

GE current HORT150 Arize Factor Horticulture LED Lighting System Installation Guide

Home » GE current » GE current HORT150 Arize Factor Horticulture LED Lighting System Installation Guide 1



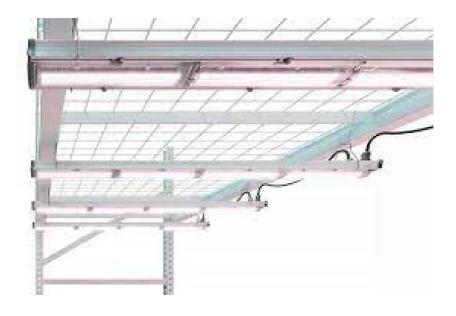
Contents

- 1 GE current HORT150 Arize Factor Horticulture LED Lighting
- **2 RISK OF ELECTRIC SHOCK AND FIRE**
- **3 Components**
- **4 Mounting Accessories**
- **5 Mounting Distance**
- 6 ML Series Rolling Rack Mount
- 7 Rolling Rack Installation Steps
- **8 LED Driver Bracket Mount**
- **9 Shorting Cap Installation**
- 10 Driver Output and Lightbar Electrical Connections
- 11 Connection Schematic
- 12 FCC STATMENT
- 13 Documents / Resources
 - 13.1 References
- **14 Related Posts**

Arize® Factor



GE current HORT150 Arize Factor Horticulture LED Lighting System



BEFORE YOU BEGIN

Read these instructions completely and carefully. For Commercial or Industrial use only.

RISK OF SAFETY AND PRODUCT DAMAGE. DO NOT MAKE OR BREAK ELECTRICAL CONNECTIONS WHILE POWER IS APPLIED.

WARNING

RISK OF ELECTRIC SHOCK

Turn power off before installation, inspection, cleaning or removal.

RISK OF ELECTRIC SHOCK AND FIRE

- Follow appropriate lock out/tag out safety procedure.
- Properly ground electrical enclosure.
- Follow all National Electric Codes (NEC) and local codes.
- This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.
- The installation and associated structures are subject to approval by the authority having jurisdiction.
- Use only with components identified in this document.
- Suitable for dry, damp, and wet locations; Do not immerse any component.
- Wear suitable Personal Protective Equipment (PPE) during installation/maintenance. Highly recommend safety glasses, helmet and leather glove for luminaire mounting.

RISK OF FIRE

- Minimum 3 inch distance from lightbar & driver to any combustible material.
- Minimum 3 inch clearance between, lightbar & driver, lightbar & lightbar, driver & driver.
- The lightbar shall be installed lens down with a minimum 6 inch distance to anything below.
- All cables including connectors shall not be concealed or extended through a wall, floor, ceiling, or other parts
 of the building structure; located above a suspended ceiling or dropped ceiling; permanently affixed to the
 building structure.
- Cables shall be routed so that they are not subject to strain and are protected from physical damage; visible

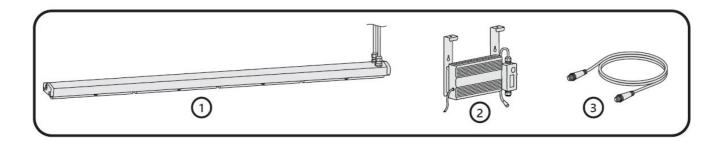
over their entire length; and used within their rated ampacity as determined for the maximum temperature of the installed environment specified in the instructions.

• For safe operation, and to maximize the longevity of the luminaire; ensure that the lightbar and driver are clean and free of dirt, dust, oil, or any other debris. Do not apply any kind of film on the lens or otherwise cover the driver or light engine in any way.

Suitable for operation in an ambient temperature as follows:

32°F-86°F (0-30°C) for ML900, 32°F-104°F (0-40°C) for ML300. A mechanical ventilation or cooling system is required to maintain the temperature as above when the lightbar is in operation.

Components



- 1 ML Series lightbars (See Lightbar Specifications table on page 2 for details)
- 2 GEPSC210-600*-A**NA Series LED Driver
- 3 Optional: Interconnection cable (93118692, 93067607)

