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WAL-PSL-MJ-10-LED-12.3-MMC

100' Permanent Tunnel LED String Light - 10 LED Work Lamps - 277V - Metal Clad Cable - Indoor/Outdoor

Product ID: 105751

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

WAL-PSL-MJ-10-LED-12.3-MMC String Lights
Lamp Type: LED
Lamp Quantity: 10
Lamp Watts: 10 watts
Total Watts: 100 Watts
Lumens: 10,500 (1,050 per lamp)
Lamp Material: Aluminum
Voltage: 277V AC

Total Length: 100`

Wiring: 10` 12/3 PVC Coated Metal Clad Cable Per Unit, 5` Whips w/ Flying Leads
Cord Caps: N/A

Mounting: Eyelet for hook mounting & Eyeholes for Flat Surface Mounting

Shipping Dimensions: 40" x 48" x 36"

Shipping Weight: 250 lbs

Features
Lower Amp Draw
Indoor/Outdoor Wet Area Approved
High Output 10 Watt LED Lamps
Daisy Chain Connection (End to End)
100` per String - Max Spanning 2500`
10,500 Lumens of Total Illumination
Metal Clad Cable for Permanent Installations

Special Orders - Special Requirements
Contact us for special requirements

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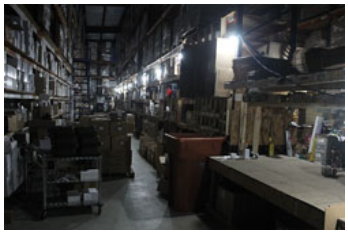
Made in the USA

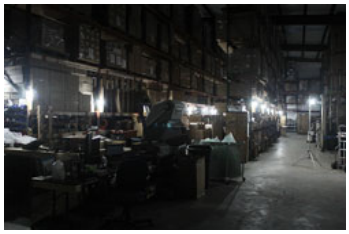
The Larson Electronics WAL-PSL-MJ-10-LED-12.3-MMC Permanent Tunnel LED Lighting String Light System is designed for high output illumination across a total length of 500` away from the power source. The 10 watt LED lamps on this this work site light set provide more and higher quality

light than 100 wattage incandescent lights while creating less heat and using less power. This LED light stringer operates on 277V AC, constructed of high quality aluminum fixtures and PVC coated metal clad cable, and provides operators with a permanent work light solution for indoor or outdoor tunnels and underpasses.

This permanent tunnel string light consists of 10 industrial grade LED lamps with 10` of 12/3 PVC coated metal clad cable between each unit, stretching a total of 100` in length. This permanent mounted LED string light is connected to a 277V power source via an integrated 5` line-in cable and user provided junction boxes. Each mason jar lamp is equipped with a high output LED bulb which delivers more light output than a 100 watt incandescent. The 10 watt LED bulb draws 10% the electrical power of a standard 100 watt bulb, making it suitable for standard voltage and low voltage applications. Each LED light screws into an E26 lamp socket and the bulb is enclosed in a bird cage style metal guard.

Ten high output A19 style LED lamps producing 1,050 lumens per lamp provide a total of 10,500 lumens of bright white illumination. Each lamp housing is constructed from light weight aluminum, and fitted with an impact and shatter resistant polycarbonate diffuser. These LED light bulbs provide additional safety measures and time savings, given the low heat production and that it does not require replacing for 50,000 hours. Since the LED bulb uses solid state technology, the vibration (dropping, etc.) that degrades conventional incandescent bulbs is not an issue with these LED bulbs.


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Unlike the glass tube design of traditional fluorescent lamps, these LED lamps have no filaments or fragile housings to break during operation. Instead of using a combination of gases to produce light, light emitting diodes (LEDs) use semi-conductive materials that illuminate when electric current applied and emitting light. The LED assembly is mounted to the extruded aluminum, with a polycarbonate lens protecting the LEDs. With LED lights, there is no warm up time or cool down time before re-striking and provide instant illumination when powered on, adding to the reliability of LED technology. By nature, LED light sources run significantly cooler than fluorescent lamps, reducing the chance of accidental burns and increased temperatures due to heat emissions. This solid state design of light emitting diodes provides a more reliable, stable, durable, and energy efficient light source over traditional fluorescent lighting.

