

## Nexus Bulkhead & Retro Fit Kit for Emergency and Non-Emergency



**\*Note:** Shown with optional wire guard

**PLEASE READ THESE INSTALLATION INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR MAINTAINING THIS EQUIPMENT. THE PRODUCT IS DESIGNED FOR INSTALLATION AND MAINTENANCE IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS (AS3000) AND LOCAL REGULATIONS (WHERE APPLICABLE), BY AN AUTHORISED AND LICENCED ELECTRICIAN.** THE INSTALLATION INSTRUCTIONS WERE CORRECT AT THE TIME OF PRINT. TO REFLECT CHANGES IN TECHNOLOGY AND AUSTRALIAN STANDARDS; GERARD LIGHTING RESERVES THE RIGHT TO AMEND THE INSTRUCTIONS WITHOUT NOTICE. UPDATED GUIDELINES CAN BE FOUND ON THE RELEVANT BRAND WEB SITE.

**IMPORTANT** - THE PRODUCT MUST BE MAINTAINED AND OPERATED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, FAILURE TO DO SO MAY DAMAGE THE PRODUCT AND SERVICES. IT IS STRONGLY RECOMMENDED THAT THIS IMPORTANT NOTE BE COMMUNICATED TO THE OWNER AND OR OPERATOR OF THE INSTALLATION AT THE TIME OF SITE COMMISSIONING. GOOD PRACTICE DOES NOT RECOMMEND THE 24/7 USE OF PRODUCTS WITHOUT THE APPLICATION OF SUITABLE SWITCH CYCLE INTERVALS. FURTHERMORE, WITH THE OMISSION OF NOMINATED SURVIVAL CURVES AND OR RECOMMENDED OPERATING HOURS, PRODUCT DESIGN EXPECTATIONS PROVIDE FOR A CONTINUAL DAILY USAGE OF 6 HOURS FOR RESIDENTIAL APPLICATIONS AND A CONTINUAL DAILY USAGE OF 12 HOURS FOR COMMERCIAL AND INDUSTRIAL APPLICATIONS. ALL PRODUCTS MUST BE THOROUGHLY CLEANED ON A REGULAR BASIS AT INTERVALS THAT REFLECT IN THE INSTALLATION ENVIRONMENT, ENSURING THE OPTICAL PERFORMANCE, TOGETHER WITH THE ELECTRICAL, MECHANICAL AND STRUCTURAL INTEGRITY AS DESIGNED, IS MAINTAINED THROUGHOUT THE SERVICE LIFE OF THE PRODUCT.



**1. PRODUCT SPECIFICATION:**

Type of Protection	Class I Luminaire
IP Rating	Refer to table in point 2
IK Rating	IK06 glass only or IK09 with optional wire guard
Nominal Voltage	240V
Power factor	>90
Body material	Die cast aluminum and stainless steel
Finish	Black (only) powder coated for Aluminum body
Circuit wattage	Refer to table in point 2
Line current	Refer to table in point 2
Inrush current	
NXS30LED / NXS35LEDM	Cold start 6.35A (twidh=40 μs measured at 50% Ipeak)
NXS32LED / NXS32LED	Cold start 50A (twidh=210 μs measured at 50% Ipeak)
Earth Leakage current	0.7mA
Power factor	>95
Rated average design life (L70)	50,000
Nominal Freq. (Hz)	50 Hz
Rated operating ambient temperature	-25°C / +50°C for non-emergency and 0°C to 50°C for emergency
Humidity	92%
Beam distribution	Asymmetric
Suitable for direct mounting on flammable surfaces	No
Dimmable (if relevant refer brand web for approved list)	No
Installation orientation	Ceiling and wall mount
Installation options	Surface or Pipe mount using optional pipe bracket.
Designed application	Industrial
Electrical connection	Direct to 6.0mm <sup>2</sup>
Dimensions - LxWxH	297mm x 191mm x 184mm
Net Weight of luminaire	5 kg

