N2LPS LIGHT-PAK™
Emergency Lighting System

Cl. I, Div. 2, Groups B, C, D
Cl. I, Zone 2
Cl. II, Div. 2, Groups F, G
Wet Locations, Marine
NEMA 3, 3R, 4X
Ambient 0ºC to 55ºC

Applications:
LED N2LPS Light-Pak™ emergency lighting systems are used:
- To provide reliable illumination for egress areas during failure or interruption of power to the normal lighting system
- In areas where flammable gases or vapors may become present due to abnormal, unusual, or accidental conditions
- In manufacturing plants, refineries, petrochemical and chemical plants, waste and sewage treatment facilities, oil terminals, food processing facilities, breweries, and other industrial manufacturing or process industry facilities subject to wet or corrosive conditions
- To illuminate machinery or panels during a loss of AC power
- Where moisture, dirt, dust, or corrosion will limit the life and reliability of ordinary emergency lighting systems
- Where required by the National Electrical Code®, the Life Safety Code® or other applicable codes
- Outdoor applications

Features:
- Compact, factory-assembled luminaire featuring LED lamps for improved lumen performance, on-time, and lamp life
- Nonmetallic, enclosed, and gasketed housing provides corrosion protection in the most extreme environments
- Durable and marine rated LED lamp head assemblies provide protection against water ingress, corrosion, and impact
- High temperature rated nickel cadmium battery for reliable operation up to 55ºC ambient
- Solid state battery charger for long life and reliable battery operation prevents deep discharge by automatically disconnecting the battery from the luminaire
- Factory-installed “push-to-test” button
- Self-test, monitoring, and diagnostics reduce costly maintenance checks
- Remote luminaire head assemblies (one or two) are available for mounting of luminaire heads away from main power system
- Stainless steel drain minimizes moisture collection
- Standard battery disconnect switch (Krydon® unit)

Certifications and Compliances:
NEC/CEC:
- Class I, Division 2, Groups B, C, D, Zone 2
UL Standards:
- 1598A (Supplemental Requirements for Luminaires for Installation on Marine Vessels)
- 924 (Emergency Lighting and Power Equipment)
- 844 (Electric Luminaires Hazardous Locations)
CSA Standards:
- C22.2 No. 141-M1985 unit equipment for emergency lighting
- C22.2 No. 137-M1981 non-incendive electrical equipment for use in Class I, Division 2 hazardous locations
- Life Safety Code NFPA101® – Section 5-9 (Emergency Lighting)
- Marine wet locations suitability, Type 4X

Standard Materials:
- Power supply and remote luminaire enclosures – Krydon® fiberglass-reinforced polyester
- LED lamp head assembly – epoxy powder coated stainless steel
- Exterior hardware – nylon, plastic coated, and stainless steel
- Cover gasket – Hypalon® synthetic rubber

Temperature Performance Data:
Based on 55ºC ambient

<table>
<thead>
<tr>
<th>Cat. #</th>
<th>Class I, Division 2</th>
<th>Class II, Division 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>N2LPS (all)</td>
<td>40ºC - T5; 55ºC - T4A</td>
<td>T6</td>
</tr>
<tr>
<td>N2RF (all)</td>
<td>T5</td>
<td>T6</td>
</tr>
</tbody>
</table>

Note: Ambient temperature at which the Light-Pak system is rated is 0ºC to 55ºC. Operation at temperatures outside this range will affect the battery life and/or charging performance.

Options:
- Description Suffix
  55ºC suitability ............... S904

Electrical Ratings:
- Power supply –
  Input: 120, 220, 230, 240, or 277 VAC, 50 or 60 Hz; 9 watts max.
  Output: 18 watts max. at 12 VDC
- Luminaire heads –
  Voltage: 12 VDC; Lamp: 3 watt LED
  Total lumen output: 80

Unit Net Weights:
- N2LPS12222 – 16 lbs.
- N2LPS12220 – 12 lbs.
- N2RF1221 – 8 lbs.
- N2RF1222 – 9 lbs.

