

Lighting That Improves Worksite Safety



## TABLE OF CONTENTS

#### *VALUE*+

PAGE 3
INTRODUCTION

PAGE 4-5 INDUSTRIAL GRADE

PAGE 6-7 LAYOUT SUPPORT

PAGE 8 QUICK SELECTION GUIDE

#### **PRODUCTS**

PAGE 10-11 MR | XR

PAGE 12-13 AR | GS (AC/DC)

PAGE 14-15 BL | NL

PAGE 16-17 EXC | CANLED

PAGE 18-19 SPECIALTY / TEMPORARY SUPPORT STRUCTURES

PAGE 20 GET IN-TOUCH

### QR CONTACT



QR CODES OFFER INSTANT ACCESS TO US & OUR PRODUCT DOCUMENTATION. ALL QR CODE LINKS HAVE LIVE CHAT ENABLED FOR REAL-TIME COMMUNICATION WITH OUR TEAM.

### CERTIFICATIONS



UL LLC - SAFETY CERTIFICATION



UL LLC - MARINE RATING



AMERICAN BUREAU OF SHIPPING



INTERNATIONAL DARK-SKY ASSOCIATION



NATIONAL SANITATION FOUNDATION



DESIGN LIGHTS CONSORTIUM

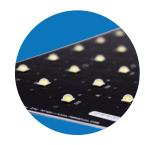


## INDUSTRIAL GRADE



### **Light Emitting Diode (LED)**

Nemalux uses reliable, high-quality diodes from CREE, Samsung, and Nichia. Underpowering these diodes reduces heat stress and premature aging. Reducing the current flow by 50-70% of the rated max value extends the usable life of LEDs. This increases longevity and reliability in the demanding temperature extremes of harsh and hazardous environments.



### **Light Engine (MCPCB)**

A vital part of heat transfer from the LED to the external case is the metal core printed circuit board (MCPCB). This allows for a greater temperature range and extended luminaire performance by minimizing the component temperature increases. When practical the electrical systems utilize redundancy, enhancing reliability. The boards are field serviceable allowing future upgrades and onsite replacements. They have quick-connect components making them a solder-free installation. This also gives easy access to the light engines which improves onsite maintenance.



#### **Secondary Optics**

Optical control is instrumental in the lighting design and application process. Our modular optics deliver illumination where required and reduce light pollution. The use of secondary optics provides flexibility and enhances visual comfort. Nemalux's designers can suggest spacing, aiming and mounting heights for each project. As a result, projects receive improved visibility while reducing total cost of ownership.



#### **Glare Reduction Lenses**

Lack of adequate illumination is a common factor affecting safety on industrial sites. Glare and light trespass can also contribute to a lower level of safety. Sharp cutoff and glare reduction lenses from Nemalux provide visual comfort and acuity. Mounting height, tilt angle, and optics are other factors for a positive outcome.



### **Power Supplies**

Hazardous location rated power supplies are a key part of many Nemalux lights. Programming features deliver tailored lighting effects, balancing thermal management and efficiency. Dimming is available on many luminaires using 0-10V technology. For most power supplies L90 values are a good indicator of system lifetime. Selecting products with multiple power supplies provides redundancy in case of failures.



#### **Housing Design**

Nemalux luminaires are constructed with a copper free aluminum alloy. These alloys are very effective heatsinks while resilient to chemicals and salt water. Anodizing or powder-coating provides increased resilience in hazardous and harsh environments. Nemalux's use of specialty powders provides multi-layer protection. This coating can withstand simultaneous exposure to corrosive chemicals, UV, and saltwater. Industrial enclosures can experience dramatic changes in temperature and humidity. Nemalux luminaires use pressure equalization vents with an IP66/67 rating. This helps relieve component stress and minimizes condensation effects. Advanced LED housing designs stimulate convective airflow and debris shedding. This lowers the operating temperatures for all electronics. Resulting in increased system life and ambient temperature range.



