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# Introduction

This time-tested legacy module series has been proven to be one of the powerful and most reliable products offered by LS Solar and the most popular choice by PV system installers and customers around world.



PID

M busbar solar cell design



E

Low cost

Highly reliable due to strict quality control

### **Superior Warranty**

• 12-year product warranty

Anti-PID

• 25-year linear power output warranty



# **Comprehensive Certificates**

- IEC 61215, IEC 61730, IEC TS 62804, IEC 61701, IEC 62716, IEC 60068-2-68
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules Guidelines for increased confidence in PV module design qualification and type approval

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# LUSTER SOLAR

www.lustersolar.com Specificantions subject to technical changes and tests. Luster Solar reserves the right of final interpretation.



# LUSTER SOLAR

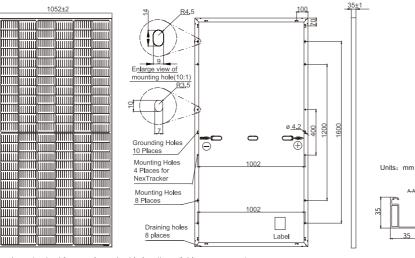
### **MECHANICAL DIAGRAMS**

IIIIII 

2112±2

UIIII

ÍIIIII



### **SPECIFICATIONS**

Cell	Mono
Weight	24.7kg±3%
Dimensions	2112±2mm×1052±2mm×35±1mm
Cable Cross Section Size	e 4mm <sup>2</sup> (IEC), 12 AWG(UL)
No. of cells	144 (6×24)
Junction Box	IP68, 3 diodes
Connector	MC4 Compatible
	Portrait: 300mm(+)/400mm(-); Landscape: 1200mm(+)/1200mm(-)
Packaging Configuration	31pcs/pallet 682pcs/40ft Container

Remark: customized frame color and cable length available upon request

ELECTRICAL PARAMETERS AT STC									
ТҮРЕ	LS-HM672 -445	LS-HM672 -450	LS-HM672 -455	LS-HM672 -460	LS-HM672 -465	LS-HM672 -470			
Rated Maximum Power(Pmax) [W]	445	450	455	460	465	470			
Open Circuit Voltage(Voc) [V]	49.56	49.70	49.85	50.01	50.15	50.31			
Maximum Power Voltage(Vmp) [V]	41.21	41.52	41.82	42.13	42.43	42.69			
Short Circuit Current(Isc) [A]	11.32	11.36	11.41	11.45	11.49	11.53			
Maximum Power Current(Imp) [A]	10.80	10.84	10.88	10.92	10.96	11.01			
Module Efficiency [%]	20.0	20.3	20.5	20.7	20.9	21.2			
Power Tolerance	0~+5W								
Temperature Coefficient of $Isc(\alpha\_Isc)$	+0.044%/°C								
Temperature Coefficient of $Voc(\beta_Voc)$	-0.272%/°C								
Temperature Coefficient of Pmax(y_Pm	mp) -0.350%/C								
STC	Irradiance 1000W/m², cell temperature 25°C, AM1.5G								

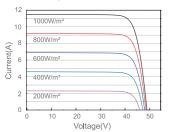
Remark: Electrical data in this catalog do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

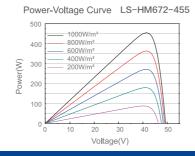
ELECTRICAL PARAMETERS AT NOCT						OPERATING CONDITIONS		
TYPE	LS-HM672 -445	LS-HM672 -450	LS-HM672 I -455	_S-HM672 _460	LS-HM672 -465	LS-HM672 -470	Maximum System Voltage	1000V/1500V DC
Rated Max Power(Pmax) [W]	336	340	344	348	352	355	Operating Temperature	<b>-40</b> °C <b>~+85</b> °C
Open Circuit Voltage(Voc) [V]	46.65	46.90	47.15	47.38	47.61	47.84	Maximum Series Fuse Rating	20A
Max Power Voltage(Vmp) [V]	38.95	39.19	39.44	39.68	39.90	40.10	Maximum Static Load,Front* Maximum Static Load,Back*	5400Pa(112 lb/ft²) 2400Pa(50 lb/ft²)
Short Circuit Current(Isc) [A]	9.20	9.25	9.29	9.33	9.38	9.42	NOCT	<b>45±2</b> °C
Max Power Current(Imp) [A]	8.64	8.68	8.72	8.76	8.81	8.86	Safety Class	Class II
NOCT			ambient temp			1m/s, AM1.5G	Fire Performance	UL Type 1

\*For NexTracker installations .Maximum Static Load, Front is 1800Pa while Maximum Static Load, Back is 1800Pa.

#### **CHARACTERISTICS**







Current-Voltage Curve LS-HM672-455

