

ILX450

EXTREME APPLICATION INDUSTRIAL LIGHTING



HIGH TECH

DURABLE



ILX 450 Series

Extreme Application LED Lighting



Product Information

The **ILX450** Series is designed specifically to withstand the harsh conditions of extreme environments such as **hazardous area and high heat applications**. It is the first true **IP68 marine rated LED industrial light** to replace existing high-pressure mercury / sodium, and metal halide lamp fixtures for **offshore Oil & Gas platforms**. It is available in numerous choices of optics with various mounting options. The **ILX450** Series incorporates an industrial grade LED driver designed for ultra-long lifespan.

Its patented Air Bi-Pass Convection System enables excellent thermal management to ensure **long LED life** with extended lumen maintenance and **virtually zero fixture maintenance**. Without any secondary optics, the **ILX450** Series provides ultra-bright industry leading high efficacy light output, resulting in cost effective solutions with a **short ROI period**.

Patent No. 8,757,842 B2 / 8,272,765 B2 / 9,383,084 / 6,830,364
Other US and international patents pending.

Application - High / Mid / Low Bay

- Oil & Gas
- Mining
- Food processing
- Foundries
- Power Generation
- Paper & Pulp Mills
- Cranes & Hoists
- Desalination Plants
- Chemical Plants
- Water & Sewage

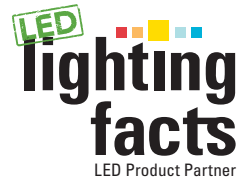
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Why **LED**[®]

- Technologically Advanced, LED industrial light
- Flexible Design with versatile mounting options
- Superior craftsmanship using high grade raw materials
- Cost effective solution with a Short ROI Period
- Available in 75 / 100 / 120 / 150 / 185 / 220 watt configuration



Advantages of ILX450

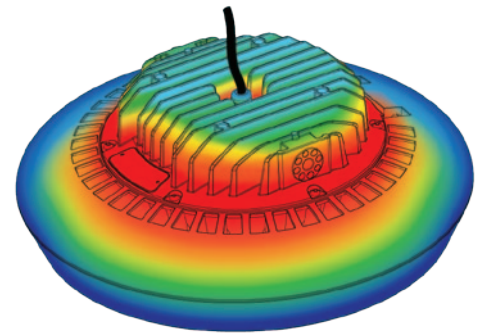
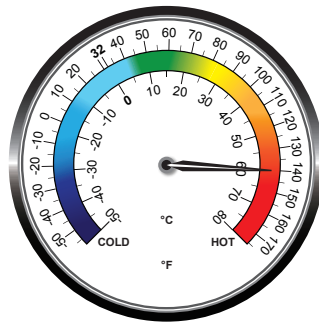
- Ultra bright industry leading **High Efficacy (lm/W)** LED industrial light
- **Hazardous Area and High Heat Rating** with an operational temperature of - 50 ~ + 65°C
- NEMA 4X industrial grade Dura-Guard powder coating with **10 years protection on weather and corrosion**
- **Marine Rated Stainless Steel** components and trimmings
- Proprietary Reflector and optics enabling glare-free uniform lighting for all applications, eliminating the need for costly and fragile plastic lenses
- Advanced Thermal Technology enables low LED junction temperatures (Tj) for **maintenance free long life**
- High efficiency LED driver with integrated smart circuitry and **surge & transient voltage protection**
- Optional programmable **RF Wireless Smart Control System** with PIR motion & daylight sensor enabling greater savings and flexibility
- **L70 Rating @ Ta 25°C over 160,000 hour rated life**
- IP68 and **Petro-Chemical Industry rated** luminaire with an exceptional **10-Year Limited Warranty**
- **Designed and engineered in USA**

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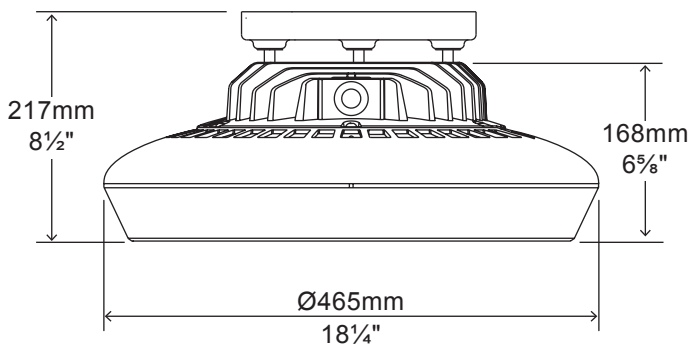
Thermal Management

The new **ILX series** LED drivers are designed specifically for extreme application lighting that requires high ambient operating temperatures. It utilizes the latest topology in electronic circuitry design with state of the art military and industrial grade components. The LED driver is encapsulated with thermal potting into a dedicated heat sink for better thermal performance and greater flexibility for service and maintenance. The **ILX** LED driver module delivers an outstanding 95% efficiency and is designed to last over 80,000 hours in harsh environments with high operating ambient temperatures.