### **Mounting Hardware**

The use of flexible mounting systems is instrumental for an optimized installation process. Nemalux's standard catalog includes an extensive range of brackets specific to each fixture. These diverse mounting options withstand severe vibration, impact, and chemical exposure.

Optional secondary safety methods enhance fall protection. Short installation time reduces the cost of fixture placement. Additionally engineering, procurement, maintenance, and installation efforts are reduced.



www.nemalux.com

### **Field Serviceability**

Nemalux offers many luminaires with field serviceable components. This allows upgrades and maintenance opportunities beyond the warranty period. Bulb and ballast replacements were important for conventional High-Intensity Discharge lights that are designed with service in mind. The emergence of LED technology has caused a shift to non-serviceable / sealed systems. This approach is challenging and forces the disposal of valuable lights. A more effective approach is to replace aging components and extend the system life.

## LAYOUT SUPPORT

Nemalux provides lighting design services for harsh and hazardous locations. These locations include Oil & Gas, Chemical, Mining, Heavy Industrial, Military & Aerospace, Municipal Infrastructure, Rail, and Marine Terminals.

rawings or basic dimensional details allow lighting desigers to run calcuations and prepare reports. These illustrate future illumination results. Following suggested luminaire locations and mounting details streamlines the installation process. Supporting the successful delivery of complex projects.

#### Why Nemalux?

#### **Durable Lighting Technology**

LED luminaires for harsh and hazardous location use. Human-centric lighting that improves safety and productivity.

#### **Versatile Deployment Options**

Light fixtures featuring various optical and mounting options. Tailored lighting systems to address challenging projects.

#### **Total Lifetime Value**

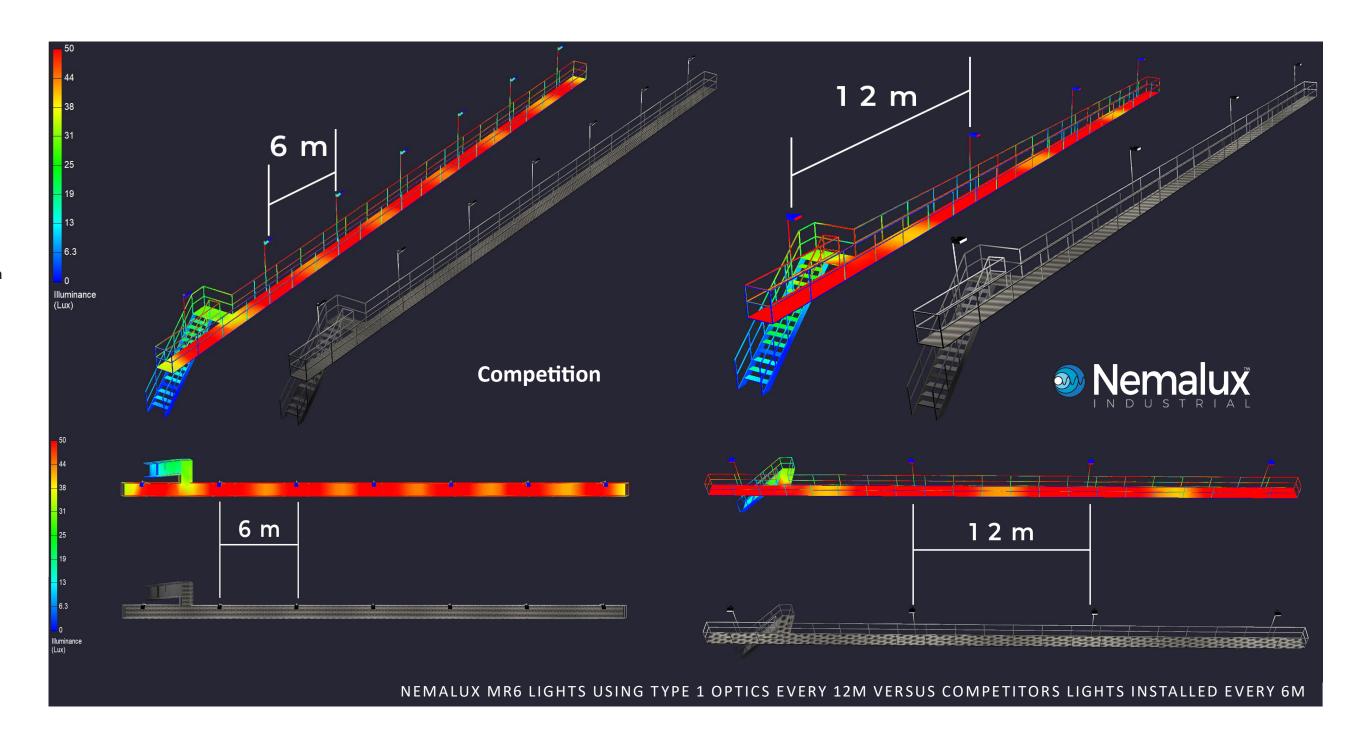
Lower initial cost, simplified installation, and field serviceable components result in excellent value

