

## **LED** Linear Low/High Bay



## **Economical, Energy-Efficient Lighting Solutions for Most High Bay Applications**



The HBL3 LED Linear Low Bay/High Bay improves on the HBL model by providing higher performance with a slim new design. It is the ideal lumen package for replacing metal halide and linear fluorescent high bay systems. The fixture supplies an output greater than 130 lumens per watt, meeting DLC premium. This energy-efficient and economical fixture offers high performance and long life, excellent color rendering, and even uniformity. The HBL3 is available in 4000K and 5000K color temperatures and has suggested mounting heights from 15ft and above, making it the perfect solution for warehouses, gymnasiums, garages and other storage areas, commercial and manufacturing facilities, as well as open and stack aisle applications.

## **High Performance Design Can be Customized for Your Environment**







## **HBL3/HBL-20 Size Comparison**



| HBL3 Product Measurements |                  |         |                  |                  |  |
|---------------------------|------------------|---------|------------------|------------------|--|
| Wattage:                  | HBL3110          | HBL3162 | HBL3223          | HBL3321          |  |
| Length:                   | 23.8 in. (605mm) |         | 23.8 in. (605mm) | 46 in. (1166mm)  |  |
| Width:                    | 12.6 in. (320mm) |         | 17.3 in. (440mm) | 12.6 in. (320mm) |  |
| Height:                   | 3.6 in. (        | 92mm)   | 3.6 in. (92mm)   | 3.6 in. (92mm)   |  |



### **HBL-20 Product Measurements**

| Wattage: | HBL-20-110W      | HBL-20-162W      | HBL-20-223W      | HBL-20-321W      |
|----------|------------------|------------------|------------------|------------------|
| Length:  | 23.8 in. (605mm) | 23.8 in. (605mm) | 46 in. (1166mm)  | 46 in. (1166mm)  |
| Width:   | 12.6 in. (320mm) | 17.3 in. (440mm) | 12.6 in. (320mm) | 17.3 in. (440mm) |
| Height:  | 3.6 in (92mm)    | 3.6 in (92mm)    | 3.6 in (92mm)    | 3.6 in (92mm)    |



## **Wattage Options**

### HBL3110 Greater Than 14,000 Lumens\*

Dimensions: 23.8in (605mm) x 12.6in (320mm) x 3.6in (92mm)

- Rack & Aisle
- · Storage areas
- Small Warehouses
- Garages

### HBL3162 Greater Than 21,000 Lumens\*

Dimensions: 23.8in (605mm) x 12.6in (320mm) x 3.6in (92mm)

- Manufacturing Facilities
- Gymnasiums
- Warehouses
- Garages



HBL3321 Greater Than 42,000 Lumens\*

### HBL3223 Greater Than 29,000 Lumens\*

Dimensions: 23.8in (605mm) x 17.3in (440mm) x 3.6in (92mm)

- Showrooms
- Gymnasiums
- Warehouses
- Garages

### Dimensions: 46in (1166mm) x 12.6in (320mm) x 3.6in (92mm)

- Manufacturing Facilities Airports
- Warehouses
- Sports complex



\*Based on 5000K

| LIDI 2 Madala Cananasiana                                      | NIC@R° LED                  |                          |                          |
|--|-----------------------------|--------------------------|--------------------------|
| HBL3 Module Comparison   | HBL3 w/ Clear Lens at 5000K | HID                      | Fluorescent              |
| Warehouses, manufacturing facilities, airports, sports complex | 321W<br>43,026 LM           | 750W МН<br>859W          | 12 lamp T5<br>648W       |
| 50-80'Ceilings   |                             |                          |                          |
| Warehouses, gymnasiums, showrooms, garages                     | 223W<br>29,234 LM           | 400W PSMH<br><b>458W</b> | 8 lamp T5<br>468W        |
| 35-50'Ceilings   |                             |                          |                          |
| Warehouses, manufacturing facilities, garages, gymnasiums      | 162W<br>21,356 LM           | 400W MH<br><b>458W</b>   | 6 lamp T5<br><b>351W</b> |
| 20-35' Ceilings  |                             |                          |                          |
| Storage areas, garages, aisle lighting small warehouses        | 110W<br>14,399 LM           | 250W MH<br><b>297W</b>   | 4 lamp T5<br>234W        |
| 15-25' Ceilings  |                             |                          |                          |
|  |                             |                          |                          |



