

# GS Series Installation Manual

## DC Variant



## APPLICATION

The GS-DC Series 12VDC, 24VDC, and 24VDC high output luminaire is an industrial-grade product suitable for harsh and hazardous locations. Installation areas include indoor, outdoor, and wet locations. Frequent exposure to moisture, dirt, corrosion, vibration, and rough usage is common for this product family. Furthermore, GS-DC fixtures have certifications for use on marine vessels inside, outside, and in other severely wet saltwater environments. Part numbers containing "-HZ-" are approved for use in hazardous locations.

UL Listing Numbers:                      Nemalux General Location: E480811  
Nemalux Hazardous Location: E477829

GS-DC luminaires are suitable for use in the following areas as defined by the National Electrical Code (NEC) and the Canadian Electrical Code (CEC):

Standards that apply to  
all models:                      UL 1598A and UL 2108;  
CSA C22.2 No. 250.0

Standards that apply only to Hazardous Location models (GS-X-XX-X-XXX-H-XXX-XX-X)

Hazardous Location  
Certifications:                      Class I, Division 2, Groups ABCD, T4\*;  
Class II, Division 2, Groups FG, T6\*;  
Class III;  
Class I, Zone 2, Group IIC;  
Zone 22  
\*T3C for simultaneous exposure rating, Class I Div. 2 & Class II, Div. 2

Housing:                      Copper-free aluminum body with polycarbonate lens.

Mounting:                      (A) Adjustable:                      Four 1/4"-20 x 4" screws or bolts (not provided)  
(B) Carriage Bolt:                      Two 1/4"-20 x 1" bolts (integral to luminaire)  
Flat washers, lock washers & 1/4"-20 nuts (provided)

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

Electrical Ratings:                      12 Models (@ 10-16VDC):    GS-1: 0.75A | GS-2: 1.5A | GS-3: 2.3A | GS-4: 3.0A  
24 Models (@ 22-28VDC):    GS-1: 0.40A | GS-2: 0.75A | GS-3: 1.1A | GS-4: 1.5A  
24H Models (@ 22-28VDC):   GS-1: 0.75A | GS-2: 1.5A | GS-3: 2.2A | GS-4: 2.9A

Connections:                      3ft extra hard usage cord with flying leads  
Black: Negative (-) | White: Positive (+) | Green: Ground  
DC Class 2 wiring Only

Temperature Range:                      -40°C to +60°C

Ingress Protection:                      IP66/67 | Suitable for wet locations. Marine outside type (salt water).  
(Luminaire enclosure only)



## WARNING / ATTENTION

To avoid the risk of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician only, in accordance with all applicable electrical codes.

Éviter tout risque d'incendie, d'explosion ou d'électrocution, ce produit doit être installé, inspecté et entretenu par un électricien qualifié uniquement, conformément à tous codes électriques applicables.



## WARNING ATTENTION

Do not open, no serviceable parts.  
Ne pas ouvrir, pas de pièces réparables.



## WARNING / ATTENTION

To reduce the risk of electric shock, disconnect the luminaire from the supply circuit before opening for installation and servicing. Keep tightly closed when in operation.

Pour réduire le risque de choc électrique, débranchez le luminaire du circuit d'alimentation avant l'ouverture pour l'installation et entretien. Gardez hermétiquement fermé pendant le fonctionnement.

## INSTALLATION STEPS

### STEP 1.

Inspect shipping package and contents to ensure no damage has occurred during shipping.

### Adjustable Bracket Mount

#### STEP 2a.

Use a 3 mm hex key to loosen each M4 pinch bolt (2x) slightly to allow some free movement. This will allow for easier installation on uneven or other surfaces.

\*Be sure not to loosen the pinch bolts too far, as they will disengage.

#### STEP 2b.

Mount the luminaire to the desired location with four 1/4" -20 (4x) screws or bolts (not provided).

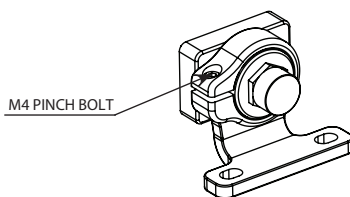
#### STEP 2c.

Adjust the luminaire to the desired angle and tighten M4 pinch bolts (2x) using a 3mm hex key.

#### NOTE:

*If the application requires periodic aiming adjustment, do not rotate more than 180° in either direction from the installation point; doing so may strain the electrical connections excessively.*

Continue to STEP 3.



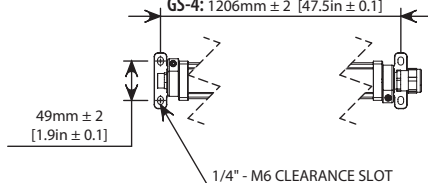
### Mounting Dimensions:

GS-1: 368mm ± 2 [14.5in ± 0.1]

GS-2: 648mm ± 2 [25.5in ± 0.1]

GS-3: 927mm ± 2 [36.5in ± 0.1]

GS-4: 1206mm ± 2 [47.5in ± 0.1]



## INSTALLATION STEPS CONT.

### Carriage Bolt Mount

#### STEP 2a.

Align both carriage bolts through holes in the desired mounting surface. Place the provided flat washer, lock washer and 1/4"-20 nut on the bolt and tighten luminaire to the surface.

#### STEP 3.

##### **For general location installation:**

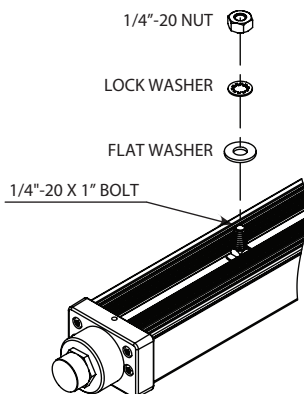
During installation, the supply side of the cord must be terminated with a listed cord connector complying with the NEC/CEC requirements. The cord connector must be rated for use with suitable cable of the types SOW, STOOW, STOW, SEOW, and SEOOW, having a diameter between 8.75mm/0.345" and 9.4mm/0.370".

The listed cord connector must be installed in a listed box that complies with the installation's NEC/CEC location requirements. The cord connector and box must be rated for the installation environment, which must not exceed the luminaire's wet location IP66/67 rating.

##### **For hazardous location installation:**

During installation, the listed cord connector for an outlet junction box with suitable grounding must comply with the installation's NEC/CEC hazardous location requirements. The cord connector must be rated for use with extra rugged usage cable of the types SOW, SOOW, STOOW, STOW, SEOW, and SEOOW, having a diameter between 8.75mm/0.345" and 9.4mm/0.370".

The listed cord connector must be installed in the listed outlet box, using a minimum 1/2" NPT hub to comply with the installation's NEC/CEC hazardous location requirements. The cord connector must be connected to the listed outlet box, which has a threaded conduit opening matching the same size as the cord connector. The outlet box must be listed for the installation environment. The installation environment must not exceed the wet location IP66/67 rating of the luminaire.



**INSTALLATION STEPS CONT.****STEP 4.**

Black: Negative (-)  
White: Positive (+)  
Green: Ground

Connect the lead wires from the cord to the field supply wiring inside the outlet box. The field wiring terminations are to be made following acceptable practices as outlined by the NEC/CEC for either the specific ordinary or hazardous locations as dictated by the installation location.

**STEP 5.**

Energize the luminaire.