1. Lightbar Specifications

Product Code	Detailed Description	Weight	Series Load per Driver	System Watts p er Lightbar
GEHF-HPKRW1*	ML900, PKR	2.6 kg (5.7lbs)	2	319W
GEHF-HPKBW1*	ML900, PKB	2.6 kg (5.7lbs)	2	313W
GEHF-HPKFW1	ML900, PKF	2.6 kg (5.7lbs)	2	313W
GEHF-HBRIW1*	ML900, BRI	2.6 kg (5.7lbs)	2	319W
GEHF-HBRVW1*	ML900, BRV	2.6 kg (5.7lbs)	2	316W
GEHF-MPKRW1	ML300, PKR	2.6 kg (5.7lbs)	4, 5, or 6	104W
GEHF-MPKBW1	ML300, PKB	2.6 kg (5.7lbs)	4, 5, or 6	104W
GEHF-MPKFW1	ML300, PKF	2.6 kg (5.7lbs)	4, 5, or 6	106W
GEHF-MBRIW1	ML300, BRI	2.6 kg (5.7lbs)	4, 5, or 6	106W
GEHF-MBRVW1	ML300, BRV	2.6 kg (5.7lbs)	4, 5, or 6	106W
GEHF-EPKBW1	ML300, PKB	2.6 kg (5.7lbs)	5, 6, 7, or 8	82W

^{*} Risk Group 1 for photobiological per IEC 62471. All others in Exempt group.

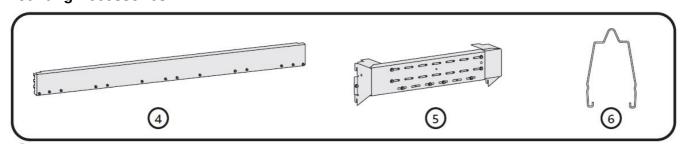
2. **LED Driver Specifications**

	Detailed Descr		Driver Max Input Ratings		
Description	iption	Weight	Voltage	Current	
GEPSC210-600D-ADGNA -D1XA1	Cord /w Leads	3.33 kg (7.3lbs)	120/208/240/277 VA C	6/3.5/3/2.6A	
GEPSC210-600D-ADGNA -D15A1	NEMA 5-15P	3.48 kg (7.33lbs)	120 VAC	6A	
GEPSC210-600D-ADGNA -D16A1	NEMA L6-15P	3.48 kg (7.33lbs)	240 VAC	ЗА	
GEPSC210-600D-ADGNA -D17A1	NEMA L7-15P	3.48 kg (7.33lbs)	277 VAC	2.6A	
GEPSC210-600G-AGJNA -D1XA1	Cord /w Leads	3.33 kg (7.3lbs)	277/347/480 VAC	2.5 / 2 / 1.5A	
GEPSC210-600G-AGJNA -D17A1	NEMA L7-15P	3.48 kg (7.33lbs)	277 VAC	2.5A	

3. Interconnection Cables Specifications

SKU	Description	Detailed Description	Weight
93118692	GECA30A14-AA03B	Interconnection cable greenhouse 3 feet, UL	0.16kg (0.4 lbs)
93067607	GECA30A14-AA06B	Interconnection cable greenhouse 6 feet, UL	0.32kg (0.7 lbs)

Mounting Accessories

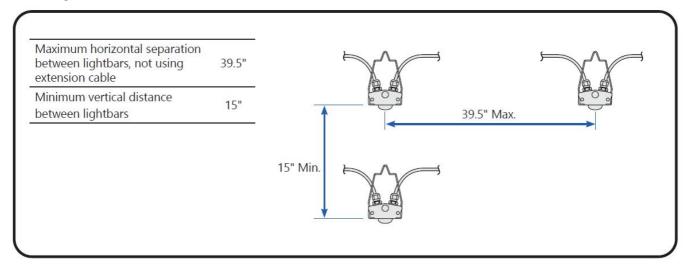


- 4 Rolling Rack Mount, 48" (GEMB-BAW2)
- 5 Rolling Rack Mount, 24" (GEMB-BAW1)
- 6 Suspended Wire Form Support (GEMB-BANE)

Mounting Accessories

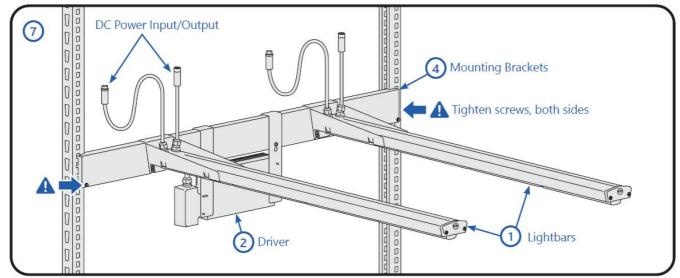
sku	Description	Detailed Description	Weight
95051690	4 GEMB-BANE	Factor suspended mount wireform support	0.012 kg (0.026lbs)
95051689	5 GEMB-BAW1	Factor rolling rack mount, 24 inch pitch	1.756 kg (3.86 lbs)
95051688	6 GEMB-BAW2	Factor rolling rack mount, 48 inch pitch	3.69 kg (8.1 lbs)
95051691	7 GEMB-FANE	Factor light engine mount	3.82 kg (8.4 lbs)
95047411	8 GEHAK-NN-NE-N0	Driver universal 1' remote mount kit	0.2kg (0.4 lbs)
95050824	9 GEHR-HAR M15	Shorting cap	0.05kg (0.11lb)