### HBL3

### Ordering Information

### **Construction**

- Durable steel construction with powder coat finish
- Vented steel housing provides thermal management through natural convection
- Top mounted wireway cover for easy wire access
- Offers four power level categories 110W, 162W, 223W, 321W
- Rated for use in damp locations

### **Optical System**

- Clear acrylic lens protects LEDs and provides optimal lumen output
- Frosted diffused acrylic lens also available

### **Electrical**

- Long-life LED system coupled with electrical driver to deliver optimal performance with over 130 lumens per watt with clear lens
- Utilizes advanced mid-powered LED technology with CCT of 4000K and 5000K with >80 CRI
- Operating temperature rating of -40°F to 122°F (-40°C to 45°C)
- 10kA surge protection standard
- Input voltage of 120-277V
- 347-480V input option available with 20kA surge protector
- Dimming: 0-10V standard
- THD less than 20%

### **Mounting and Installation**

- V-hook and chain (41.3 in, 1050 mm) mounting system included
- Optional pendant mount kit available
- Motion Sensor options available
- Six foot cord or FMC option available
- Wireguard option available for increased fixture protection
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel

### Warranty

- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)
- TM-21 Projected L70 (9K) life > 122,000 hours
- LM-79, LM-80 testing performed in accordance with IESNA standards









| Performance Data |               |        |       |            |
|------------------|---------------|--------|-------|------------|
|                  | Model Number  | Lumens | Watts | Lumen/Watt |
|                  | HBL3110UNV40K | 14389  | 109.0 | 132.1      |
|                  | HBL3110UNV50K | 14399  | 107.9 | 133.4      |
|                  | HBL3162UNV40K | 21132  | 158.5 | 133.3      |
|                  | HBL3162UNV50K | 21356  | 159.6 | 133.8      |
|                  | HBL3223UNV40K | 28615  | 216.4 | 132.2      |
|                  | HBL3223UNV50K | 29234  | 217.7 | 134.3      |
|                  | HBL3321UNV40K | 42115  | 318.9 | 132.1      |
|                  | HBL3321UNV50K | 43026  | 318.7 | 135.0      |

| Perform       | ed Lens |       |            |
|---------------|---------|-------|------------|
| Model Number  | Lumens  | Watts | Lumen/Watt |
| HBL3110UNV40K | 13734   | 107.8 | 127.4      |
| HBL3110UNV50K | 13824   | 107.7 | 128.4      |
| HBL3162UNV40K | 20215   | 158.7 | 127.4      |
| HBL3162UNV50K | 20497   | 159.3 | 128.7      |
| HBL3223UNV40K | 27764   | 216.2 | 128.4      |
| HBL3223UNV50K | 28047   | 216.9 | 129.3      |
| HBL3321UNV40K | 40390   | 319.0 | 126.6      |
| HBL3321UNV50K | 41244   | 318.7 | 129.4      |

| Orderin | g Informat | ion                    | Example: HBL3162UNV40K |                    |                     |                             |                             |
|---------|------------|------------------------|------------------------|--------------------|---------------------|-----------------------------|-----------------------------|
| Series  | Version    | Wattage                | Voltage                | сст                | Lens                | Emergency                   | Wiring Options <sup>1</sup> |
| HBL     | 3          | <b>110</b> (110 Watts) | <b>UNV</b> (120-277V)  | <b>40K</b> (4000K) | (Blank) Clear       | (Blank) No Emergency Backup | (Blank) No Cord             |
|         |            | <b>162</b> (162 Watts) | <b>HV</b> (347-480V)   | <b>50K</b> (5000K) | <b>D</b> (Diffused) | E3 (EMB250 Battery)         | C¹ (Cord)                   |
|         |            | <b>223</b> (223 Watts) |                        |                    |                     |                             | F (Flexible Metal Conduit)  |
|         |            | <b>321</b> (321 Watts) |                        |                    |                     |                             |                             |

### **Accessories**



### **Microwave Motion Sensor**

Offering stand-by dimming during vacancy at 50, 30, 20 and 10 percent light output, this sensor facilitates greater energy savings. Remote control functionality.



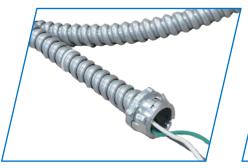
### **Infrared Motion Sensor**

Multiple options to provide automatic control and energy savings.



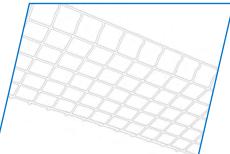
### **Cord & Plug Option**

Standard 6ft cord with custom lengths available for wiring fixture.