#### **Expert Support Services**

In-house lighting design and product engineering expertise. Lighting outcome-based philosophy vs a simplistic product-centric approach.

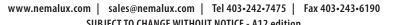
#### **Short Lead Times**

An extensive component stocking program with just-in-time manufacturing from our Canadian facility.



# QUICK SELECTION GUIDE

Application	Nemalux Model		VEC.			NEC/CEC							Lumen Output				Lens Material				Cold	our Te	mp.		Optical Profiles*							Environmental				
		Div. 1	Div. 2	Zone 1	Zone 2	Div. 1	T	Zone 20	П	UL1598	UL1598A	200 - 2000	5000 - 10000	10000 - 20000	20000 - 30000	30000 - 50000	Polycarbonate	Glass	Clear	Frosted	3000 K	4000 K	2000 K	Wide Beam	Narrow Beam	Type 1	Type 2	Type 3	Type 4	Type 5	IP66	IP67	IP68**	Low Ambient	High Ambient	
Pole Mount	AR Series										-			•	•	-					•		•		-							•		-40°C	+55°C	
	XR Series							-			-		-	-							•	-	•	ŀ	-						-		-	-50°C	+75°C	
	MR Series											•	•								•	-	•	ı	-				-			•	-	-40°C	+55°C	
High Bay/ Low Bay	AR Series		Б							•	-			-	•	•	П				•	-	•	ı					-			•		-40°C	+55°C	
	XR Series		П					-	36	•			-	-							•	-	•	Ŀ			ı	ŀ			•		-	-50°C	+75°C	
	MR Series					П					-		•								-	-	•								-		-	-40°C	+55°C	
Yoke Mount	AR Series					П					-			-	-						•	-	-		-				-		-			-40°C	+55°C	
	XR Series					П		-			-		-	-							•	-	-		-						-		-	-50°C	+75°C	
	MR Series					П					-	•	•								•	-	•		•				-		-	•	-	-40°C	+55°C	
Linear	GS Series AC					П					-	•									•	-	-								-			-40°C	+65°C	
	GS Series DC					П					-										•	-	•		-						-	•	-	-40°C	+60°C	
Lilledi	NL Series					П					-	•	-								•	-	-								-			-40°C	+53°C	
	BL Series					П		-	10		-										•	-	•								-		•	-50°C	+65°C	
Dark Sky Certified	AR Series					П					-			•		-		П			•	-	•						-		-	•		-40°C	+55°C	
	XR Series					П		-	10		-		-	-								-	-										-	-50°C	+75°C	
	MR Series					П					-	-	-									-	-								-	•	-	-40°C	+55°C	
	GS Series AC					П					-	•										-	-								-			-40°C	+65°C	
	GS Series DC					П					-	•									•	-	•								-	•	•	-40°C	+60°C	
Specialty	EXC Series											•									•	-	•								-			-50°C	+58°C	
	CANLED Series											•									•	-	•		-						-			-40°C	+55°C	
	XCANLED Series											-									•	-			-						-			-40°C	+55°C	
Temporary	LS Series										-	•									•	-	•								-	•		-20°C	+60°C	
	ZLM Series							1							•	-					•	•	-		-						•			-40°C	+55°C	