Safety within the workplace is another benefit of LED work lights. All light sources produce heat. With traditional work lamps, such as incandescent and halogen light sources, the lamp reaches high surface temperatures. These surface temperatures introduce a burn risk to anyone to anyone that allows prolonged skin contact with the light source, as well as a fire hazard if a flammable material is accidentally set too close to the light source for an extended period of time. While LED fixtures do still produce heat, they are designed with heat sinks to properly disperse the heat. Each LED bulb is engineered to disperse and expel this heat quickly and efficiently, keeping the lamp cooler than traditional light sources. This LED work light operates at a lower surface temperature than a comparable model with traditional light source, and thus does not present a significant burn risk if an operator or bystander accidentally brushed up against an exposed lamp, and reduce the fire hazard should they fixture accidentally come in contact with a flammable material for a short period of time. This significantly increases the safety within the work environment.

Each light housing is constructed of light weight aluminum and is fitted with an

aluminum mesh guard enclosure that provides protection for the enclosed bulb. A hook eyelet on the back of each lamp housing allows operators to hang these lights overhead. Alternatively, corner ears allow operators to permanently install these fixtures to walls, ceilings, or flat surfaces. Utilizing energy efficient LED lamps, operators are able to provide more light coverage from the same amp draw, or lower the amp draw using the same amount LED lamps as incandescent. Each LED light has an effective range that approximately covers a 5-8` radius with 10-15 foot candles of light. Unlike fragile incandescent and compact fluorescent lamps that are made from glass, these LED bulbs are extremely durable and can live up to the abuse of harsh working conditions. With a lamp life of 50,000 hours, operators are not constantly having to replace burnt out or broken lamps, reducing down time and lowering the amount of spare lamps required at the job site.

Multiple stringer sections can junctioned together via 5` whips with flying leads, with a maximum of twenty-five stringers junctioned together. Previously, it would have been unrealistic to have a complete assembly reaching 2500` in length from a single point of power. The metal clad cable reduces the risk of damage to the string light after installation in tunnel applications, and prevents rodents from chewing through the cabling.

Stringer Energy Consumption Comparison (Single Stringer)

	Incandescent	CFL	LED
Wattage (single unit)	100 watts	26 watts	10 watts
Wattage (total)	5,000 watts	1300 watts	500 watts
Amp Draw @ 277V AC	3.61 amps	2.71 amps	1.04 amps
Lamp Life Expectancy	1,500 hours	8,000 hours	50,000 hours
Color Temperature	2800K	4300K	6000K
Operation cost per day (12hs/day @ 12c/kWh)	$1.44	$0.38	$0.14
Operation cost per month (12hs/day @ 12c/kWh)	$43.20	$11.23	$4.32
Operation cost per year (12hs/day @ 12c/kWh)	$525.60	$136.66	$52.56

Stringer Energy Consumption Comparison (Twenty-Five Stringer)

	Incandescent	Halogen	LED
Wattage (Single Lamp)	100 watts	26 watts	10 watts
Wattage (6 Stringers Total)	25,000 watts	6,500 watts	2,500 watts
Amp Draw @ 277V AC	90.26 amps	23.47 amps	9.03 amps
Operation cost per day (12hs/day @ 12c/kWh)	$36.00	$9.36	$3.60
Operation cost per month (12hs/day @ 12c/kWh)	$1,080.00	$280.80	$108.00
Operation cost per year (12hs/day @ 12c/kWh)	$13,140.00	$3,416.40	$1,314.00

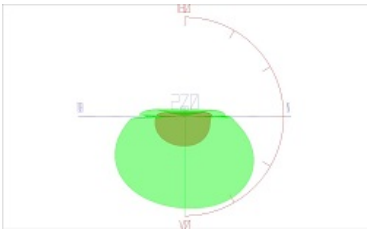
Please note: This string light is not capable of supporting 100 watt lamps nor 26 watt lamps for due to cable restriction and overloading the cable, as well as the lack of 277V lamps for CFL technology. These comparison charts are for references only. To be able to achieve the same results with traditional light sources, higher amp capacity cable would be required or shorter runs per string light assembly. To be able to achieve the same distance, multiple power sources would be required for the total length of the area that requires being illuminated.