**2. SKU Table**

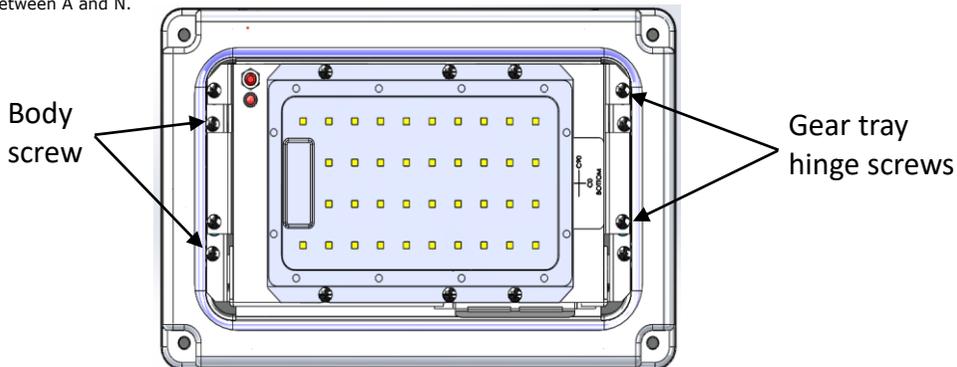
Product Code #	Type	Body Material	System Power (W)	Line Current (A)	Lumen Output (Lm)	CCT (K)	CRI	IP Rating	Beam Distribution
NXS30LED	Mains Model	Aluminum	30	0.129	3640	4000	70	66	Asymmetric
NXS30LEDK	Mains Retrofit Kit	Aluminum	30	0.128	3640	4000	70	66	Asymmetric
NXS35LEDM	Maintained EM	Aluminum	34	0.148	3640	4000	70	66	Asymmetric
NXS35LEDMK	Maintained EM Retrofit Kit	Aluminum	34	0.148	3640	4000	70	66	Asymmetric
NXS32LED	Mains Model	Aluminum	35	0.151	3590	4000	80	66	Asymmetric 180°
NXS32LED	Mains Model	Stainless Steel	35	0.151	3590	4000	80	65	Asymmetric 180°

**3. LUMINAIRES PER CIRCUIT BREAKER**

SKU	Miniature Circuit Breaker	QTY	Miniature Circuit Breaker	QTY
<b>NXS30LED / NXS30LEDK</b>	Units per MCB 20A Type B	67	Units per MCB 25A Type C	98
	Units per MCB 25A Type B	84	Units per MCB 20A Type D	90
	Units per MCB 20A Type C	78	Units per MCB 25A Type D	112
<b>NXS35LEDM / NXS35LEDM</b>	Units per MCB 20A Type B	67	Units per MCB 25A Type C	98
	Units per MCB 25A Type B	84	Units per MCB 20A Type D	82
	Units per MCB 20A Type C	78	Units per MCB 25A Type D	102
<b>NXS32LED/ NXS32LED</b>	Units per MCB 20A Type B	14	Units per MCB 25A Type C	30
	Units per MCB 25A Type B	18	Units per MCB 20A Type D	48
	Units per MCB 20A Type C	24	Units per MCB 25A Type D	60

\*The quantity of luminaires per circuit breaker is a guide only, all electrical system designs must be designed as per the electrical characteristics attached there within. This information is subject to change.

**4. INSTALLATION / GENERAL:** Installation of the product is to be completed by an authorized and licensed electrician, in accordance with these instructions, relevant Australia standards and local regulations (where applicable). Termination of product wiring, together with the installation of the product must be in a manner and orientation that maintains the integrity of the designated IP rating of the product for electronic control equipment (when supplied) DO NOT MEGGER between A and N.



