

#### Industrial LED Solutions For Extreme Temperature Environments



# THE GOLIATH

# 60,000 105°C -80°C Lumens Max Amb Temp Min Amb Temp

#### PRIMARY METAL FABRICATION

STEEL MILLS SMELTING OPERATIONS CASTING FOUNDRIES METAL POLISHING BOILER ROOMS BLAST FURNACES PAINT CURING OVENS/KILNS PULP/PAPER PRODUCTION GLASS MANUFACTURING POWER GENERATION POWER PLANTS CHEMICAL PLANTS REFINERIES AIRCRAFT HANGARS CONTRACTOR OF LAND SHIP YARDS RAIL YARDS AEROSPACE FACILITIES INDUSTRIAL FREEZERS ICE MANUFACTURING CRYOGENIC INDUSTRIES WASTE INCINERATION PLANTS

COKING PLANTS



**500W** 60,000 Lumens

350W 39,250 Lumens

#### 225W

25,000 Lumens also available



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# THE GOLIATH

## **Temperature Hardened** Ultra Bright Industrial LED High Bay







# Solas Ray<sup>™</sup> Lighting



#### EVERY COMPONENT OF THE GOLIATH IS ENGINEERED FOR PERFORMANCE AND RELIABILITY IN EXTREME TEMPERATURE ENVIRONMENTS

#### **Mounting Bracket**

adjusts up to +/- 90°



**Integrated Dust Cover** protects the heat sink from build up prolonging LED life. (2mm stainless steel)

#### Large Heat Sink

keeps the LED modules cool for longer life even in ambient temperatures up to 105°C.



#### **Thermostat Labels**

verify both the internal and external maximum temperature reached.

**Stainless Steel Safety Cable** kit included standard.

**Up To 5 Year Warranty** See technical info for warranty details.

#### **C5-M Epoxy Marine Rated**

finish is included standard for exceptional durability and is available in black or white. A **PVDF** coating is available for applications where strong chemical resistance is required.

304 Stainless Steel locking "J" hook for extra strength and corrosion resistance when hanging fixture.

#### **NORD-LOCK®** Anti-Vibration

washers are used to keep the mounting hook and bracket secure in high vibration applications. Low load fasteners are secured with thread-locking compound. (NEMA ANSI C136.32 compliant)

#### **Advanced LED Modules**

feature driver-on-board technology eliminating the need for an external driver. The Goliath modules are over-engineered for extended life and tested to 200°C without failure. See the next page for the full story on these game changing modules.

#### **Electroplated Aluminum Reflectors**

reduce glare and control beam spread. They achieve a minimum 93% reflectivity after 10 years in harsh industrial environments.

#### **Durable Tempered Glass Lens**

protects components **IK07** and achieves impact ATING protection ratings of : IK08 · **IK07** (500W) • **IK08** (350W / 225W) RATINO

> **IP66 Rated** for high resistance to water or dust ingress.

Trade Agreement Act meets requirements of TAA TAA for government contracts.

# TORTURE TESTED TO 200°C

The Goliath's proprietary state-of-the-art LED modules excel in extremely high/low temperature environments.

They feature driver-on-board technology and do not require an external driver. These amazing modules are why the Goliath is so reliable and resistant to surges.

Even when torture tested to 200°C, these modules kept performing.

# GOLIATH

# **ADVANCED LED MODULES**



#### **Over-Engineered**

We use 12 IC current control chips to distribute load when 4 would be enough for extra durability. Tested to 200° C without failure.

#### No Load Shedding

As modules approach their max. rated temperature, lumen compensation technology (LCT) ensures light output stays constant. Reducing output at high temp. is a common occurrence with other high temp. lights.

#### No Harmonic Distortion

Quality components and advanced circuit design results in longer fixture life and no line noise generated by the Goliath™.

#### No Inrush Current

Inrush current has been engineered out of the module preventing large line voltage drops at start-up protecting the fixture and other equipment.

#### Metal Oxide Varistors

High quality MOVs are used to suppress surges and protect the LED module from "dirty power" common in industrial facilities with large electrical equipment. The result is over 10kV protection even at 100°C

#### 1.2 mil Gold Wire

Goliath LEDs are connected with gold wire for enhanced durability under heavy thermal cycle stress.



#### **Conformal Coating**

Special silicone based coating creates

a waterproof seal around the module and dissipates heat for increased durability.





## **OPTIONS**

#### Wire Guard

Protect your lighting investment from impacts with an optional wire guard. Available for all configurations.



#### Visor

Equip your Goliath with a visor to block light in one direction. Available for all configurations.



#### **PVDF Coating - Harsh Chemicals**



For harsh chemical environments, the Goliath is available with an optional PVDF coating. PVDF is a type of thermoplastic fluoropolymer derived from vinylidene fluoride. It is known for its high chemical resistance, UV resistance, and excellent weatherability.