Also note that for incandescent lamps, due to voltage loss over distance, the light from start to end of the single string light, with the lamps at the tail end of the stringer being nearly half the light output as the ones at the head end of the string light by the power source. For compact fluorescent lamps, this would require bulbs with internal ballasts that are universal voltage and capable of auto sensing voltage and adjusting accordingly. Otherwise the lamps will stop operating properly or fail prematurely after a certain distance due to voltage drop

The LED string lights from Larson Electronics have been designed to overcome the above difficulties and faults with traditional lighting. This allows operators to run a single strand of string lights within the work area and span long distances from a single power source and work around voltage drop without sacrificing light output. This feat would not be possible with above traditional light sources without increasing cable size, weight of the unit, number of power sources required to span the same distance, while providing more light output within the work space.

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Each high output LED lamp produces more light output than standard 100 watt rough serve lamps. The 3D polar distribution curve displays a standard 100 watt rough service incandescent lamp (red) in comparison to the LED-A19-10-E26-SML high output LED lamp (green) that is used in this work area string light. The LED lamp visible covers more than twice ground than the 100 watt rough service lamp, and the higher CRI of the LED lamp provides a better working environment. The cool white color temperature allows operators to see fine details that would not be clearly visible incandescent lighting.

These LED lamps are suitable for wet areas, extremely long lived, resistant to damage from impacts and vibrations, and consume far less energy than standard lamps. This tunnel string light is configured to operate with 277 volt electrical current. The LED lamps provide more and better quality illumination than 100 watt incandescent string lights without the high heat and fragile glass construction of traditional lamps. With the low energy requirements of LED lamps, mile long assembly units are now physically possible.

Lamp Features

1. 10 Watt LED Lamps
2. 10 Lamps for a total of 100 watts spanning 100` in length.
3. 1,050 lumens per lamp for a total of 10,500 lumens.
4. High output LED lamps provide bright white illumination and better color rendering compared to the dingy yellow tint of traditional incandescent lamps.
5. Indoor & Outdoor approved permanent install equipment.
6. No ballast, no flickering, instant on illumination
7. Cage metallic Guards for added protection
8. 277V AC Operation
9. Durable solid state LED construction resists damage from impacts and vibrations.
10. Hanging hook for hanging and hands free operation.
11. 10` of 12/3 PVC coated metal clad cable between each light.
12. 100` span of permanent LED work lights.
13. Daisy chain operations allows connecting multiple stringers together via user provided weatherproof junction box for maximum work site illumination, while aiding in servicing, storage, and transport of the tunnel light system.
14. Energy efficient alternative to incandescent and compact fluorescent string lights.
15. All components NRTL listed.

Superior LED Benefits

1. 50,000 hour lifespan.
2. Can SAVE 50% or more on energy.
3. Qualifies retrofit projects for financial incentives, including utility rebates, tax credits and energy loan programs.
4. Reduces energy use and prolongs life-spans of peripheral cooling units (A/C, refrigeration)
5. 100% recyclable.
6. No toxins-lead, mercury.
7. No UV light, infrared radiation or CO2 emissions.
8. Qualifies buildings for LEED and other sustainable business certifications.
9. Bright, even light maintains consistent color over time.
10. Instant on/off – No flickering, delays or buzzing.
11. Very good color rendering.
12. Vibration/impact resistant.
13. Significantly cooler operation.
14. Less frequent outages, higher output improves workplace safety.

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Frequently Asked Questions (FAQ)

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Product ID: 105751

Harmonized System (HS) Code: 9405.41.84.10

Export Control Classification Number (ECCN): EAR99

Links (Click on the below items to view):

- **HigResPic1**
- **ISO 9001 Certification**
- **Business Certificate**
- **Shipping Time Map**