<sup>\*</sup>Custom optics are available upon request \*\*IP68 models are rated for General Location use only











## MR SERIES



c/w Slip Fitter Yoke Mount (MR-SFY)

#### *Features*

- Designed for marine, harsh, and hazardous location use
- Optimized thermal management for all electronics
- Wide range of optical distribution patterns for superior lighting quality
- Approved for through-wiring of multiple units on a single circuit
- Built-in junction area for simplified termination
- 8 mounting options for deployment flexibility
- Field serviceable light engines, power supply and housing elements
- Submersible and fully encapsulated IP68 version (non-serviceable) is rated for general location use only

#### Technical Specs

**Voltage:** AC: 120-277 VAC (50/60 Hz) | HV: 347 VAC (50/60 Hz) **Ingress Protection:** IP66 | IP67 | IP68 (General Location use only)

**Temp Range:** -40°C to +55°C

CSA C22.2 No. 137, CSA C22.2 No. 250.0, CSA C22.2 No. 250.13;

Class I, Division 2, Groups ABCD, T4;

Class II, Division 2, Groups FG, T4A; Class III;

### 3,000 - 6,000 lumen multi-functional luminaire

**Certification:** UL 844, UL 1598 & UL 1598A & UL 8750;

#### Mounting Options (ordered separately)

















# XR SERIES



c/w Slip Fitter Yoke Mount (XR-SFY)

#### 8,000 - 20,000 lumen multi-functional luminaire

#### *Features*

- Designed for marine, harsh, and hazardous location use
- Thermal separation of LED and power supply allows max ambient temperatures of up to +75°C
- Wide range of optical distribution patterns for superior lighting quality
- Approved for through-wiring of multiple units on a single circuit
- Built-in junction area for simplified termination
- 8 mounting options for deployment flexibility
- Field serviceable light engines, power supply and housing elements
- Submersible and fully encapsulated IP68 version (non-serviceable) is rated for general location use only

#### Technical Specs

**Voltage:** AC: 120-277 VAC (50/60 Hz) | HV: 347-480 VAC (50/60 Hz)

**Ingress Protection:** IP66 | IP68 (General Location use only)

**Temp Range:** -50°C to +75°C

**Certification:** UL 844; UL 1598 & UL 1598A; UL 8750;

CSA C22.2 No. 250.0-08, CSA C22.2 No. 250.13-17, CSA C22.2 No. 137-18;

Class I, Division 2 Groups ABCD / Class I, Zone 2, Groups IIC;

Class II Division 2 Groups FG / Class I, Zone 22, Groups IIIB; Class III

#### Mounting Options (ordered separately)

















Surface (MR-SM) Suspension (MR-SM)











## AR SERIES



c/w Slip Fitter Yoke Mount (AR-SFY)

### 10,000 - 50,000 lumen multi-functional luminaire

#### **Features**

- Wide range of optical distribution patterns for superior lighting quality
- Approved for through-wiring of multiple units on a single circuit

- Field serviceable light engines, power supply and housing elements

#### Technical Specs

**Voltage:** AC: 120-277 VAC | HV: 347-480 VAC (50/60Hz)

Ingress Protection: IP66 | IP67 **Temp Range:** -40°C to +55°C

**Certification:** UL 844; UL 1598 & UL 1598A; UL 8750;

CSA 22.2 No. 137, CSA 22.2 No. 250.0, CSA 22.2 No. 250.13;

Class I, Division 2, Groups ABCD; | Class II, Division 2, Groups FG; Class III;

#### • Designed for marine, harsh, NSF and hazardous location use

- Housing geometry and specialty powder coat prevents debris buildup and staining

- Built-in junction area for simplified termination
- 8 mounting options for deployment flexibility

Class I, Zone 2, Groups IIC; | Class I, Zone 22, Groups IIIB;