#### Chemical Agent Resistance List -

Acetamide 50% Acetic acid, aqueous solution 5% Acetic acid, aqueous solution 10% Ammonia solution 10% Benzene Benzine Boric acid, aqueous solution 10% Butyl acetate Calcium chloride solution 10% Carbon trachloride Chloroform Citric acid, aqueous solution 10% Cupric sulphate 10% Cyclohexane Diesel Oil Dioxane Edible fats and oils Ethanol 96% Ethyl acetate Ethyl ether Formaldehyde, aqueous solution 30% Formic acid, aqueous solution 10% Glycerine

Glykol Glysantin, aqueous solution 40% Heating Oil Hydrachloric acid, aqueous solution 36% Hydrogen peroxide, aqueous solution 30% Ink Isopropanol Lactic acid, aqueous solution 90% Linseed oil Methanol Mythylene chloride Milk Nitric acid, aqueous solution 2% Oxalic acid, aqueous solution 10% Ozone Parafin oil Perchlorethylene Petroleum Phenol. aqueous solution Phosphoric acid concentrate Potassium dichromate, aqueous solution 10% Propanol Pyridine

Salicylc acid Silicone oils Soda lye, aqueous solution 50% Soda solution, aqueous solution 10% Sodium bisulphate, aqueous solution 10% Sodium chloride, aqueous solution 10% Sodium nitrate, aqueous solution 10% Sodium thiosulphate 10% Sulphur dioxide Sulphuric acid, aqueous solution 2% Tertaric acid Tetrahydrofurane Toluene Transformer oil Trichlorethylene Vaseline Wax, molten Winer. Brandv Xylene Zinc chloride, aqueous solution 10%

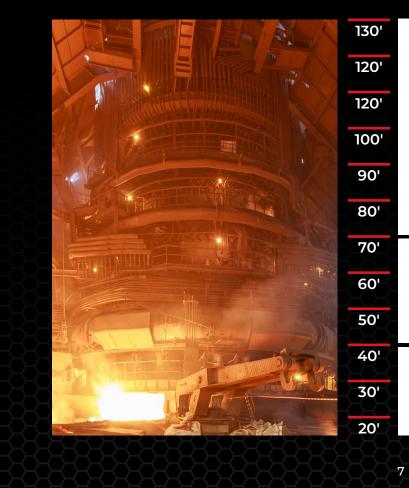
... And more, consult factory.

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# **COLIATH**

Ambient Temp:	-112°F (-80°C) to 221°F (105°C)
Wattage:	500W / 350W / 225W
Beam Angle:	70° / 110°
Max Lumens:	60,000



# GOLIATH + BEAST E2



### A PERFECT INDUSTRIAL PAIR THE COMPLETE EXTREME TEMPERATURE SOLUTION





Ambient Temp: -94°F (-70°C) to 212°F (100°C) Wattage: 350W / 210W Beam Angle: 150° Max Lumens: 35,000





350W Goliath - 70° 225W Goliath - 70° 350W Goliath - 110° 225W Goliath - 110° 350W Beast E2 - 150°

210W Beast E2 - 150°

# TECHNICAL INFO

#### SPECIFICATIONS

Voltage	120VAC / 208VAC / 277VAC / 480VAC		
Wattage	225W / 350W / 500W		
Color Temp	5000 Kelvin		
Ambient Temperature	-80°C (-112°F) to 105°C (221°F)		
Color	Black (standard) / white		
Housing	Copper free aluminum alloy		
Lens	Tempered glass		
Lifetime	>53,000 at L <sub>70</sub>		
CRI	>70		
Beam Angles	70° (standard) / 110°		
Power Factor	>0.88		
Protection	IP66		

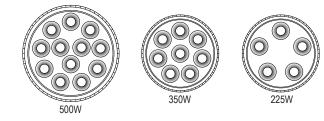
#### LUMENS

225W	350W	500W
25,000 lm	39,250 lm	60,000 lm

#### WARRANTY

Ambient Temperature	Warranty Length
65° (149°F) Max Ambient Temp.	5 Year Limited Warranty
85° (185°F) Max Ambient Temp.	2 Year Limited Warranty
105°C (221°F) Max Ambient Temp.	1 Year Limited Warranty

#### CONFIGURATIONS



#### **CERTIFICATIONS / RATINGS**



\*IK07 impact rating on 500W model, IK08 impact rating on 350W/225W models

#### WEIGHTS / DIMENSIONS

Model	Weight		225W / 350W	500W	
HBGO-225	33.7 lb	A	17 ¾"	22 ¼ <sub>16</sub> "	
HBGO-350	33.7 lb	В	20 1⁄2"	24 <sup>7</sup> ⁄ <sub>16</sub> "	
HBGO-500	53.4 lb	С	8 <sup>1</sup> /4"	8 <sup>11</sup> / <sub>16</sub> "	
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#### CONFIGURATIONS / ORDER CODES

HBGO		- 50	-6-6-6-	-0-0-		- UB	
Series	Watts	Kelvin	Voltage	Beam Angle	Color	Mounting Options	Other Options
I HBGO	🗆 225 - 225W	🗹 50 - 5000K	120V - 120VAC	□ 70 - 70° (std)	BK - Black (std)	🗹 UB - Universal Bracket	PVDF - PVDF Chemical Resistant
	🗆 350 - 350W		208V - 208VAC	□ 110 - 110°*	UWH - White	with Latching J-Hook	Finish (Black Only)
	🗆 500 - 500W		277V - 277VAC	* 110° hoom angle not available for E00W models			WG - Protective Wire Guard
			T 480V - 480V/AC				🗆 VR - Visor



Hazardous Location Lighting • Industrial Lighting • Commercial Lighting • High / Low Temp Lighting NSF / Food Service Lighting • Emergency Lighting • Harsh Environment Lighting • Outdoor Lighting

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