### **Flexible Metal Conduit Option**

Flexible metal conduit provides more wire protection and a secure fit.



### **Wire Guard Option**

Wire guard options for HBL3 add protection to the lens from any potential damage.



### **Pendant Mount Option**

The pendant mount option is available for all HBL fixtures.



### **High Voltage Transformers**

Pendant Kit for 110W, 162W, 321W HBL3

Pendant Kit for 223W HBL3 & High

Voltage 162W, 223W & 321W HBL3

High voltage transformers allow the fixture to recieve a higher power input of 347V - 480V.



### **Frosted Lens Option**

**Emergency** 

The frosted lens option provides an even light spread and is ideal for lower ceiling applications



### **Emergency Battery Back-up**

The emergency battery back-up provides 90 minutes of power to your fixture in the event of power failure.

| Wireguard Accessories          |                      |
|--------------------------------|----------------------|
| Wireguard for 110W & 162W HBL3 | HBL3110162-WG        |
| Wireguard for 223W HBL3        | HBL3223-WG           |
| Wireguard for 321W HBL3        | HBL3321-WG           |
| Lens Accessories               |                      |
| Diffuser for 110W & 162W HBL3  | HBL3110162-FROS-DIFU |
| Diffuser for 223W HBL3         | HBL3223-FROS-DIFU    |
| Diffuser for 321W HBL3         | HBL3321-FROS-DIFU    |
| Pendant Kit                    |                      |

HBL3110162321-P

HBL3223-P

# Emergency Back-up EMB250-10-UNV Motion Sensors Infrared Motion Sensor HBOS360WH Microwave Motion Sensor (No Remote Control) MWOS360 Microwave Motion Sensor MWOS360R Remote Control for MWOS360R

| Plug Accessories                |        |
|---------------------------------|--------|
| 15 amp 120V Straight Blade Plug | 515P   |
| 15 amp 120V Twist Lock Plug     | L515P  |
| 15 amp 250V Twist Lock Plug     | L615P  |
| 15 amp 277V Twist Lock Plug     | L715P  |
| 20 amp 277V Twist Lock Plug     | L720P  |
| 20 amp 347V Twist Lock Plug     | L2320P |
| 20 amp 480V Twist Lock Plug     | L820P  |
|                                 |        |

1Plug options are field install only & requres wiring option



## **LED** Linear Low/High Bay



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The HBL3 LED Linear Low Bay/High Bay improves on the HBL model by providing higher performance with a slim new design. It is the ideal lumen package for replacing metal halide and linear fluorescent high bay systems. The fixture supplies an output greater than 130 lumens per watt, meeting DLC premium. This energy-efficient and economical fixture offers high performance and long life, excellent color rendering, and even uniformity. The HBL3 is available in 4000K and 5000K color temperatures and has suggested mounting heights from 15ft and above, making it the perfect solution for warehouses, gymnasiums, garages and other storage areas, commercial and manufacturing facilities, as well as open and stack aisle applications.

## **High Performance Design Can be Customized for Your Environment**







## **HBL3/HBL-20 Size Comparison**



| HBL3 Product Measurements |                  |         |                  |                  |  |
|---------------------------|------------------|---------|------------------|------------------|--|
| Wattage:                  | HBL3110          | HBL3162 | HBL3223          | HBL3321          |  |
| Length:                   | 23.8 in. (605mm) |         | 23.8 in. (605mm) | 46 in. (1166mm)  |  |
| Width:                    | 12.6 in. (320mm) |         | 17.3 in. (440mm) | 12.6 in. (320mm) |  |
| Height:                   | 3.6 in. (        | 92mm)   | 3.6 in. (92mm)   | 3.6 in. (92mm)   |  |



### **HBL-20 Product Measurements**

| Wattage: | HBL-20-110W      | HBL-20-162W      | HBL-20-223W      | HBL-20-321W      |
|----------|------------------|------------------|------------------|------------------|
| Length:  | 23.8 in. (605mm) | 23.8 in. (605mm) | 46 in. (1166mm)  | 46 in. (1166mm)  |
| Width:   | 12.6 in. (320mm) | 17.3 in. (440mm) | 12.6 in. (320mm) | 17.3 in. (440mm) |
| Height:  | 3.6 in (92mm)    | 3.6 in (92mm)    | 3.6 in (92mm)    | 3.6 in (92mm)    |



## **Wattage Options**

### HBL3110 Greater Than 14,000 Lumens\*

Dimensions: 23.8in (605mm) x 12.6in (320mm) x 3.6in (92mm)