| System Watts | T6 Temperature Code Ambient Temperature Range | | T5 Temperature Code Ambient Temperature Range | | T4a Temperature Code Ambient Temperature Range | |
|--------------|--------------------------------------------------|--------------|--------------------------------------------------|--------------|---------------------------------------------------|--------------|
| | °F | °C | °F | °C | °F | °C |
| 75 W | -40°F ~ 149°F | -40°C ~ 65°C | | | | |
| 100 W | -40°F ~ 140°F | -40°C ~ 60°C | -40°F ~ 149°F | -40°C ~ 65°C | | |
| 120 W | -40°F ~ 131°F | -40°C ~ 55°C | -40°F ~ 149°F | -40°C ~ 65°C | | |
| 150 W | -40°F ~ 122°F | -40°C ~ 50°C | -40°F ~ 149°F | -40°C ~ 65°C | | |
| 185 W | -40°F ~ 113°F | -40°C ~ 45°C | -40°F ~ 131°F | -40°C ~ 55°C | -40°F ~ 149°F | -40°C ~ 65°C |
| 220 W | -40°F ~ 113°F | -40°C ~ 45°C | -40°F ~ 131°F | -40°C ~ 55°C | -40°F ~ 149°F | -40°C ~ 65°C |

External Dimensions



Packaging Information

| Quantity | Dimensions (LxWxH) | Weight |
|----------|--------------------------------------------|---------------------|
| 1 | 50 x 50 x 28 cm 19 5/8 x 19 5/8 x 11 in | 16.5 kg 36.3 lbs |

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Extreme Application LED Lighting

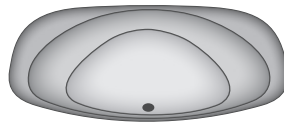
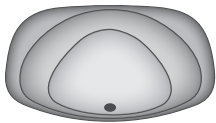
Optics Options

02 - Type II / wall mount & perimeter lighting

S - Short

M - Medium

L - Long

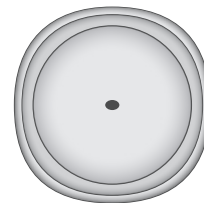
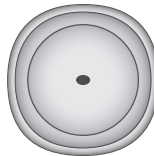
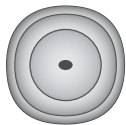


R5 - Type V Round / symmetric for low-mid-high bay, parking garages and flood application

S - Short

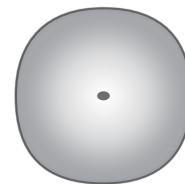
M - Medium

L - Long



F5 - Type V Opaque - Frosted / symmetric for ultra uniform & low glare application

L - Long



S5 - Type V Square / symmetric for high-bay, isle, high-mast and flood application

S - Short

M - Medium

L - Long



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Mounting Options



SST - SPRING LOADED SNAP & TURN
SURFACE MOUNTING SYSTEM

SST - SPRING LOADED SNAP & TURN
MOUNTING SYSTEM



CH4 - CHAIN CHANDELIER
MOUNTING SYSTEM



W90 - WALL MOUNTING SYSTEM



TMS - TANDEM MOUNTING SYSTEM



SWL - VARIABLE ANGLE SWIVEL
MOUNTING SYSTEM



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Ordering Information

| ILX45 | Wattage | Voltage | Optics | Pitch | CCT | Driver | Mounting * |
|-------|---------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| | 075 = 75Watt 100 = 100Watt 120 = 120Watt 150 = 150Watt 185 = 185Watt 220 = 220Watt | UV = 90-277VAC HV = 305-528VAC DV = 127-380VDC | 02 = Type II R5 = Type V Round S5 = Type V Square F5 = Type V Frosted | S = Short M = Medium L = Long | 30 = 3000K 40 = 4000K 50 = 5000K | ND = Non-Dimmable DM = Dimmable DS = Dimmable With Sensor DL = Dali Control LS = Dali Control With Sensor | SST = Snap & Turn CH4 = 4 Chain W90 = 90° Mount SWL = Swivel Mount TMS = Tandem Mount |

* SST mount is standard, please see mounting options accessories for details.

NOTE: Outdoor application and corrosive environment please request glass lens.
Gray is the standard exterior color. Other colors are available on request.