**Complete fitting** - installation instructions

1. Remove front cover using a Philips head screwdriver
2. Remove the gasket
3. Remove LED gear tray using a Philips head screw driver
4. Install cable glands or conduit fittings to base.
5. Install base in desired location the correct way up for specified use and optical array, secure base to mounting medium using appropriate mounting fixings (not supplied).
6. Reinstall LED hinged gear tray
7. Open the LED hinged gear tray lid by unscrewing the gear tray hinge screws and run cables into the fitting,
8. Connect electrical cables as specified by all Australian and New Zealand standards, must be installed by a licensed electrician. Ensure the earth is connected.

Non-emergency luminaire electrical connections (model NXS30LED)

- a. Connect earth into E or terminal
- b. Connect Neutral into N terminal
- c. Connect active into A terminal

Emergency luminaire electrical connections (model NXS35LEDM)

- a. Connect earth into E or terminal
- b. Connect Neutral into N terminal
- c. Connect switched active into A terminal
- d. Connect unswitched active into A UNSW terminal

9. Dead test fitting as per Australian Standards
10. Ensure battery is connected
11. Close and secure the hinged LED gear tray lid by screwing the gear tray hinge screws with a Philips head screw driver
12. Reinstall the gasket
13. Screw cover back on base using a Philips head screw driver.
14. Ensure IP rating is equal or in addition to the IP rating of the fitting.
15. Energise circuit when safe

**Note:** Can be pole mounted using the optional pole mounted bracket

**Retro fit kit** - installation instructions

16. Remove front cover using a Philips head screwdriver
17. Remove old gasket
18. Remove all of the old lighting control gear to ensure the base of the fitting is empty
19. Install gear tray into the base of the fitting by securing it to the body ensuring the Led optics are installed in the correct direction, use the screws and star washers supplied in the kit. Ensure the star washer are between the screw head and the body of the gear tray with a Philips head screw driver.
20. Open the LED hinged gear tray lid by unscrewing the gear tray hinge screws
21. Connect electrical cables as specified by all Australian and New Zealand standards, must be installed by a licensed electrician. Ensure the earth is connected.

Non-emergency luminaire electrical connections (model NXS30LEDK)

- d. Connect earth into E or terminal
- e. Connect Neutral into N terminal
- f. Connect active into A terminal

Emergency luminaire electrical connections (model NXS35LEDMK)

- e. Connect earth into E or terminal
- f. Connect Neutral into N terminal
- g. Connect switched active into A terminal
- h. Connect unswitched active into A UNSW terminal

22. Dead test installation
23. Ensure the battery is connected
24. Close and secure the hinged LED gear tray lid by screwing the gear tray hinge screws with a Philips head screw driver
25. Install the new gasket which is supplied with the retro fit kit
26. Ensure IP rating is equal or in addition to the IP rating of the fitting
27. Re install the glass lens and secure with a Philips head screw driver
28. Energise circuit when safe

## 5. Service & Operation (Emergency Version)

Normal Operation: Maintained Emergency Operation.

Battery: Sealed **Lithium Iron Phosphate (LiFePO4)** rechargeable battery pack. As per AS/NZS 2293, it is required that the battery pack is discharged and recharged at least once every 6 months.

In case of a replacement, same brand and type of battery pack must be used. Allow 24 hours charging time before carrying out any discharge tests.

Charge Duration: 16 Hours

Discharge Duration: 2 Hours (Initial Test)

Test Switch: If manual test switch pressed, the fixture will operate from its battery supply. Please ensure battery plug is connected to the inverter battery terminal.

### Self Test :

- **The emergency driver will run in self-test mode if it is not connected to DALI.**
- Commissioning Test will be run after 48 hours of continuous power.
- Duration Test to test for full 120 minutes.
- The results will be displayed on the status indicator for 7 days after this test completes. From that point forward the unit will run a 10 second function test every 4 weeks and a 90 minute Discharge Test every 26 weeks. Subsequent Duration Tests run for 90 minutes.
- If the battery is replaced then the unit will automatically run another Commissioning Test after 48 hours.

