

# INDUSTRIAL MERCMASTER™ LED GENERATION 3 SERIES LUMINAIRES STANDARD — ORDINARY LOCATION

## FEATURES

- Modular design provides thousands of combinations for maximum versatility
- Choice of optics for optimal light distribution in a variety of applications: Type I, Type III, Type V or Type V Wide
- Choice of color temperature (CCT): 5000K (70 CRI), 4000K (80 CRI), 3000K (80 CRI), 2200K (70 CRI), 1800K (70 CRI), Amber or Green
- Seven standard mounting hood designs allow for mounting in any location. Uses same mounting hoods as Mercmaster III HID
- Retrofit adapters for Crouse-Hinds™ ±, Mercmaster II, and Killark™ ✦ hoods available.
- Watertight Pendant Hood with IP68 cord grip available to address water ingress into luminaire via conduit
- Luminaire housing has wiring compartment with terminal block separate for easy wiring access
- Hinge has high lip for added safety during installation and servicing. Hinge and bolt construction assures 360° compression at all points on fixture housing gasket for positive sealing. Swing away design of captive bolt and nut simplifies installation

## WARRANTY ☼

- 10 year standard warranty

## TYPICAL APPLICATIONS

- Power plants
- Processing plants
- Chemical plants
- Oil refineries
- Waste and sewage treatment
- Hydrogen and Biofuels plants
- LNG (Liquid Natural Gas) plants
- Other areas where dust, water, dirt and rough usage are a problem

## LUMINAIRE MATERIALS

- Mounting hoods and bodies: cast copperfree (4/10 of 1% max.) aluminum
- Gaskets: silicone
- All hardware and catch assemblies: stainless steel
- Globe: polycarbonate or glass
- Short refractor guard: stainless steel
- Tall refractor guard: diecast aluminum
- Globe guard, short refractor guard and safety cable: stainless steel wire

## ACCESSORIES (PURCHASE SEPARATELY)

- Globe guard: MGU1
  - Refractor guard: KRG2S
  - Visor: MMVISOR
  - Drain plug: LEDDR3
- ## NEC/CEC/NOM LISTINGS ①
- Marine Outside Type (Salt Water)
  - Type 3R, 4, 4X
  - IP66/IP67
  - Simultaneous Exposure
  - Suitable for Use in Wet Locations
  - NOM

## IECEE CB LISTINGS ①

- IP66
- IK08

## NOTABLE LISTINGS ①

- ABS Certified
- DarkSky Approved
- DLC listed

## RELATED PRODUCTS

- Mercmaster LED Generation 3 Series Luminaires
- Mercmaster LED Low Profile Luminaires
- Industrial Mercmaster LED Low Profile Series Luminaires



IMLG\*L + Clear Globe + Ceiling Mount



IMLG\*L + Short Refractor + Ceiling Mount



IMLG\*H/IMLG\*X + Clear Globe + Ceiling Mount



IMLG\*H/IMLG\*X + Short Refractor + Ceiling Mount

① Refer to catalog pages for detailed certification information.

✦ Killark is a registered trademark of Hubbell Incorporated.

± Crouse-Hinds is a registered trademarks of Cooper Crouse-Hinds.

☼ For warranty details go to [www.appleton.emerson.com](http://www.appleton.emerson.com).

## PRODUCT SPECIFICATIONS

Series * Lumen Output	IMLG*L3	IMLG*L5	IMLG*L7	IMLG*L9	IMLG*H9	IMLG*H1	IMLG*H3	IMLG*H6	IMLG*X1	IMLG*X5	IMLG*X8	
Nominal Wattage (W, @120 V)	33	48	60	80	80	101	119	150	170	207	273	
Equivalencies (W, HID) ①	70 -100	100 -175	175 -250	250-350	250-350	350-400	400	400-600	600-750	1000	>1000W	
Nominal Lumens ①	4000	6200	8500	11000	11000	13000	15500	19000	21000	25000	28000	
Efficacy (up to, lm/W)	121	127	137	128	149	131	132	127	124	121	103	
Color Temperature (CCT) (K)	5000 / 4000 / 3000 / 2200 / 1800 / Amber / Green											
Color Rendering index (CRI)	≥ 70 CRI (5000K / 2200K / 1800K)   ≥ 80 CRI (4000K / 3000K)											
Voltage	100-277 Vac, 50/60 Hz; 125-300 Vdc   347-480 Vac, 50/60 Hz   24-48 Vdc											
Surge Protection	Standard: 6 kV, 3 kA   Optional: 10 kV, 5 kA											
Ambient Temperature ②	Standard: -40 °C to +65 °C (-40 °F to +149 °F)   Cold Temperature Option: -50 °C to +65 °C (-58 °F to +149 °F)   High ambient: -40 °C to +75 °C (-40 °F to +167 °F)											
Fixture Weight - kg (lbs) ③	9.20 (20.3)				12.00 (26.4)				13.15 (29.0)			
Replaceable Parts	Drivers, Globes											