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Temperature Performance Data:
Based on 55ºC ambient

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Note: Battery time in emergency mode is 90 minutes.
National Electrical Code and Life Safety Code are registered trademarks of the National Fire Protection Association, Inc.
Noryl is a registered trademark of General Electric Company.
Ordering Information:

<table>
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<tr>
<th>Description</th>
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<tbody>
<tr>
<td>28 watt, 12 volt power supply assembly with two 3 watt LED lamp heads</td>
<td>N2LPS12222</td>
</tr>
<tr>
<td>28 watt, 12 volt stainless steel power supply assembly with two 3 watt LED</td>
<td>N2LPS12222 SS</td>
</tr>
<tr>
<td>lamp heads</td>
<td></td>
</tr>
<tr>
<td>28 watt, 12 volt power supply assembly less luminaire heads</td>
<td>N2LPS12220*</td>
</tr>
<tr>
<td>Remote luminaire assembly with two 3 watt LED lamp heads</td>
<td>N2RF1221*</td>
</tr>
<tr>
<td>28 watt, 120V LED Light-Pak with single sided exit sign**</td>
<td>N2LPS12222/120 EXS DR0391734</td>
</tr>
<tr>
<td>28 watt, 277V LED Light-Pak with single sided exit sign**</td>
<td>N2LPS12222/277 EXS DR0391734</td>
</tr>
<tr>
<td>28 watt, 120V LED Light-Pak with double sided exit sign**</td>
<td>N2LPS12222/120 EXD DR0391734</td>
</tr>
<tr>
<td>28 watt, 277V LED Light-Pak with double sided exit sign**</td>
<td>N2LPS12222/277 EXD DR0391734</td>
</tr>
</tbody>
</table>

*Not UL or cUL approved.
**Exit sign operates in both normal and emergency mode.

Note: Up to four (4) remote LED lamp assemblies can be connected to the N2LPS12222. Up to six (6) remote LED lamp assemblies can be connected to the N2LPS12220.

Wire Sizing for Remote Installation:
For Copper Wire –

Running Distance† (ft.) Between Power Supply and Remote Luminaire

<table>
<thead>
<tr>
<th>Wire Size</th>
<th>Load In Watts</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8  16  24  32</td>
<td></td>
<td>8  16  24  32</td>
</tr>
<tr>
<td>16 AWG</td>
<td>26  13  6  3</td>
<td>10 AWG</td>
<td>106 53 26 13</td>
</tr>
<tr>
<td>14 AWG</td>
<td>42  21 10  5</td>
<td>8 AWG</td>
<td>168 84 42 21</td>
</tr>
<tr>
<td>12 AWG</td>
<td>66  33 16  8</td>
<td>6 AWG</td>
<td>270 135 67 33</td>
</tr>
</tbody>
</table>

†Maximum distance to limit line voltage drop to 5%.

Dimensions (N2LPS):

Standard – N2LPS LED Light-Pak™
**N2LPS LIGHT-PAK™**  
**Emergency Lighting System**

Dimensions (N2LPS):

![Diagram of LED Light-Pak™ with Optional Emergency Exit Luminaire]

**Dimensions (N2RF):**

![Diagram of N2RF components]

**Detail Indication Logic:**

<table>
<thead>
<tr>
<th>Status Indication</th>
<th>Status Description</th>
<th>Status Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>No Light</td>
<td>AC Power Removed from Circuit</td>
</tr>
<tr>
<td>**</td>
<td>Steady Light (No Blinks)</td>
<td>Fully Charged</td>
</tr>
<tr>
<td>*<em>-</em></td>
<td>Light Blinks Once</td>
<td>Battery Charging</td>
</tr>
<tr>
<td><strong>-</strong></td>
<td>Light Blinks Twice</td>
<td>Battery Failure</td>
</tr>
<tr>
<td><em><strong>-</strong></em></td>
<td>Light Blinks Three Times</td>
<td>Circuit Failure</td>
</tr>
</tbody>
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