Mounting Distance



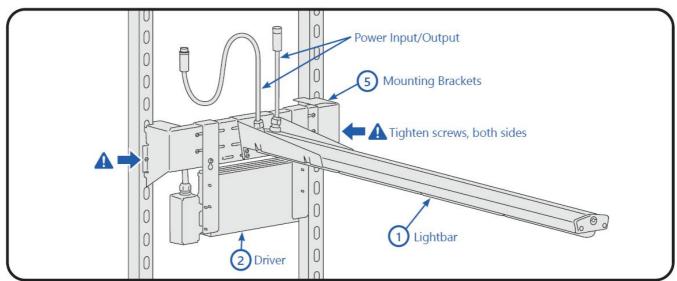
ML Series Rolling Rack Mount

ML900 Rolling Rack Mount, 48"



After the horizontal bracket is attached to the strut, secure the bracket to the strut by tightening the two screws located at each end of the bracket.

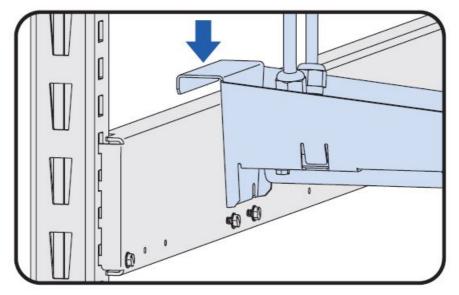
ML300 Rolling Rack Mount, 24"



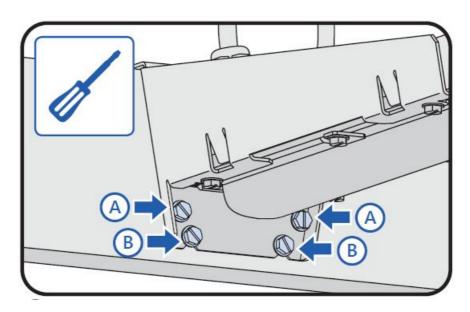
After the horizontal bracket is attached to the strut, secure the bracket to the struts by tightening the two screws, located each end of the bracket.

Rolling Rack Installation Steps

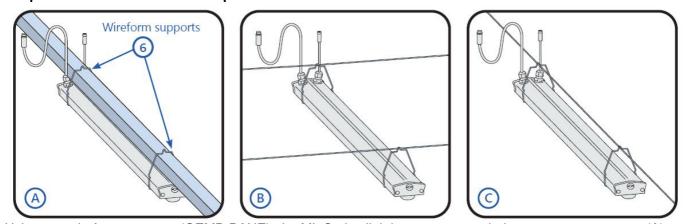
1. Place lightbar on GEMB-BAW2 as shown, push down with a screwdriver to secure on bracket



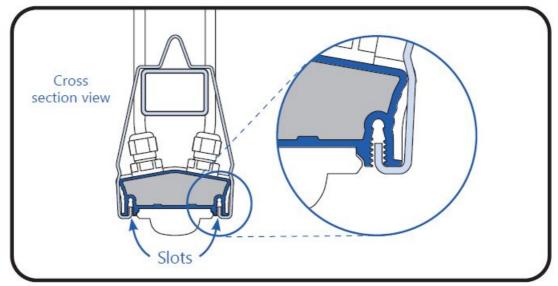
2. A) Adjust screws to level the lightbar with a screwdriver. B) After lightbar is leveled, tighten the 2 screws at the bottom.



Suspended Mount Installation Steps

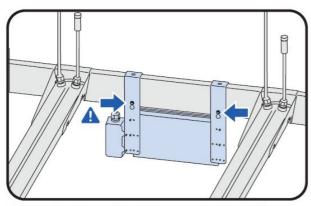


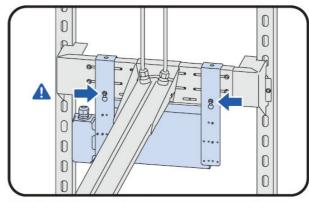
Using two wireform supports (GEMB-BANE), the ML Series lightbar can suspended on a support structure (A) or on cables as shown above (B and C).



Attach wireform supports by pushing up into the slots on the underside of the lightbar.