① Nominal lumens are based on 5000K CCT, clear glass lens and Type III optic (L3 thru L9) or Type V optic (H1 thru X5). Review the catalog pages for detailed performance.

② Refer to catalog pages for detailed temperature tables/operating temperature based on lumen output/certification. High ambient max temperature may vary from +70 °C to +75 °C (+158 °F to +167 °F).

③ Driver housing weight shown. See catalog pages for more details.

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For product information:  
[www.masteringled.com](http://www.masteringled.com)  
1.800.621.1506



**EMERSON™**

# INDUSTRIAL MERCMASTER™ LED GENERATION 3 SERIES LUMINAIRES

## STANDARD — ORDINARY LOCATION

Project Information	Specifications
Part Number: _____ Date: _____	_____
Project: _____	_____
Fixture Type: _____	_____

### CATALOG NUMBERING GUIDE

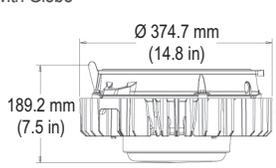
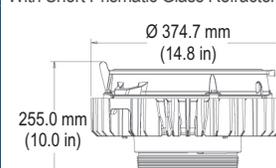
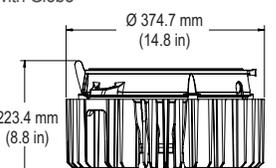
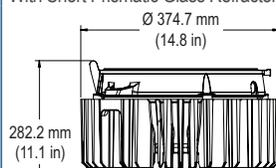
Series Prefix	Mounting	Lumen (nominal)	Hub Size	Color Temperature	Light Distribution Pattern	Voltage	Fusing Option	Operating Temperature	Options
IMLG									

SERIES PREFIX:	LUMEN (NOMINAL): ☆ †	COLOR TEMPERATURE (CCT): ‡	VOLTAGE FOR ALL LUMENS: ⑩
<b>MLG</b> Industrial Mercmaster LED Generation 3 Series	<b>L3</b> 4,000 <b>L5</b> 6,200 <b>L7</b> 8,500 <b>L9</b> 11,000 <b>H9</b> 11,000 ③ <b>H1</b> 13,000 <b>H3</b> 15,500 <b>H6</b> 19,000 <b>X1</b> 21,000 <b>X5</b> 25,000 <b>X8</b> 28,000 ⑤	<b>C</b> Cool, 5000K <b>N</b> Neutral, 4000K <b>W</b> Warm, 3000K <b>H</b> 2200K <b>S</b> HPS, 1800K <b>A</b> Yellow Amber <b>V</b> Green ④	<b>BU</b> 100-277 Vac, 50/60 Hz; 125-300 Vdc ⑦ <b>BH</b> 347-480 Vac, 50/60 Hz ▲ <b>B2</b> 24-48 Vdc ⑧
MOUNTING:	HUB SIZE:	GLOBE MATERIAL: ③	OPTIONAL FUSING: ⑧
<b>A</b> Pendant <b>B</b> Watertight Pendant ▲ <b>C</b> Ceiling ⑤ <b>D</b> Pendant Cone ▲ ⑤ <b>R</b> 90° Stanchion ① <b>S</b> 25° Stanchion ① <b>T</b> Trunnion <b>K</b> Killark™ † Adapter Universal ▲ <b>U</b> Mercmaster II Adapter, Ceiling or Pendant ▲ <b>V</b> Mercmaster II Adapter, Stanchion or Wall ▲ <b>W</b> Wall <b>X</b> Crouse Hinds™ † Adapter, Ceiling or Pendant ▲ ⑥ <b>Y</b> Crouse Hinds™ † Adapter, Stanchion or Wall ▲ <b>Blank</b> No mounting hood	<b>2</b> 3/4" NPT ① <b>3</b> 1" NPT ① <b>4</b> 1-1/4" NPT stanchion <b>5</b> 1-1/2" NPT stanchion <b>6</b> Metric M20 ① <b>Blank</b> If using adapter or no hood	<b>P</b> Clear Polycarbonate Globe <b>D</b> Diffused Polycarbonate Globe <b>G</b> Clear Glass Globe <b>J</b> Short Glass Prismatic Refractor ⑨	<b>F</b> Fusing <b>Blank</b> No Fusing
Blank	Blank	LIGHT DISTRIBUTION PATTERN:	OPERATING TEMPERATURE: ⑨
		<b>1</b> Type I ② <b>3</b> Type III ② <b>5</b> Type V ② <b>W</b> Type V Wide	<b>C</b> Cold Temperature -50 °C (-58 °F) Min. Ambient <b>Blank</b> Standard -40 °C (-40 °F) Min. Ambient
Blank	Blank	Blank	OPTIONS:
			<b>1</b> Photocontrol 120V ④ <b>2</b> Photocontrol 208-277V ④ <b>S</b> Additional surge to 10 kV ② <b>A</b> High Ambient ③ † <b>Blank</b> No Options Chosen

