LORENTZ GERMANY

High-efficiency PV Module
LA130-24S

Technology

The LORENTZ LA-Series of PV modules offer a conversion efficiency of 17-20% due to the unique back-contact technology.

Our monocrystalline silicon solar cells yield a higher voltage per cell. Therefore 66 cells are sufficient to provide the same voltage as traditional 72-cell modules. As a result, LORENTZ modules are lighter and smaller.

In combination with an extremely low voltage-temperature coefficient, this guarantees a superior battery charging performance, even at high operating temperatures.

Exceptional low-light performance and broad spectral response further enhance energy delivery in all weather conditions, year round.

Features

- aerospace style cell interconnects with in-plane strain relief
- advanced EVA encapsulation system with multi-layer backsheet for long-term package durability
- bypass diodes to minimize the power drop caused by shade
- high reliability

Warranty

- Warranty: 2 years
- Performance guarantee:
  10 years (90% power output)
  20 years (80% power output)

  Details according to warranty issued by LORENTZ

Standards

LA130-24S meets the requirements for IEC and CE.

CE IEC

Applications

- remote village lightning
- solar home systems
- street and camp lights
- traffic signals
- medical facilities in remote areas
- microwave/radio repeater stations
- battery charging
- water pumping
- water purification systems

Specifications

Electrical Data

Peak power	Pmax	[Wp]	132
Tolerance		[%]	+10 / -5
Max. power current	Imp	[A]	3.8
Max. power voltage	Vmp	[V]	34.7
Short circuit current	Isc	[A]	4.3
Open circuit voltage	Voc	[V]	43.6
Efficiency of cells		[%]	18.0
Temperature co-efficient for Pmax		[%/°C]	-0.38
Temperature co-efficient for Voc		[mV/°C]	-125.4
Temperature co-efficient for Isc		[mA/°C]	2.8
Max. system voltage		[V]	750

All technical data at standard test condition:
AM = 1.5, E = 1,000W/m², T_c = 25 °C

Cells

Number of cells per module	66*
Cell technology	monocrystalline
Cell shape	rectangular

* Due to the back-contact cell technology only 66 cells are required to yield the same Vmp voltage as traditional SI products with 72 cells.

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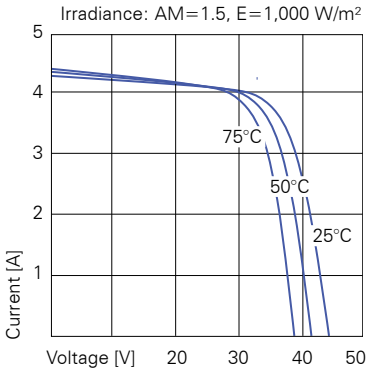
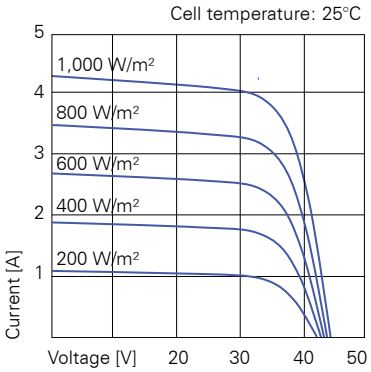
Electrical Performance

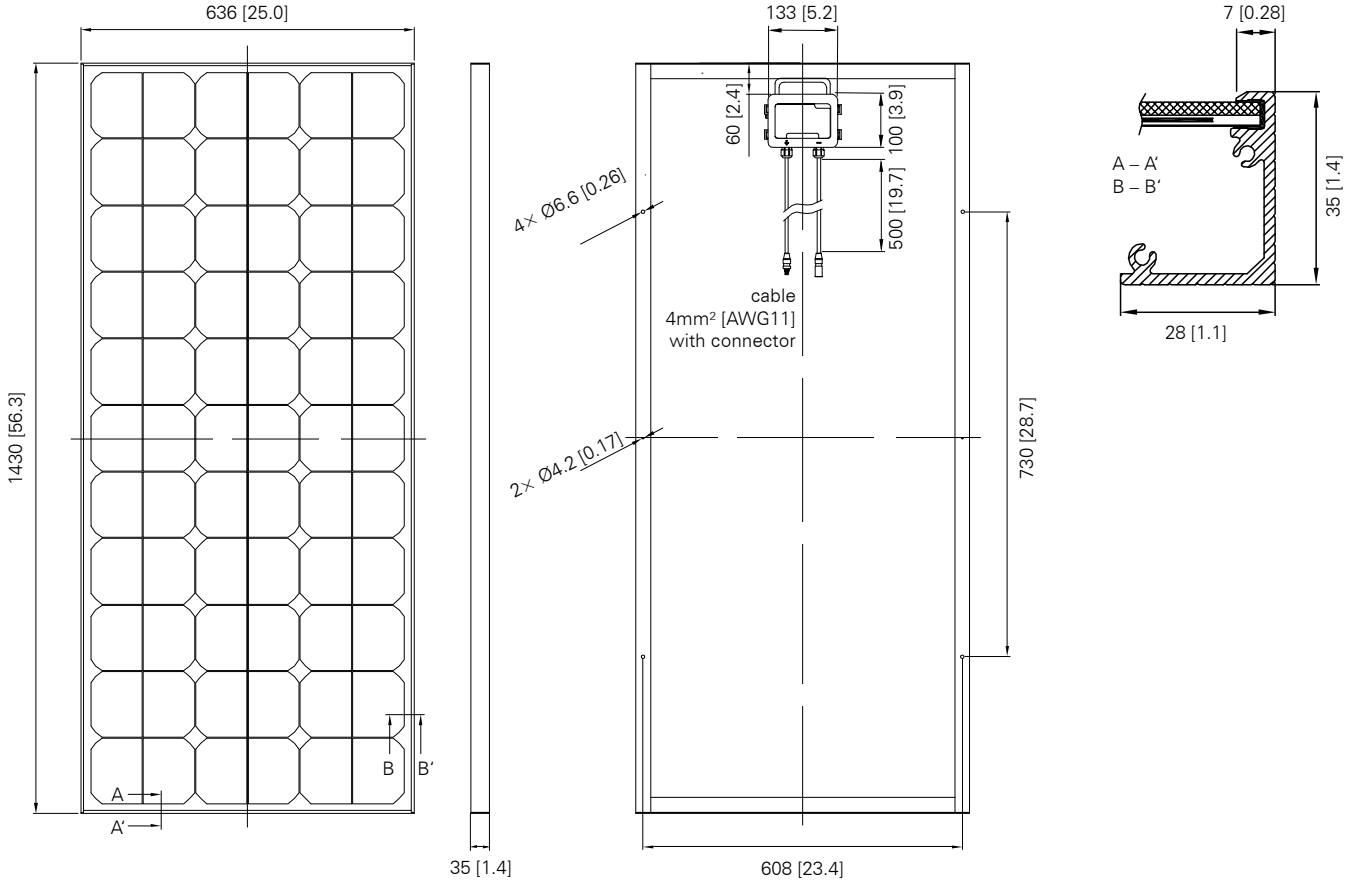


Current-voltage characteristics of PV module LORENTZ LA130-24S at various cell temperatures.



Current-voltage characteristics of PV module LORENTZ LA130-24S at various irradiation levels.

Physical Specifications mm [in]



Weight	[kg]	10.5
Dimension	[mm]	636 × 1430 × 35

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