LED Driver Bracket Mount





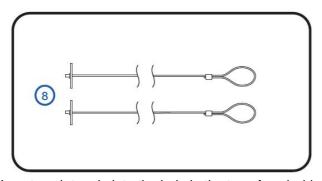
ML 900 LED Driver Mounting Option A Installation

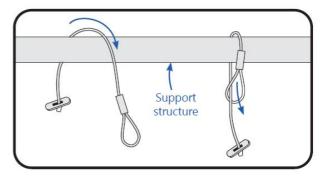
ML300 LED Driver Mounting Option A Installation

After placing driver on mounting bracket, secure driver by tightening the screws shown.

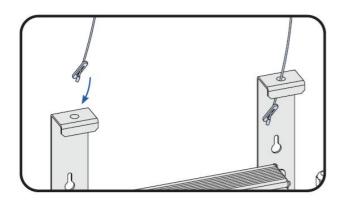
LED Driver Suspended Mount

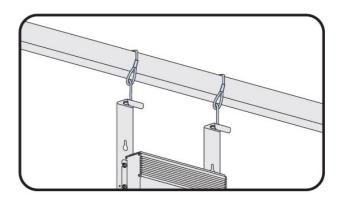
- 1. Components required: GEHAK-NN-NE-N0 Driver universal 1' remote mount kit (95047411), 2 required.
- 2. Wrap the two toggle cables around the support structure. Thread the toggle through the loop in each toggle cable.





- 3. Insert each toggle into the hole in the top of each driver bracket.
- 4. Hang the driver from the support structure.





Shorting Cap Installation

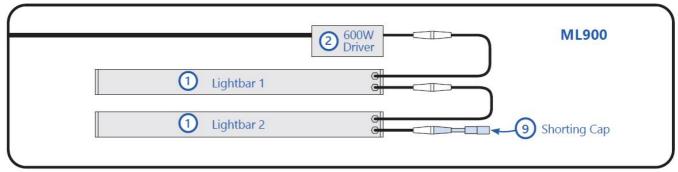
RISK OF SAFETY AND PRODUCT DAMAGE. DO NOT MAKE OR BREAK ELECTRICAL CONNECTION WHILE POWER IS APPLIED.

Connect the output of the driver to the first light bar using the 30" interconnection cable. The output of first light bar (6" cable) must be connected to the 30" cable of the 2nd lightbar, and so on.

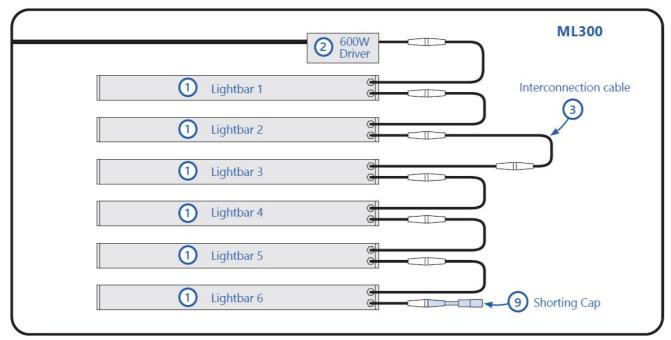
- For ML900, only 2 lightbars should be connected as shown.
- For ML300, a minimum of 4, and a maximum of 6 light bars can be connected. Connecting less than 4 ML300 light bars may damage the product.
- Connect the shorting cap to the last 6" lightbar cable, as shown, or else the array will not light. The shorting cap must be secured such that it does not touch the light bar.



ML900 Electrical Connection: 2 Lightbars only



ML 300 Electrical connection: 4, 5, or 6 Lightbars only



For all configurations greater than 5 bars, only use 3ft or 6ft extension cable (GECA30A14-AA03B or GECA30A14-AA06B interconnection cables) in conjunction with LED Drivers without NEMA plugs (GEPSC210-600D-ADGNA-D1XA1 and GEPSC210-600G-AGJNA-D1XA1).

Driver Output and Lightbar Electrical Connections

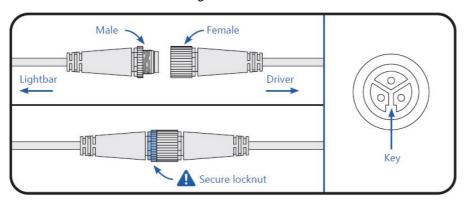
WARNING

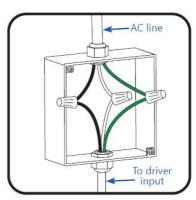
RISK OF ELECTRIC SHOCK OR PRODUCT DAMAGE

Turn power OFF before inspection, installation or removal.