- ① 3/4" NPT, 1" NPT and Metric M20 hub entries are not offered on 90° or 25° Stanchion mounting options.
- ② 10 kV surge is not rated for IECEE and not available with high ambient options.
- ③ Guards for the glass refractors and globes are ordered separately. See the Accessories for more information.
- ④ Photocontrol available for 120-277 Vac only. Factory installed in the mounting hood. Photocontrols only certified for cCSAus. Luminaires with photocontrol are not rated IECEE, IP66/67, Class II, 3R, 4, 4X, or Marine Outside Type (Salt Water).
- ⑤ Ceiling-mount and pendant cone mounting hoods and adapters are not designed to use the in hood photocontrol. Ceiling and pendant cone mounts must use an FS/FD box with photocontrol (ordered separately).
- ⑥ Only allowed for Type V and Type V Wide light distribution.
- ⑦ Voltage range may vary from 100-277V to 120-277V. See Electrical Specifications table for details.
- ⑧ H9 only available with High Ambient option (-A).
- ⑨ Short glass prismatic refractor (J) is only available in light distribution pattern Type V and NEC/CEC rated applications.
- ⑩ All models except from X8, H3 347-480V, H6 347-480V, have 0-10V variable dimming input providing 10% to 100% dimming curve for BU/BH voltage options at standard temperature and 0% to 100% dimming curve for B2 voltage or cold temperature models.

- ① Voltage range is 100-277V for X1 and X5 models, and cold temperature models from L7 to H6. 125-300V DC voltage is available only with the Fusing option.
- ② Available up to 8500lm models.
- ③ Cold temperature option is available for use with clear glass globe, and BU (100-277 Vac), or B2 (24-48 Vdc) voltages only. Not available with X1, X5, X8 and Photocontrol.
- ④ Green Color Temperature is only available with L5, L9, H3 and X1 lumen options. Review T code tables for applicable ambient temperatures
- ⑤ Available with glass globe, short glass prismatic refractor, 5000K CCT, and 100-277V voltage options only.
- † Lumen output options L3 (up to 75° C), L5 (up to 75° C), L7 (up to 75° C), L9/H9/H3 (up to 70° C) can be ordered as High Ambient models.
- ★ For lumen output information, see Lumen Output (Efficacy) Table.
- ⊗ Fusing only permitted for NEC/CEC rating. Factory installed. Use of fuse voids Marine Outside Type (Salt Water) rating. Fusing is mounted in the driver housing.
- ‡ Other CCT options available upon request. Contact your local sales representative for more information.
- ▲ Adapters, watertight pendant hood and BH Voltage only certified for cCSAus. Not available for use with photocontrol.
- ◇ Killark is a registered trademark of Hubbell Incorporated.
- † Crouse-Hinds is a registered trademark of Cooper Industries, Inc., a wholly owned subsidiary of the Eaton Corporation plc.