SELF TEST - DALI Version Indicator Color Instruction		
Indicator Colour	Status	Meaning
Green Solid	Device ok	all OK, AC power is present, battery is connected & charging
Green fast flash (0.1s on, 0.1s off)	Function test in progress	AC power is present, functional test in progress
Green slow flash (1s on, 1s off)	Duration test in progress	AC power is present, discharge test in progress
Green very slow flash (4s on, 1s off)	Automatic duration test passed	AC power is present, automatic discharge test has completed within the last 7 days and was ok
Red Solid	Emergency LED Fault	Emergency LED is open circuit, short circuit or has otherwise failed in some way. fault can indicate the live status or the result of a test
Red fast flash (0.1s on, 0.1s off)	LED Driver fault LED	Unit unable to deliver current to emergency LED. fault can indicate the live status or the result of a test
Red slow flash (1s on, 1s off)	Battery fault	Battery failure (battery failed the duration or functional test, battery appears to be defective, battery has incorrect voltage). fault can indicate the live status or the result of a test .
Red/green alternating	Identification mode	The unit is in unit identification mode
Red/Green Off	No power available	AC power is lost, unit in emergency mode

**8. DALI CONTROL GEAR:** The LED driver and emergency control gear are both controllable through the DALI RAPIX system. A DALI connection is not required in a non-systemized electrical system, if DALI is not required do not connect it.

**Note:** when designing the DALI system please refer to the table below for the number of DALI addresses.

Control gear	Function	Number of Addresses	RAPIX Ready
Emergency Inverter	Testing & Reporting	1	YES

**5. APPROVALS:** The RCM marking of this product applies to AS/NZS CISPR15 (EMC) "Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment". This product is designed to conform to AS/NZS60598 "Luminaires, general requirements and tests".



**6. STORAGE:** Prior to installation products are to be stored in cool and dry conditions.

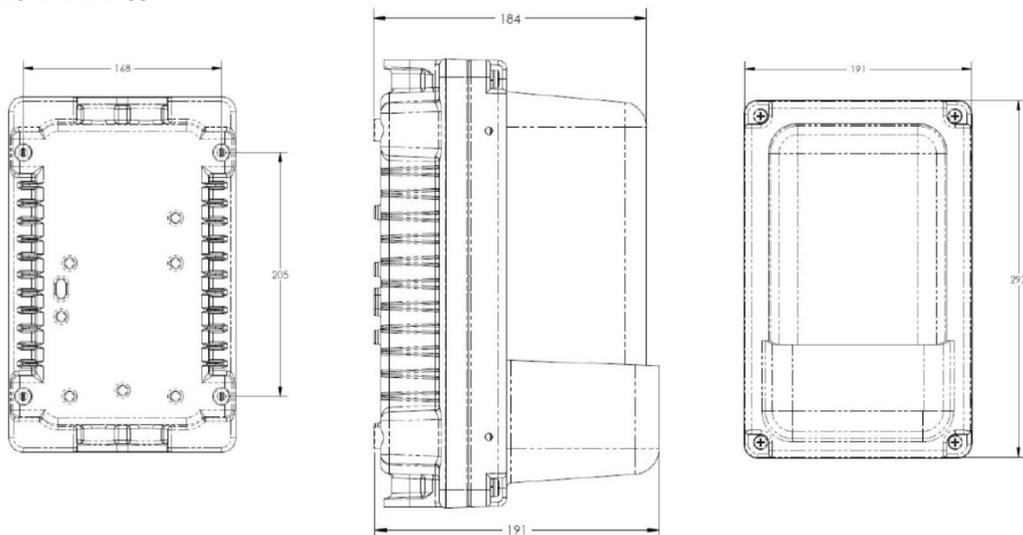
**7. APPLICATION:** The installation application and orientation of the product is designed in accordance with the nominated product IP rating, class designation and these installation instructions. Installation environments and operating conditions beyond these instructions are not recommended.

