

# SolaFrame 1000 Technical Datasheet

Information subject to change without notice

100 - 240V



## **OVERVIEW**

# **ORDERING INFORMATION**

#### **FIXTURE OVERVIEW**

SolaFrame 1000 fixture is the go-to workhorse automated framing fixture for lighting designers. With 20,000 lumen output, full framing shutters, rotating and fixed gobo wheels, a redesigned CMY and CTO color mixing system, replaceable color wheels, and animation effects. It has a feature set as varied as your lighting designs. The SolaFrame 1000 is a star performer in all professional production environments.

#### **APPLICATIONS**

- Arenas and stadiums
- Concert halls and performing arts centers
- Film and television broadcast studios
- Megachurches and houses of worship
- Nightclubs and special events

#### **PRODUCT FEATURES**

- White LED Engine
- 480 W Ultra-Bright engine producing 20,000 field lumens or a High CRI Engine featuring incredibly accurate color rendering
- Full framing shutter system
- CMY / CTO Linear color mixing system
- Six plus open position replaceable color wheel
- Iris and Light Frost
- Rotating Prism
- Sharp edge focus throughout 12°–40° zoom range
- Eight position plus open interchangeable Gobo Wheel
- Seven position plus open Rotating Gobo Wheel
- Continuously rotating variable Animation Wheel
- TM-30 Filter boosts Ultra-Bright engine to 85+ CRI
- Patented Lens Defogger

#### SolaFrame 1000

Model	Description
2570A1200	SolaFrame 1000 fixture, Ultra-Bright, black, with Road Case
2570A1200-B	SolaFrame 1000 fixture, Ultra-Bright, black, with Molded Rubber Insert
2570A1200-F	SolaFrame 1000 fixture, Ultra-Bright, black, with Styrofoam Packaging
2570A1201	SolaFrame 1000 fixture, High CRI, black, with Road Case
2570A1201-B	SolaFrame 1000 fixture, High CRI, black, with Molded Rubber Insert
2570A1201-F	SolaFrame 1000 fixture, High CRI, black, with Styrofoam Packaging

Color Options: Fixtures ship standard in black. White available by request.

Notes: Fixture includes two (2) Omega Brackets, one (1) fixture power cord, Bare Ends to powerCON TRUE1™ Input, Safety cable

#### Accessories

Model #	Description
2560B7009	Fixture Power Cord upgrade, 5-15 Edison to powerCON TRUE1, 15 A
2560B7005	Fixture Power Cord upgrade, Stage Pin to powerCON TRUE1, 20 A
2560B7006	Fixture Power Cord upgrade, L6-20 to powerCON TRUE1, 20 A
2560B7007	Fixture Power Cord upgrade, L5-20 to powerCON TRUE1, 20 A
67040007	MegaClaw™
55040014	Cheeseborough 2" Alloy 1/2 Coupler Truss Clamp
67040010	Mini-Claw <sup>™</sup>



# **PRODUCT SPECIFICATIONS**

#### Source

Engine Options	Ultra-Bright white engine	High CRI white engine
LED Details	480 W	480 W
Max Lumens on the Wall	20,000 Lumens	16,000 Lumens
LPW	42 Lumens per Watt	34 Lumens per Watt
LED Life	50,000 hours	50,000 hours
Native CCT	7000 K	6000 K

#### Color

Color Mixing	Cyan, Magenta, Yellow, CTO-Linear
Color Temperature	Variable down to 2800 K
Color Wheel	Six (6) interchangeable dichroic chips plus open includes TM-30 Filter standard
Notes	See Page 5 for color rendering information

#### Optical

Flicker control/Hz range	Additional accessories available  2.4 kHz or 16 kHz
Frost	Additional accessories available  Light frost  Additional accessories available
Prism	Three-facet rotating and indexable prism
Pattern Projection	Rotating and indexable wheel with seven (7) patterns plus open Fixed wheel with eight (8) patterns plus open
Aperture size	108 mm
Gate size	25 mm
Beam angle range	12°–40°

#### Control

Input method	DMX (5-pin) or Ethernet
Protocols	DMX via RS-485 Art-Net or sACN via Ethernet
Modes (Footprint)	One (49)
RDM functions	Yes
UI type	Full color graphical UI with 6 button navigational control
Local control	Yes
Dimming performance	16-Bit, DMX Controlled

#### **Electrical**

Voltage range	100–240 V 50–60 Hz
Input method	powerCON TRUE1
Max Wattage	900 W
Max Current	9.1 A
Notes	See Page 6 for power factor information

#### **Thermal**

Ambient operating temp	-10°–45° C (14°–113° F)
Fan	Three Modes: Standard, Studio, and Continuous
Stationary dBA/Full intensity	Standard - 42.8 dBA Background noise measured at 39.5 dBA

## **Physical**

Pan and Tilt Range	540° Pan, 265° Tilt
Max Pan/Tilt Speed	2.64 sec for 540°, 1.5 sec for 265°
Materials	Steel and aluminum frame with molded plastic covers
Color options	Black, White by request
Mounting options	Any orientation
IP rating	IP20
Weight	69.9 lb / 31.3 kg
Included accessories	powerCON TRUE1 to bare end fixture tail Two (2) clamp brackets Safety cable
Notes	See page 6 for dimensions