### DIMENSIONAL DRAWINGS ① | MILLIMETERS (INCHES)

IMLGL3 to IMLGL9	IMLGH1 to IMLGH9 and IMLGX1 to IMLGX8
<p>With Globe</p>  <p>With Short Prismatic Glass Refractor</p> 	<p>With Globe</p>  <p>With Short Prismatic Glass Refractor</p> 

① Driver housing models with globes shown. Refer to catalog pages or the Product Drawing configurator page for additional dimensional information; available on [www.masteringled.com](http://www.masteringled.com).

# INDUSTRIAL MERCMASTER™ LED GENERATION 3 SERIES LUMINAIRES WITH EMERGENCY BATTERY BACKUP — ORDINARY LOCATION

## FEATURES

- Modular design provides thousands of combinations for maximum versatility
- Choice of optics for optimal light distribution in a variety of applications: Type I, Type III, Type V or Type V Wide
- Choice of color temperature (CCT): 5000K (70 CRI), 4000K (80 CRI), 3000K (80 CRI), 2200K (70 CRI), 1800K (70 CRI) or Amber
- Emergency mode is field changeable from 90 min to 180 min
- Customize to the application requirements with three different globe options: clear polycarbonate, diffused polycarbonate, and clear glass
- Seven standard mounting hood designs allow for mounting in any location. Uses same mounting hoods as Mercmaster™ III HID
- Retrofit adapters for Crouse-Hinds™ †, Mercmaster II, and Killark™ † hoods available.
- Watertight Pendant Hood with IP68 cord grip available to address water ingress into luminaire via conduit
- Hinge has high lip for added safety during installation and servicing. Hinge and bolt construction assures 360° compression at all points on fixture housing gasket for positive sealing. Swing away design of captive bolt and nut simplifies installation
- Luminaire housing has wiring compartment with terminal block separate for easy wiring access.

## WARRANTY ◊

- 10 year standard warranty

## TYPICAL APPLICATIONS

- Power plants
- Processing plants
- Chemical plants
- Oil refineries
- Waste and sewage treatment
- Hydrogen and Biofuels plants
- LNG (Liquid Natural Gas) plants
- Other areas where dust, water, dirt and rough usage are a problem

## LUMINAIRE MATERIALS

- Mounting hoods and driver housing: cast copperfree (4/10 of 1% max.) aluminum
- Gaskets: silicone rubber
- All hardware and catch assemblies: stainless steel
- Globe: polycarbonate or glass
- Short refractor guard: stainless steel
- Refractor: heat-resistant prismatic glass
- Globe guard, short refractor guard and safety cable: stainless steel wire

## ACCESSORIES (PURCHASE SEPARATELY)

- Globe guard: MGU1
- Refractor guard: KRG2S
- Visor: MMVISOR
- Drain plug: LEDDR3

## NEC/CEC LISTINGS ①

- Marine Outside Type (Salt Water)
- Type 3R, 4, 4X
- IP66/IP67
- Simultaneous Exposure
- Suitable for Use in Wet Locations



IMLGL\*L + Clear Globe + Ceiling Mount

## NOTABLE LISTINGS ①

- ABS Certified

## RELATED PRODUCTS

- Industrial Mercmaster LED Generation 3 Standard Luminaires
- Mercmaster LED Generation 3 Luminaires Standard or with Emergency Battery Backup
- Industrial Mercmaster Connect LED Luminaires

① Refer to catalog pages for detailed certification information.

† Killark is a registered trademark of Hubbell Incorporated.

† Crouse-Hinds is a registered trademarks of Cooper Crouse-Hinds.

◊ For warranty details go to [www.appleton.emerson.com](http://www.appleton.emerson.com).

## PRODUCT SPECIFICATIONS

Series * Lumen Output	IMLGL3	IMLGL5	IMLGL7
Nominal Wattage (W, @120 V)	37	54	65
Equivalencies (W, HID)	70 - 100	100 - 175	175 - 250
Nominal Lumens   Standard Mode ①	4000	6200	7500
Nominal Emergency   Emergency Mode ①	1450 ( 90 min )   800 ( 180 min )		1600 ( 90 min )   950 ( 180 min )
Efficacy (up to, lm/W) ①	133	130	112
Color Temperature (CCT) (K)	5000 / 4000 / 3000 / 2200 / 1800 / Amber		
Color Rendering index (CRI)	≥ 70 CRI (5000K)   ≥ 80 CRI (4000K / 3000K)		
Voltage	120–277 Vac, 50/60 Hz		
Ambient Temperature ②	20 °C to +55 °C (-4 °F to +131 °F)		
Fixture Weight - kg (lbs) ③	10.5 ( 23.2 )		
Replaceable Parts	Drivers, Globes, Battery pack, Battery Management Module		

① Nominal lumens based on Type V optics, 5000K CCT with clear glass lens. Refer to catalog pages for detailed performance.