**8. INSTALLATION / SPECIAL CONDITIONS** (relevant only for products approved for such an installation):  
**(a) products installed in high wind environments** must have suitable installation / fastening methods applied to ensure the product's mounting points are not damaged through, corrosion, constant vibration and or movement. Exterior products are designed with precise vertical aiming limits, which should not be exceeded. Any

vertical floodlight aiming requirements should be specifically validated in writing with the relevant brand before consideration.

**(b) products installed in corrosive or salt laden environments** require special consideration and such; specific product selection, inclusive of suitable fastening methods and extensive ongoing maintenance of products installed in these environments require professional advice. It is essential that all aspects of the product selection, material specification and maintenance are specifically designed for such use and a cleaning program be adopted that maintains the design integrity of the product.

## 10. DRAWINGS



## 11. MAINTENANCE:

**(a)** The supply must be isolated before opening or accessing the luminaire. Product maintenance is IMPORTANT and is critical to the products designed performance. The product is to be maintained in accordance with the manufacturer's instructions. For the latest product maintenance guides please go to relevant brand web site. GLG is not responsible for any product not maintained in accordance with the recommended procedure or intervals. **(b) battery (where provided):** The battery is designed with a rated average battery design life of 25,000 hours in standby mode. The battery is supported with a standard **4-year warranty**; conditional of the product being maintained and operated in accordance with the manufacturer's guidelines and tested in accordance with AS/NZS2293. For guidelines see product installation instructions or visit the relevant brand web site. **(C) for products supplied with glass visors or covers**, do not operate the product with a damaged visor or cover; it is recommended the product be turned off, area surrounding the product vacated and the damaged glass replaced by a professional installer immediately. Clean glass with warm soapy water and dry thoroughly before reinstalling.

**12. WARRANTY INSTRUCTIONS:** For the purpose of warranty claims (if any) the following instructions apply:

**Warranty components** – THE PRODUCT, (identified as the PRODUCT only). **Warranty period** - The above components are provided with a warranty of **five (5) year/s** or 50,000 hours (whichever comes first) against manufacturing defects or failure to perform to specifications for products installed by an authorised installer in accordance with the manufacturer's installation instructions and which have not been subject to incorrect operation or maintenance, unauthorised modification or damage arising from

any intervening cause. **Warranty reference** - The warranty reference date commences from the date of purchase. **Warranty point of contact** - Gerard Lighting Pty Ltd, 96 Gow Street Padstow NSW 2211, phone T 02 9794 9300 contact - GLG After Sales Support.

**Warranty claim procedure** - For the purpose of making a claim the customer must:

1. Contact the "point of contact" above and upon provision of proof of purchase the customer will receive a goods return advice (GRA) number. 2. At the customer's expense, collect and return the goods to the "point of contact" with the issued GRA number. 3. Upon receipt of the goods, Gerard Lighting will review the claim and if found to be accepted, GLG will return a replacement product to the customer to install at the customer's expense. Alternatively if the claim is rejected, the customer may request the return of the goods at their expense. **Consumer Contracts** - The benefits to the customer given by the GLG warranty are in addition to other rights and remedies of the customer if the goods are the subject of a Consumer Contract under the Australian Consumer Law. In that event the following statement is required to be brought to the Consumer's attention: - *Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.* **Limitation of Liability** - if the goods are not purchased by the customer under a Consumer Contract within the Australian Consumer Law then but not otherwise; - (a) the Company is not liable in tort for any loss or damage suffered by the customer or by any third party; and (b) in no circumstances is GLG liable to the customer or to any third party for any loss of profits, loss of anticipated savings, economic loss or interruption of business or for any indirect or consequential loss (Consequential Loss). **Terms of Sale** - these Warranty provisions are in substitution for any inconsistent provisions in the Gerard Lighting Terms and Conditions of Sale in so far as they apply to the Warranty components.