#### Warranty

Fixture Warranty	Five (5) years for light engine Two (2) years for complete fixture
Warranty Details	https://www.highend.com/warranty/

## Regulatory & Compliance

Approved Regulatory Standards	Listed to UL 1573 Certified to CSA STD. C22.2 No: 166 CE EAC
CE Compliance declared to the following standards	Safety: EN 60598-1, EN 60598-2-17 EMC: EN 55015, EN 61547, EN 61000-3-2, EN 6100-3-3
Complies to the ROHS Directive	Yes

## Safety

Safety	Minimum distance to illuminated surface = 2.0 m
	Minimum distance from fixture head to
	combustible materials = 0.1 m

#### Notes about LED luminaires

All LED sources experience some lessening of light output and some color shift over time. LED output will vary with thermal conditions. Thermal conditions can be affected by ambient temperatures and orientation.



# **OPTICAL INFORMATION**

#### **Fixed Gobo Dimensions**

Outside Diameter	30 mm (1.18 in)
Image Diameter	24 mm (0.95 in)
Materials	0.5 mm Aluminum

## **Rotating Gobo Dimensions**

Outside Diameter	30 mm (1.18 in)
Image Diameter	24 mm (0.95 in)
Materials	0.5 mm Aluminum or 1.1 mm Glass Borofloat

### Interchangeable Color Wheel



1 - Red



2 - Blue



3 - Green



4 - TM-30



5 - Orange



6 - Dark Blue

## Fixed Gobo Wheel



1 - Tunnel



2 - Triangles



3 - Organic



4 - Shatter



5 - Abstract



6 - Cobble



7 - Endgrain



8 - Warped

#### Rotating Gobo Wheel



1 - Bar



2 - Stripe Strips



3 - Fracked



4 - Starvolver



5 -Pinwheel Dots (Magnetically indexed adaptor)



6 - Ice



7 - Shower

#### **Animation Wheel**



Continuously rotating animation wheel



# PHOTOMETRIC INFORMATION

#### SolaFrame 1000 - Ultra-Bright

Mode	Degree	Candela	Field	Power	Lumens	
			Lumens	Consumption	Per Watt	
Narrow	12	607,900	18,000	480 W	37	
Medium	30	113,400	20,000	480 W	41	
Wide	40	78,600	20,000	480 W	41	
Wide w/ Frost	42	62,880	16,000	480 W	33	

### SolaFrame 1000 - High CRI

Mode	Degree	Candela	Field Power		Lumens
			Lumens	Consumption	Per Watt
Narrow	12	405,300	14,500	480 W	25
Medium	30	75,606	16,000	480 W	31
Wide	40	52,100	16,000	480 W	31
Wide w/ Frost	42	41,680	13,000	480 W	25

#### Narrow Zoom - 12 Degrees

Throw Distance (d)	10 ft	15 ft	20 ft	25 ft	188.7 ft
	3.0 m	4.6 m	6.1 m	7.6 m	57.5 m
Field Diameter	2.1 ft	3.1 ft	4.2 ft	5.3 ft	39.6 ft
	0.65 m	0.97 m	1.29 m	1.61 m	12.1 m
Illuminance (fc)	6,079	2,733	1,537	984	18
Illuminance (lux)	65,400	29,400	16,538	10,584	186

#### Medium Zoom - 30 Degrees

Throw Distance (d)	10 ft	15 ft	20 ft	25 ft	188.7 ft
	3.0 m	4.6 m	6.1 m	7.6 m	57.5 m
Field Diameter	5.3 ft	8.0 ft	10.7 ft	13.4 ft	101.1 ft
	1.64 m	2.46 m	3.27 m	4.09 m	30.83 m
Illuminance (fc)	1,023	455	256	164	3
Illuminance (lux)	12,198	5,421	3,050	1,952	34

#### Wide Zoom - 40 Degrees

	_				
Throw Distance (d)	10 ft	15 ft	20 ft	25 ft	188.7 ft
	3.0 m	4.6 m	6.1 m	7.6 m	57.5 m
Field Diameter	7.3 ft	11.0 ft	14.6 ft	18.2 ft	137.3 ft
	2.22 m	3.33 m	4.44 m	5.55 m	41.87 m
Illuminance (fc)	786	350	197	126	3
Illuminance (lux)	8,450	3,756	2,112	1,352	24

To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

#### Narrow Zoom - 12 Degrees

Throw Distance (d)	10 ft	15 ft	20 ft	25 ft	188.7 ft
	3.0 m	4.6 m	6.1 m	7.6 m	57.5 m
Field Diameter	2.1 ft	3.1 ft	4.2 ft	5.3 ft	39.6 ft
	0.65 m	0.97 m	1.29 m	1.61 m	12.1 m
Illuminance (fc)	4,053	1,801	1,014	649	12
Illuminance (lux)	43,600	19,378	10,900	6,976	123