- Rack & Aisle
- · Storage areas
- Small Warehouses
- Garages

### HBL3162 Greater Than 21,000 Lumens\*

Dimensions: 23.8in (605mm) x 12.6in (320mm) x 3.6in (92mm)

- Manufacturing Facilities
- Gymnasiums
- Warehouses
- Garages



HBL3321 Greater Than 42,000 Lumens\*

### HBL3223 Greater Than 29,000 Lumens\*

Dimensions: 23.8in (605mm) x 17.3in (440mm) x 3.6in (92mm)

- Showrooms
- Gymnasiums
- Warehouses
- Garages

### Dimensions: 46in (1166mm) x 12.6in (320mm) x 3.6in (92mm)

- Manufacturing Facilities Airports
- Warehouses
- Sports complex



\*Based on 5000K

| LIDI 2 Madala Cananasiana                                      | NIC@R° LED                  |                          |                          |
|--|-----------------------------|--------------------------|--------------------------|
| HBL3 Module Comparison   | HBL3 w/ Clear Lens at 5000K | HID                      | Fluorescent              |
| Warehouses, manufacturing facilities, airports, sports complex | 321W<br>43,026 LM           | 750W МН<br>859W          | 12 lamp T5<br>648W       |
| 50-80'Ceilings   |                             |                          |                          |
| Warehouses, gymnasiums, showrooms, garages                     | 223W<br>29,234 LM           | 400W PSMH<br><b>458W</b> | 8 lamp T5<br>468W        |
| 35-50'Ceilings   |                             |                          |                          |
| Warehouses, manufacturing facilities, garages, gymnasiums      | 162W<br>21,356 LM           | 400W MH<br><b>458W</b>   | 6 lamp T5<br><b>351W</b> |
| 20-35' Ceilings  |                             |                          |                          |
| Storage areas, garages, aisle lighting small warehouses        | 110W<br>14,399 LM           | 250W MH<br><b>297W</b>   | 4 lamp T5<br>234W        |
| 15-25' Ceilings  |                             |                          |                          |
|  |                             |                          |                          |



### HBL3

### Ordering Information

### **Construction**

- Durable steel construction with powder coat finish
- Vented steel housing provides thermal management through natural convection
- Top mounted wireway cover for easy wire access
- Offers four power level categories 110W, 162W, 223W, 321W
- Rated for use in damp locations

### **Optical System**

- Clear acrylic lens protects LEDs and provides optimal lumen output
- Frosted diffused acrylic lens also available

### **Electrical**

- Long-life LED system coupled with electrical driver to deliver optimal performance with over 130 lumens per watt with clear lens
- Utilizes advanced mid-powered LED technology with CCT of 4000K and 5000K with >80 CRI
- Operating temperature rating of -40°F to 122°F (-40°C to 45°C)
- 10kA surge protection standard
- Input voltage of 120-277V
- 347-480V input option available with 20kA surge protector
- Dimming: 0-10V standard
- THD less than 20%

### **Mounting and Installation**

- V-hook and chain (41.3 in, 1050 mm) mounting system included
- Optional pendant mount kit available
- Motion Sensor options available
- Six foot cord or FMC option available
- Wireguard option available for increased fixture protection
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel

### Warranty

- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge)
- TM-21 Projected L70 (9K) life > 122,000 hours
- LM-79, LM-80 testing performed in accordance with IESNA standards









| Performance Data |               |        |       |            |
|------------------|---------------|--------|-------|------------|
|                  | Model Number  | Lumens | Watts | Lumen/Watt |
|                  | HBL3110UNV40K | 14389  | 109.0 | 132.1      |
|                  | HBL3110UNV50K | 14399  | 107.9 | 133.4      |
|                  | HBL3162UNV40K | 21132  | 158.5 | 133.3      |
|                  | HBL3162UNV50K | 21356  | 159.6 | 133.8      |
|                  | HBL3223UNV40K | 28615  | 216.4 | 132.2      |
|                  | HBL3223UNV50K | 29234  | 217.7 | 134.3      |
|                  | HBL3321UNV40K | 42115  | 318.9 | 132.1      |
|                  | HBL3321UNV50K | 43026  | 318.7 | 135.0      |