② Refer to catalog pages for detailed temperature tables/operating temperature based on lumen output/certification. High ambient max temperature may vary from +70 °C to +75 °C (+158 °F to +167 °F).

③ Driver housing weight shown. See catalog pages for more details

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**EMERSON™**

# INDUSTRIAL MERCMASTER™ LED GENERATION 3 SERIES LUMINAIRES WITH EMERGENCY BATTERY BACKUP — ORDINARY LOCATION

Project Information	Specifications
Part Number: _____ Date: _____	_____
Project: _____	_____
Fixture Type: _____	_____

## CATALOG NUMBERING GUIDE

Series Prefix	Mounting	Lumen (nominal)	Hub Size	Color Temperature	Globe Material	Light Distribution Pattern	Voltage	Emergency
IMLG							BU	

<b>SERIES PREFIX:</b> <b>MLG</b> Industrial Mercmaster LED Generation 3 Series with Emergency Battery Backup	<b>LUMEN (NOMINAL): *</b> <b>L3</b> 4,000 <b>L5</b> 6,000 <b>L7</b> 7,500 <b>HUB SIZE:</b> <b>2</b> 3/4" NPT ① <b>3</b> 1" NPT ① <b>4</b> 1-1/4" NPT stanchion <b>5</b> 1-1/2" NPT stanchion <b>6</b> Metric M20 ① <b>Blank</b> If using adapter or no hood	<b>COLOR TEMPERATURE (CCT):</b> <b>C</b> Cool, 5000K <b>N</b> Neutral, 4000K <b>W</b> Warm, 3000K <b>H</b> 2200K <b>S</b> HPS 1800K <b>A</b> Amber <b>GLOBE MATERIAL: ②</b> <b>P</b> Clear Polycarbonate Globe <b>D</b> Diffused Polycarbonate Globe <b>G</b> Clear Glass Globe	<b>LIGHT DISTRIBUTION PATTERN:</b> <b>1</b> Type I ④ <b>3</b> Type III ④ <b>5</b> Type V <b>W</b> Type V Wide <b>VOLTAGE:</b> <b>BU</b> 100-277 Vac, 50/60 Hz; <b>EMERGENCY:</b> <b>H</b> 90 Minutes <b>E</b> 180 Minutes
<b>MOUNTING:</b> <b>A</b> Pendant <b>B</b> Watertight Pendant ▲ <b>C</b> Ceiling <b>D</b> Pendant Cone ▲ <b>R</b> 90° Stanchion ① <b>S</b> 25° Stanchion ① <b>T</b> Trunnion <b>K</b> Killark™ ✦ Adapter Universal ▲ <b>U</b> Mercmaster II Adapter, Ceiling or Pendant ▲ <b>V</b> Mercmaster II Adapter, Stanchion or Wall ▲ <b>W</b> Wall <b>X</b> Crouse Hinds™ ✦ Adapter, Ceiling or Pendant ▲ ③ <b>Y</b> Crouse Hinds™ ✦ Adapter, Stanchion or Wall ▲ <b>Blank</b> No mounting hood			

- ① 3/4" NPT, 1" NPT and Metric M20 hub entries are not offered on 90° or 25° Stanchion mounting options.
- ② Guards for the globes are ordered separately. Refer to catalog pages for complete accessories information.
- ③ Only allowed for Type V and Type V Wide light distribution.
- ④ Type I and Type III use a multiple hinge housing.
- \* Refer to catalog pages for detailed lumen output information, see Lumen Output (Efficacy) Table.
- ▲ Adapters only certified for cCSAus.
- ✦ Killark is a registered trademark of Hubbell incorporated.
- ✦ Crouse-Hinds is a registered trademarks of Cooper Crouse-Hinds.

## DIMENSIONAL DRAWINGS ① | MILLIMETERS (INCHES)



① Driver housing models with globes shown. Refer to catalog pages or the Product Drawing configurator page for additional dimensional information; available on [www.masteringled.com](http://www.masteringled.com).