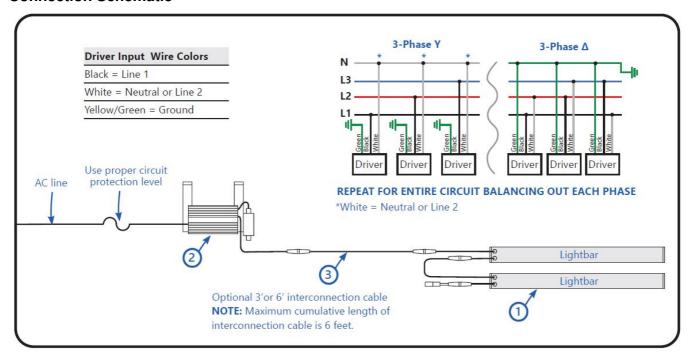
DO NOT MAKE OR BREAK ELECTRICAL CONNECTIONS WHILE POWER IS APPLIED.

- 1. Mate male connector from lightbar with female connector from DC output of driver. Ensure matching up the key guides from Male to Female connector.
- 2. Connect the green wire to the incoming ground conductor. Connect the black wire to Line 1 and white wires to Neutral or Line 2 of the incoming AC line.





Connection Schematic



Wired Dimming Connections (Optional)

WARNING

RISK OF ELECTRIC SHOCK OR PRODUCT DAMAGE

- Turn power off before installation, inspection, cleaning or removal. Follow appropriate lock out/tag out safety procedure.
- This product must be installed in accordance with the applicable installation code by a person familiar with the product and the hazards involved.

1. Junction Box Cover Removal

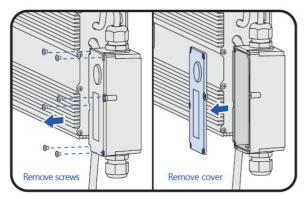
- Using a #1 Phillips screwdriver, unscrew the 6 screws on the junction box cover.
- Remove the junction box cover from the junction box enclosure.

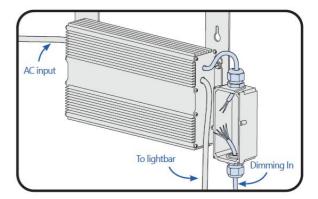
NOTE: Be sure to hold on to the screws, junction box cover, and gasket for future use.

2. Wall Dimming Wire Insertion

- Remove the sealed gland in the bottom of the junction box enclosure, and install an appropriate Listed ½" NPT fitting rated for the environment into the open threaded open conduit connection.
- Bring the conductors for the building dimming network into this fitting.

NOTE: Customer is responsible for the 1/2" NPT- 14 thread per inch fitting.





3. Wire Dimming Electrical Connection

Connect the appropriate wiring to Dim + (0-10V) and Dim - (0-10V) from driver. Insulate the black, pink & blue wires. Follow dimming switch instructions for rest of connection.

- 4. Junction Box Cover Replacement
 - Ensure gasket is sitting in place on the inner edge of the junction box cover.
 - Fasten all 6 screws to ensure water tight seal.

NOTE: Be careful not to strip out the junction box enclosure by over tightening the screws.

RISK GROUP 1 - CAUTION

Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eyes.

* See Specification Table for Risk Group 1 models.

- These photobiological safety markings are based on testing of the light output characteristic of a single
 horticultural luminaire. Increased exposure risk to facility personnel may be present depending upon the
 number of horticultural luminaires and their placement and/or positioning within the plant growth facility.
- It is the responsibility of the plant growth facility to address these risks at the facility level and to ensure that people entering the plant growth areas while the lights are on, are aware of these risks and that appropriate safeguards are in place.

FCC STATMENT

Use only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interfer-ence,
- 2. this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. This Class [A] RFLD complies with the Canadian standard ICES-005. /CeDEFR de la classe [A] est conforme à la NMB-005 du Canada.

Electrical products must not be thrown out with domestic waste. They must be taken to a communal collecting point for environmentally friendly disposal in accordance with local regulations. Contact your local authorities or stockist for advice on recycling. The packaging material is recyclable. Dispose of the packaging in an environmentally friendly manner and make it available for the recyclable material collection-service.

Scan the QR code for the English



and Spanish installation guide

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Call us today! 1-888-694-3533 Email us: .info@gecurrent.com

For the latest install guides for your product go to:

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Documents / Resources



GE current HORT150 Arize Factor Horticulture LED Lighting System [pdf] Installation Guid

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GE current HORT150 Arize Factor Horticulture LED Lighting System [pdf] Installation Guid

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References

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- C Grow Lighting | Current GLI Brands

Manuals+