VULCAN™ HIGH TEMPERATURE LED LIGHT SERIES

INDUSTRIAL-GRADE LIGHTING SOLUTIONS FOR HIGH HEAT ENVIRONMENTS



VULCAN LT	VULCAN MT	VULCAN HT
Rated to 75°C (167°F) ambient	Rated to 100°C (212°F) ambient	Rated to 150°C (302°F) ambient

The VULCAN™ High Temperature LED Light Series is engineered to excel in demanding industrial environments. The series is offered in three temperature classes, so every fixture can be matched to the actual ambient conditions of the job: **Vulcan LT** for spaces up to 75°C (167°F), **Vulcan MT** up to 100°C (212°F), and **Vulcan HT** up to 150°C (302°F) for steel plants, smelting operations, and power generation facilities.

Available in power configurations from 50W to 500W, every VULCAN™ fixture combines robust construction with advanced thermal management technology to ensure long-term operational reliability.

IP67 DUST TIGHT WATERPROOF

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SERIES OVERVIEW & ORDERING GUIDE

The VULCAN™ Series shares a common platform across all three temperature classes. Choose the class rated for the highest sustained ambient temperature at the mounting location, then select the wattage required for the light level.

	VULCAN LT	VULCAN MT	VULCAN HT
Max. Ambient Temperature	**75°C (167°F)**	**100°C (212°F)**	**150°C (302°F)**
Operating Range	-40°C to +75°C	-40°C to +100°C	-40°C to +150°C
Available Wattages	75, 100, 150, 200, 300, 400, 500W	50, 100, 150, 200, 300, 400, 500W	50, 100, 150, 200, 300, 400, 500W
Beam Angle Options	11°, 24°, 36°, 60°, 90°	24°, 36°, 60°, 90°	120°
Driver	Customized Mean Well	Customized Inventronics	Customized Inventronics
Typical Environments	Warehouses, workshops, factories, high bays near process heat	Boiler rooms, paper mills, chemical processing, foundry support areas	Steel plants, smelting and refining, furnace areas, power generation

HOW TO READ A PART NUMBER

VULCAN — Product Line

HT — Temperature Class

300 — Wattage

LT = rated to 75°C | **MT** = rated to 100°C | **HT** = rated to 150°C. Example: **Vulcan HT 300** is a 300W fixture rated for 150°C ambient.

WHEN ORDERING, PLEASE SPECIFY

- **Part number**: series and wattage (e.g., Vulcan MT 200)
- **Quantity**
- **Color temperature**: 3000K, 4000K, 5000K, or 6500K
- **Beam angle**: from the options available for the selected series
- **Mounting**: 5mm S/S trunnion (standard), hook, or pendant*
- **Driver cable length**: 5 meters standard; custom lengths available*

** Optional upcharge applies. Contact PTLX Global for pricing.*

KEY FEATURES & PERFORMANCE CHARACTERISTICS

Advanced Thermal Management

Utilizes proprietary gold wire-free LED packaging technology that eliminates traditional wire bonding vulnerabilities. This advanced approach prevents the efficiency degradation and heat buildup associated with conventional gold wire connections, significantly reducing thermal stress and extending operational lifespan. By eliminating potential wire breakage points, the system maintains optimal performance even under sustained high-temperature conditions.

Customized Solid-State Power Management

Features custom-engineered drivers (Inventronics on Vulcan MT and HT, Mean Well on Vulcan LT) incorporating ceramic capacitors specifically designed for high-temperature stability. The integration of Ultra-Dimming Technology (UDT) optimizes thermal performance by minimizing heat generation during operation, thereby extending component lifespan and ensuring reliable long-term performance in extreme environments.

Superior Optical Performance

Equipped with tempered glass lenses rated for temperatures up to 250°C (482°F), ensuring optical integrity and light transmission quality even in the most demanding thermal conditions. Multiple beam angle options across the series, from a tight 11° spot to a broad 120° flood, allow precise light placement for high bays, process areas, and open floors.