#### Medium Zoom - 30 Degrees

Mediam 200m 30 Degrees					
Throw Distance (d)	10 ft	15 ft	20 ft	25 ft	188.7 ft
	3.0 m	4.6 m	6.1 m	7.6 m	57.5 m
Field Diameter	5.3 ft	8.0 ft	10.7 ft	13.4 ft	101.1 ft
	1.64 m	2.46 m	3.27 m	4.09 m	30.83 m
Illuminance (fc)	682	303	171	110	2
Illuminance (lux)	8,132	3,614	2,033	1,301	22

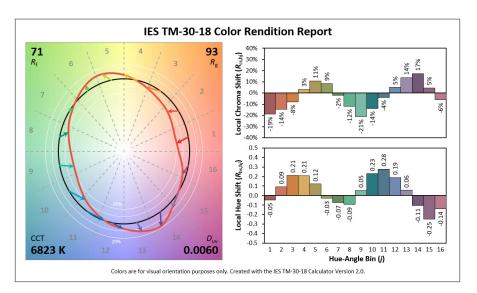
#### Wide Zoom - 40 Degrees

Throw Distance (d)	10 ft	15 ft	20 ft	25 ft	188.7 ft
	3.0 m	4.6 m	6.1 m	7.6 m	57.5 m
Field Diameter	7.3 ft	11.0 ft	14.6 ft	18.2 ft	137.3 ft
	2.22 m	3.33 m	4.44 m	5.55 m	41.87 m
Illuminance (fc)	521	232	131	84	2
Illuminance (lux)	5,600	2,489	1,400	896	16

To determine center beam illumination in footcandles at any throw distance, divide candela by the throw distance squared.

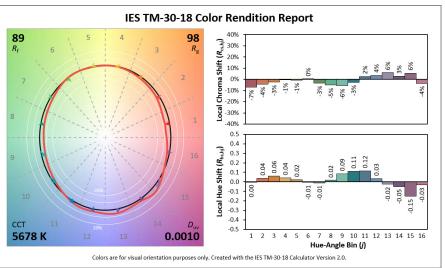


# **COLOR METRIC INFORMATION**



#### **Additional Color Metrics**

SolaFrame 1000 Ultra-Bright Engine				
CRI R <sub>a</sub> (R <sub>9</sub> )	<sub>a</sub> (R <sub>9</sub> ) 70 (-39.5)			
TLCI	47			



#### **Additional Color Metrics**

SolaFrame 1000 High CRI Engine				
$CRIR_a(R_9)$	90 (52.6)			
TLCI	89			

Ultra-Bright Engine

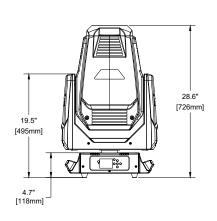


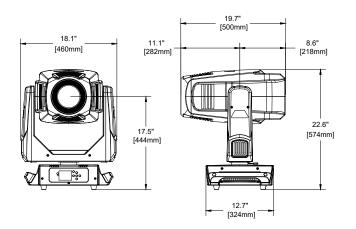
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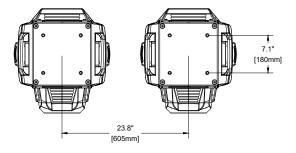
#### SolaFrame 1000 Dimensions

MODEL	HEIGHT		WIDTH		DEPTH		WEIGHT	
	in	mm	in	mm	in	mm	lb	kg
SolaFrame 1000*	28.6	726	18.1	460	12.7	324	69.9	31.3
SolaFrame 1000 in Box	31.3	795	25.2	640	23.6	600	84.2	38.2
SolaFrame 1000 in Molded Case Insert	28.1	715	23.6	600	22	560	105.2	47.7
SolaFrame 1000 in Roadcase	36.6	929	22.3	565	23.6	600	185.9	84.3

<sup>\*</sup>Does not include mounting hardware







#### SolaFrame 1000 Power Table

VAC	Amps	Hz	Watts	VA	PF	
100	9.0	50	900	925	0.99	
120	7.5	60	900	907	0.99	
200	4.6	50	896	926	0.96	
208	4.3	60	869	896	0.97	
220	4.0	50	834	869	0.95	
240	3.7	60	837	875	0.95	

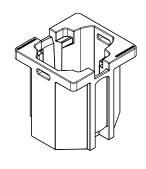


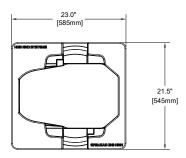
## **ADDITIONAL ORDERING INFORMATION**

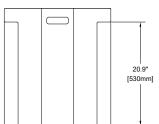
#### **Additional Accessories**

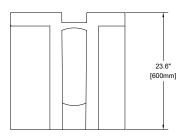
MODEL	DESCRIPTION	
H7500001	Extra Omega Brackets	
H7300105	Galvanized Safety Cable w/Spring Snap	

#### **Molded Case Insert Dimensions**









Roadcase Dimensions (Single Mode)