NSF-2: Splash and Non-Food Zones;

### Mounting Options (ordered separately)











## **GS SERIES**



- Length: 26.5 in

GS-3: 1.8 kg | 3.9 lbs - Length: 37.5 in

GS-4: 2.4 kg | 5.3 lbs - Length: 48.5 in

### 500 - 5,000 lumen linear low-profile luminaire

#### *Features*

- Designed for marine, harsh, and hazardous location use
- 12 or 24 Volt DC as well as 120 Volt AC direct input circuit board / light engine
- Light weight and low-profile housing allow for deployment in complex areas
- Adjustable mounting brackets allows for 360° rotation
- Sealed housing provided with 3ft cable and cable gland
- Vented enclosure to prevent stress on electronics and gaskets
- 12 or 24 Volt DC submersible and fully encapsulated IP68 version (non-serviceable) is rated for general location use only

#### Technical Specs

**Voltage:** DC: 12:11-16 VDC | 24:22-28 VDC | 24H: 22-28 VDC

AC: 120 VAC ± 10% (60Hz)

**Ingress Protection:** IP66 | IP67 | IP68 (General Location use only)

Temp Range: -40°C to +65°C

**Certification:** UL 844, UL 1598, UL 1598A, UL 2108;

CSA 22.2 No. 137, CSA 22.2 No. 250.0; Class I, Division 2, Groups ABCD, T4\*\*;

Class II, Division 2, Groups FG, T6\*\*; Class III;

Class I, Zone 2, Group IIC; Zone 22







Mounting Options



A - Adjustable Mounting Bracket





www.nemalux.com







#### *Fixture*

2.9 kg | 6.4 lbs (mounting bracket excluded)

18.43 in x 5.65 in x 3.93 in

#### 2,000 - 4,000 lumen 18 inch linear luminaire

#### Features

- Designed for marine, harsh, and hazardous location use
- Lightweight replacement for conventional vapor tight lights
- Copper free aluminum housing with polycarbonate or glass lens
- Approved for through-wiring of multiple units on a single circuit
- Built-in junction area for simplified termination
- Field serviceable light engines, power supply and housing elements
- Submersible and fully encapsulated IP68 version (non-serviceable) is rated for general location use only

#### Technical Specs

Ingress Protection: IP66 | IP68 (General Location only)

**Temp Range:** -50°C to +65°C

**Certification:** UL 844; UL 1598 & UL 1598A; UL 8750;

CSA 22.2 No. 250.0, CSA 22.2 No. 250.13, CSA 22.2 No. 137;

**Voltage:** AC: 120-277 VAC (50/60 Hz) | HV: 347 VAC (50/60 Hz | General Location only



Class I, Division 2, Groups ABCD, T4A;

Class II, Division 2, Groups FG, T6; Class III;

#### Mounting Options (ordered separately)



Surface (BL-SM)



Hook (BL-HK)



Conduit (BL-CM)





Tube Clamp (BL-TC)



Strap Mounting





## **NL SERIES**



#### *Features*

- Designed for marine, harsh, and hazardous location use
- High intensity linear LED replacement for conventional vapor tight lights

4,000 - 14,000 lumen linear high output luminaire

- Copper free, extruded aluminum housing with polycarbonate lens
- Approved for through-wiring of multiple units on a single circuit
- Built-in junction area for simplified termination
- Angle adjustable mounting bracket allows for 360° rotation
- Field serviceable light engines, power supply and housing elements

#### *Fixture*

NL-2: 5.3 kg | 12.0 lbs

- Length: 27.3 in

NL-4: 8.6 kg | 19.0 lbs - Length: 50.8 in

#### Technical Specs

**Voltage:** AC: 120-277 VAC (50/60 Hz) | HV: 347-480 VAC (50/60 Hz)

**Ingress Protection:** IP66 Temp Range: -40°C to +55°C

**Certification:** UL 844; UL 1598 & UL 1598A; UL 8750;

CSA 22.2 No. 137, CSA 22.2 No. 250.0, CSA 22.2 No. 250.13;

