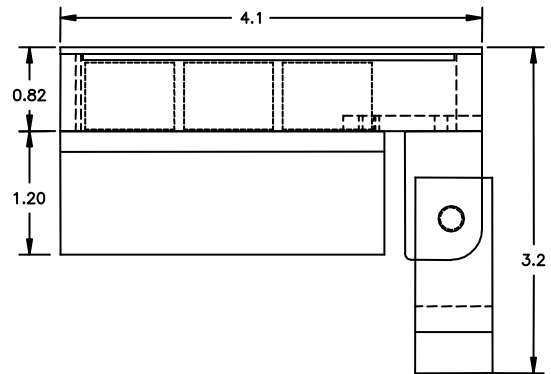
Dimension: 3.0"(W) x 2.0"(H) x 4.1"(L)

 Material: 3/4" CNC PVC plastic, dark grey.  
Aluminum, anodized finish  
1/8" clear Lexan, CNC machined

Hardware: All stainless steel

Cabling: PG7 gland for cable.

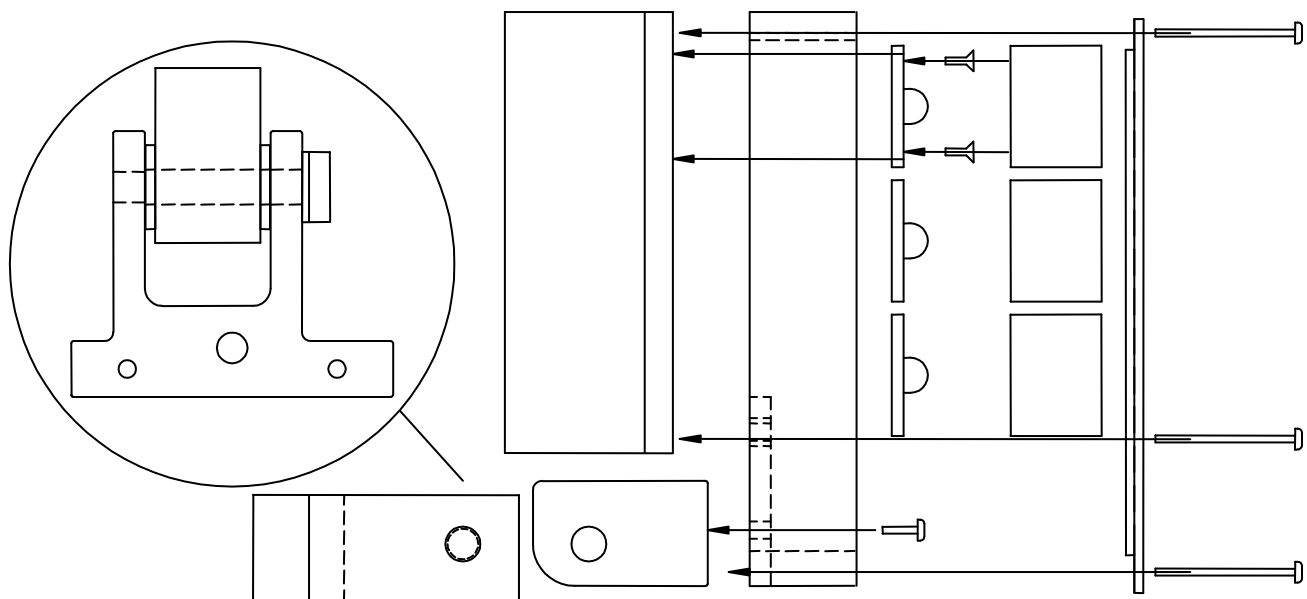
Weight: 12.4 Oz. (350g)



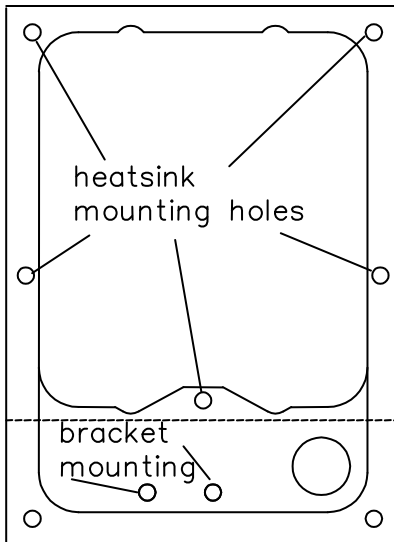
## DO NOT STARE DIRECTLY INTO THE LED LIGHT