Heavy-Duty Cabling System

High-quality silicone rubber power cables rated for continuous operation from -60°C to +200°C (-76°F to 392°F), providing exceptional flexibility and durability across extreme temperature ranges. The 5-meter remote driver cable configuration keeps heat-sensitive power electronics away from high-temperature zones; custom cable lengths are available.*

Modular, Serviceable Construction

Aluminum housing with integrated heat sink and IP67 ingress protection (dust-tight, protected against hot steam). The modular design simplifies installation and allows individual LED modules to be serviced without replacing the entire fixture.

** Optional upcharge applies. Contact PTLX Global for pricing.*

TARGET APPLICATIONS

The VULCAN™ Series is designed for industrial environments where conventional lighting fails due to heat. Select the class that matches the sustained ambient temperature at the fixture location:

VULCAN LT Up to 75°C (167°F)	VULCAN MT Up to 100°C (212°F)	VULCAN HT Up to 150°C (302°F)
• Warehouses and distribution	• Boiler and mechanical rooms	• Steel plants and foundries
• Workshops and factories	• Paper mills and pulp processing	• Smelting and metal refining
• Process line high bays	• Chemical processing facilities	• Power generation plants
• Enclosed roof spaces	• Foundry and forge support areas	• Oil and gas refining facilities

AVAILABLE POWER CONFIGURATIONS

Power	Lumens	LT	MT	HT	Dimensions (mm)	Weight
50W	7,500 lm	–	●	●	304 × 270 × 53	5 kg (11.0 lbs)
75W	11,250 lm	●	–	–	Consult factory	Consult factory
100W	15,000 lm	●	●	●	304 × 430 × 53	7 kg (15.4 lbs)
150W	22,500 lm	●	●	●	606 × 409 × 56	12 kg (26.5 lbs)
200W	30,000 lm	●	●	●	606 × 499 × 56	15 kg (33.1 lbs)
300W	45,000 lm	●	●	●	769 × 606 × 56	24 kg (52.9 lbs)
400W	60,000 lm	●	●	●	949 × 606 × 56	30 kg (66.1 lbs)
500W	75,000 lm	●	●	●	1129 × 606 × 56	38 kg (83.8 lbs)

● *= available in that temperature class. Dimensions and weights are common to all three classes. All configurations within a class share identical operating specifications, differing only in physical size, power consumption, and light output.*

TECHNICAL SPECIFICATIONS

Specification	VULCAN LT	VULCAN MT	VULCAN HT
Operating Temperature Range	-40°C to +75°C (-40°F to +167°F)	-40°C to +100°C (-40°F to +212°F)	-40°C to +150°C (-40°F to +302°F)
Power Consumption	75W – 500W	50W – 500W	50W – 500W
Beam Angle	11° / 24° / 36° / 60° / 90°	24° / 36° / 60° / 90°	120°
Driver	Customized Mean Well	Customized Inventronics (Solid-State Design)	
Luminous Efficacy	150 lm/W		
Total Lumen Output	7,500 – 75,000 lm depending on wattage (see Available Power Configurations)		
LED Chip Technology	Customized Bridgelux SMD LED, gold wire-free packaging		
Power Supply Configuration	Remote driver with 5-meter cable; custom cable lengths* available. Mount driver where ambient stays below 100°C (212°F).		
Input Voltage	90–295V AC, 50–60Hz		
Color Temperature Options	3000K / 4000K / 5000K / 6500K		
Lens	Tempered glass, rated to 250°C (482°F)		
Power Cable	Silicone rubber, rated -60°C to +200°C (-76°F to +392°F)		
Ingress Protection	IP67 (dust-tight, protected against hot steam)		
Housing	Aluminum with integrated heat sink; modular, individually serviceable LED modules		
Mounting Options	5mm S/S Trunnion / Hook / Pendant* (optional)		
Rated Lifespan	~100,000 hours		

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