| Perform       | ance Data | with Diffuse | ed Lens    |
|---------------|-----------|--------------|------------|
| Model Number  | Lumens    | Watts        | Lumen/Watt |
| HBL3110UNV40K | 13734     | 107.8        | 127.4      |
| HBL3110UNV50K | 13824     | 107.7        | 128.4      |
| HBL3162UNV40K | 20215     | 158.7        | 127.4      |
| HBL3162UNV50K | 20497     | 159.3        | 128.7      |
| HBL3223UNV40K | 27764     | 216.2        | 128.4      |
| HBL3223UNV50K | 28047     | 216.9        | 129.3      |
| HBL3321UNV40K | 40390     | 319.0        | 126.6      |
| HBL3321UNV50K | 41244     | 318.7        | 129.4      |

| Ordering Information Example: HBL3162UNV40K |         |                        |                       |                    |                     |                             |                             |
|---|---------|------------------------|-----------------------|--------------------|---------------------|-----------------------------|-----------------------------|
| Series                                      | Version | Wattage                | Voltage               | сст                | Lens                | Emergency                   | Wiring Options <sup>1</sup> |
| HBL   | 3       | <b>110</b> (110 Watts) | <b>UNV</b> (120-277V) | <b>40K</b> (4000K) | (Blank) Clear       | (Blank) No Emergency Backup | (Blank) No Cord             |
|   |         | <b>162</b> (162 Watts) | <b>HV</b> (347-480V)  | <b>50K</b> (5000K) | <b>D</b> (Diffused) | E3 (EMB250 Battery)         | C¹ (Cord)                   |
|   |         | <b>223</b> (223 Watts) |                       |                    |                     |                             | F (Flexible Metal Conduit)  |
|   |         | <b>321</b> (321 Watts) |                       |                    |                     |                             |                             |

### **Accessories**



### **Microwave Motion Sensor**

Offering stand-by dimming during vacancy at 50, 30, 20 and 10 percent light output, this sensor facilitates greater energy savings. Remote control functionality.



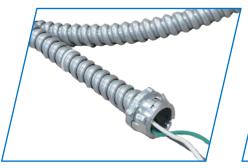
### **Infrared Motion Sensor**

Multiple options to provide automatic control and energy savings.



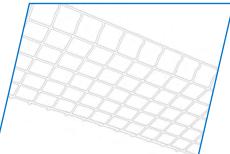
### **Cord & Plug Option**

Standard 6ft cord with custom lengths available for wiring fixture.



### **Flexible Metal Conduit Option**

Flexible metal conduit provides more wire protection and a secure fit.



### **Wire Guard Option**

Wire guard options for HBL3 add protection to the lens from any potential damage.



### **Pendant Mount Option**

The pendant mount option is available for all HBL fixtures.



### **High Voltage Transformers**

Pendant Kit for 110W, 162W, 321W HBL3

Pendant Kit for 223W HBL3 & High

Voltage 162W, 223W & 321W HBL3

High voltage transformers allow the fixture to recieve a higher power input of 347V - 480V.



### **Frosted Lens Option**

**Emergency** 

The frosted lens option provides an even light spread and is ideal for lower ceiling applications



### **Emergency Battery Back-up**

The emergency battery back-up provides 90 minutes of power to your fixture in the event of power failure.

| Wireguard Accessories          |                      |
|--------------------------------|----------------------|
| Wireguard for 110W & 162W HBL3 | HBL3110162-WG        |
| Wireguard for 223W HBL3        | HBL3223-WG           |
| Wireguard for 321W HBL3        | HBL3321-WG           |
| Lens Accessories               |                      |
| Diffuser for 110W & 162W HBL3  | HBL3110162-FROS-DIFU |
| Diffuser for 223W HBL3         | HBL3223-FROS-DIFU    |
| Diffuser for 321W HBL3         | HBL3321-FROS-DIFU    |
| Pendant Kit                    |                      |

HBL3110162321-P

HBL3223-P

# Emergency Back-up EMB250-10-UNV Motion Sensors Infrared Motion Sensor HBOS360WH Microwave Motion Sensor (No Remote Control) MWOS360 Microwave Motion Sensor MWOS360R Remote Control for MWOS360R

| Plug Accessories                |        |
|---------------------------------|--------|
| 15 amp 120V Straight Blade Plug | 515P   |
| 15 amp 120V Twist Lock Plug     | L515P  |
| 15 amp 250V Twist Lock Plug     | L615P  |
| 15 amp 277V Twist Lock Plug     | L715P  |
| 20 amp 277V Twist Lock Plug     | L720P  |
| 20 amp 347V Twist Lock Plug     | L2320P |
| 20 amp 480V Twist Lock Plug     | L820P  |
|                                 |        |

1Plug options are field install only & requres wiring option