**Assembly:**

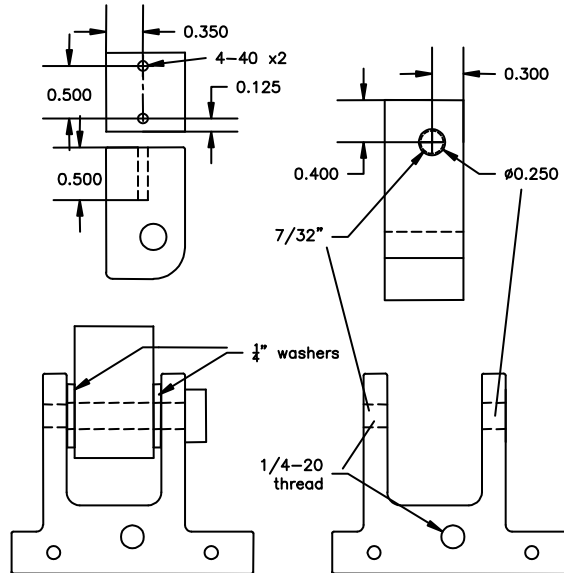
Maximize airflow to LED array for best performance. The LEDs and components get warm during operation. Do not install in an enclosed area or expose to high temperatures. LEDs are sensitive to heat and static. Use proper care during soldering and assembly. Follow the assembly procedures sequentially for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



LLK-18 LED light assembly layout.



Heatsink and mounting bracket hole locations.



Mounting bracket assembly hole locations (drill and thread).

1. Put LED heatsink on the back of the plastic shell. Center and align to top edge. On plastic shell side, mark-off mounting holes on heatsink surface (5x) with 1/8" 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 required depth. Thread holes to 4-40 thread.
2. Drill and thread holes as necessary on mounting bracket assembly (figure above). Assemble mounting bracket assembly.
3. If using 4-40 screws for LED mounting, drill with 3/32" 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. Thread PG7 gland into hole. Insert power cable into PG7 gland. Tighten.
6. Mount bracket assembly onto plastic shell with 4-40 screws.
7. The clear window can be glued or mounted onto the plastic case. The 4-40 screws mount directly onto the heatsink from the plastic shell side through the clear window cover.
8. Mount heatsink onto plastic case. Do not over tighten screws.
9. Test LED light unit.

 <b>Onstate Technologies</b>	<b>LLK-18 LED Lighting Kit</b> Enclosure Kit	Technical Information- LED Lighting LED Lighting Kits And Accessories
		Turn Night Into Light™

**LLK-18 Parts:**

Bill-of-Materials for LLK-18 LED lighting kit.

LLK-18 enclosure, heatsink, window and hardware.

Part	QTY	Application	Description
HSK-LL-03	1	Aluminum heatsink for mounting LEDs.	3" wide aluminum heatsink
WCF-LL-02	1	Window cover plate for LLK-18	1/8" CNC clear Lexan.
BPS-LL-02	1	LLK-18 enclosure and bracket.	3/4" plastic shell. CNC box.
HWF-BLTI404-01	1	BPS-LL-02 enclosure mounting	4-40 x 1/4" pan head phillips drive bolts, SS
HW-BLTI404-02	12	Star-type LED mounting hardware	4-40 x 1/4" flat head phillips drive bolts, SS
HWF-BLTI202-01	12	Star-type LED mounting hardware	2-56 x 1/8" pan head phillips drive bolts, SS
HWF-BLTI416-04	6	Window/enclosure/heatsink mounting hardware	4-40 x 1.0" pan head phillips drive bolts, SS
HWF-BLTI408-05	2	Bracket plate assembly mounting	4-40 x 1/2" pan head phillips drive bolts, SS
HWF-LWI4-01	4	For 4-40 screws.	#4 split lock washer, SS
HWF-NUTI4-01	2	4-40 nut, shell back side.	4-40 nut.
HWF-LWI14-03	5	1/4" flat washer, bracket spacers	1/4" flat washers, SS
HWF-LWI1424-02	1	1/4-20 x1.5" bolt, bracket pivot mounting	1/4-20 x1.5" hex bolt, SS
HWG-LWTPG7-1	1	PG7 wire strain relief, 1/8"-1/4" cable	PG7 cable gland, black

Required materials (not supplied) for LLK-12 LED lighting unit.

LEDs, LED lens and holder, LED driver

Part	QTY	Application	Description
LED array	6	high brightness star-type LED	LED array. Star-type
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	6	Plastic holder for lens collimator	Lens holder
	6	Various lens for different beam angles	20mm Lens collimator