Example

| Part Number | Part Description |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| ILX45150UV-R5M-50DS-SST | LED Industrial Light / 150Watt / 90-277VAC / Type V Round / Medium Pitch / 5000K Cool White / Dimmable with Motion Sensor / Snap & Turn |

Specification - Type II Medium

| | | | | |
|-------------------------------------------|---------------------------------------------------------|-------------|--------------|--------------|
| Fixture Watts | 75 W | 100 W | 120 W | 150 W |
| Lumens (Total)* | 9,225 lm | 12,100 lm | 14,280 lm | 17,550 lm |
| Efficacy * | 123 lm / W | 121 lm / W | 119 lm / W | 117 lm / W |
| Number of LEDs & Driving Current | 24@290mA | 24@380mA | 24@450mA | 24@560mA |
| T _s - Solder Point Temp * | 46°C | 54°C | 58°C | 63°C |
| L70 Rating @ T _a 25°C | > 185K hours | >180K hours | > 175K hours | > 170K hours |
| Operational Temperature (T _a) | -40°C ~ 65°C | | | |
| Input Voltage | 90-277VAC 47~63Hz (348 & 480VAC available) / 127~380VDC | | | |
| LED Model | Lumileds / Nichia / Cree | | | |
| CRI | 75 | | | |
| Lighting Control | Dimmable (0-10V, PWM) / DALI / Daylight & Motion Sensor | | | |
| Warranty | 10-Year Limited | | | |
| Storage Temp. / Humidity | -40°C ~ 80°C / IP68 Waterproof Rated Fixture | | | |
| Transient Surge Protection | 6kV / 3kA optional 20kV / 10kA (L - L, L-G) | | | |

* Test data @ T_a 25°C

NOTE: All Values Have ±7% Tolerance

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Extreme Application LED Lighting

Specification - Type V Round Medium

| | | | | | | |
|-------------------------------------------|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Fixture Watts | 75 W | 100 W | 120 W | 150 W | 185 W | 220 W |
| Lumens (Total) * | 10,500 lm | 13,500 lm | 16,560 lm | 20,100 lm | 22,940 lm | 26,180 lm |
| Efficacy * | 140 lm / W | 135 lm / W | 138 lm / W | 134 lm / W | 124 lm / W | 119 lm / W |
| Number of LEDs & Driving Current | 28@250mA | 28@330mA | 28@390mA | 28@480mA | 28@590mA | 28@700mA |
| T _s - Solder Point Temp * | 44°C | 47°C | 54°C | 59°C | 63°C | 70°C |
| L70 Rating @ T _a 25°C | >190K hours | >185K hours | >180K hours | >175K hours | >160K hours | >150K hours |
| Operational Temperature (T _a) | -40°C ~ 65°C | | | | | |
| Input Voltage | 90-277VAC 47~63Hz (348 & 480VAC available) / 127~380VDC | | | | | |
| LED Model | Lumileds / Nichia / Cree | | | | | |
| CRI | 70 / 80 | | | | | |
| Lighting Control | Dimmable (0-10V, PWM) / DALI / Daylight & Motion Sensor | | | | | |
| Warranty | 10-Year Limited | | | | | |
| Storage Temp. / Humidity | -40°C ~ 80°C / IP68 Waterproof Rated Fixture | | | | | |
| Transient Surge Protection | 6kV / 3kA optional 20kV / 10kA (L - L, L-G) | | | | | |

* Test data @ T_a 25°C

NOTE: All Values Have ±7% Tolerance

Specification - Type V Square Short

| | | | | | | |
|-------------------------------------------|---------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|
| Fixture Watts | 75 W | 100 W | 120 W | 150 W | 185 W | 220 W |
| Lumens (Total)* | 10,500 lm | 13,500 lm | 16,200 lm | 20,100 lm | 22,940 lm | 26,400 lm |
| Efficacy * | 140 lm / W | 135 lm / W | 135 lm / W | 134 lm / W | 124 lm / W | 120 lm / W |
| Number of LEDs & Driving Current | 28@250mA | 28@330mA | 28@390mA | 28@480mA | 28@590mA | 28@700mA |
| T _s - Solder Point Temp * | 44°C | 47°C | 54°C | 59°C | 63°C | 70°C |
| L70 Rating @ T _a 25°C | >185K hours | >180K hours | >175K hours | >170K hours | >160K hours | >150K hours |
| Operational Temperature (T _a) | -40°C ~ 65°C | | | | | |
| Input Voltage | 90-277VAC 47~63Hz (348 & 480VAC available) / 127~380VDC | | | | | |
| LED Model | Lumileds / Nichia / Cree | | | | | |
| CRI | 75 | | | | | |
| Lighting Control | Dimmable (0-10V, PWM) / DALI / Daylight & Motion Sensor | | | | | |
| Warranty | 10-Year Limited | | | | | |
| Storage Temp. / Humidity | -40°C ~ 80°C / IP68 Waterproof Rated Fixture | | | | | |
| Transient Surge Protection | 6kV / 3kA optional 20kV / 10kA (L - L, L-G) | | | | | |

* Test data @ T_a 25°C

NOTE: All Values Have ±7% Tolerance