Class I, Division 2, Groups ABCD; Class II, Division 2, Groups FG;

Class III:

Class I, Zone 2, Groups IIC; Class I, Zone 22, Groups IIIB

### Mounting Options (ordered separately)



Surface / Ceiling & Suspended Mount



Angle Adjustable Mount & Swivel Bracket





## **EXC SERIES**



### *Fixture*

4.4 kg | 9.8 lbs (mounting bracket excluded)

11.5 in x 6.5 in x 3.76 in

#### 1,200 lumen explosion proof luminaire for confined space applications

#### *Features*

- Explosion-proof luminaire designed for confined space and low clearance applications
- Tested to withstand more than 2,500 psi internal pressure
- Built-in junction box with three 3/4" NPT entries on three sides
- Copper free, marine grade aluminum housing with glass lens
- Thermally managed for maximum longevity
- No arcing, sparking or hazardous temperature components

#### Technical Specs

**Voltage:** AC: 120-277 VAC (50/60 Hz) | DC: 22-28 VDC

**Ingress Protection: IP66** Temp Range: -50°C to +58°C

**Certification:** UL 844; UL 1598; UL 8750;

CSA 22.2 No. 250.0, CSA 22.2 No. 250.13, CSA 22.2 No. 137;

Class I, Division 1, Groups CD T5; Class II, Division 1, Groups EFG T4A;

Class III, Division 1;

Class I, Zone 1, Group IIB; Class II, Zone 20, Group IIIC

### Mounting Options (ordered separately)



Surface - built in



Yoke (EXC-YM) - ordered separately

## CANLED SERIES 500 lumen hazardous location luminaire for remote applications



*Fixture* 

1.04 kg | 2.3 lbs (mounting bracket excluded)

Ø3.47 in x 5.29 in [134mm]

#### Features

- Designed for harsh, and hazardous location use
- Copper free, machined aluminum housing with polycarbonate lens
- Factory sealed with 6ft flying lead and cable gland
- Operates on 12 to 24 Volt DC direct input
- Small size allows for deployment in difficult locations
- Thermally managed for maximum longevity

#### Technical Specs

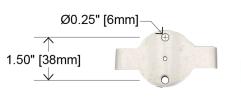
Voltage: 12-24 VDC **Ingress Protection: IP66** 

Temp Range:: -40°C to +55°C

**Certification:** Class I, Division 2, Groups ABCD, T3



### Mounting Bracket

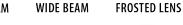












## **SPECIALTY**

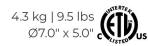
### **XCANLED Series**

1,996 - 2,334 lumen fixture





GN & HZ





### **RS Series**

9.098 - 28.560 lumen fixture



IP66 GN & HZ

16.3 kg | 36 lbs 15.23" x 23.42" x 10.41"



## **TEMPORARY**



## **ZLM Series**

22,000 - 28,000 lumen fixture



IP66 GN

10.0 kg | 22.0 lbs



### **LS Series**

1,550 lumens per module



IP66 / IP67

Up to 30 LED modules per string

1.2 kg | 2.6 lbs per module 9.7"x 3.3" per module





## SUPPORT STRUCTURES





IP66 / IP67 GN & HZ





**Solar GS** Pre-assembled system











Back light prevention shield c/w the GS Series





IP66 / IP67





## Swivelpole

Pre-wired & pre-assembled c/w the MR Series c/w the XR Series



IP66 / IP67 GN & HZ











IP66 / IP67 GN & HZ







Support Structures Webpage







www.nemalux.com



## **GET IN TOUCH**

Safe & optimized lighting for industrial projects.



Digital Copy

# Nemalux

1018 - 72nd Ave NE | Calgary, AB, Canada T2E 8V9 Toll Free: 1-877-NEMALUX / 1-877-636-2589

P: 1.403.242.7475

F: 1.403.243.6190

E: info@nemalux.com

W: www.nemalux.com









