

LC20-12M

High-efficiency PV Module

Features

- high energy yields ensured by high conversion efficiency
- sturdy, clear-anodized aluminum frame with pre-drilled holes for quick installation
- advanced EVA encapsulation with triple-layer backsheets, meets the most stringent safety requirements for high-voltage operation
- reliable bypass diodes to prevent overheating (hot spot effect) and to minimise power loss by shading
- manufactured in ISO 9001:2000-certified factory

Applications

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



photo may differ from actual product

Warranty

- Warranty: up to 2 years
- Performance guarantee: up to 5 years (90% power output)

Details according to warranty issued by LORENTZ

Standards

LC20-12M meets the requirements for IEC and CE.



Specifications

Electrical Data

Peak power	P _{max}	[Wp]	20
Tolerance		[%]	+ 15/- 5
Max. power current	I _{mp}	[A]	1.2
Max. power voltage	V _{mp}	[V]	17.2
Short circuit current	I _{sc}	[A]	1.3
Open circuit voltage	V _{oc}	[V]	21.6
Temperature co-efficient for P _{max}		[%/°C]	-0.50
Temperature co-efficient for V _{oc}		[%/°C]	-0.35
Temperature co-efficient for I _{sc}		[%/°C]	0.09
Max. system voltage		[V]	48

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

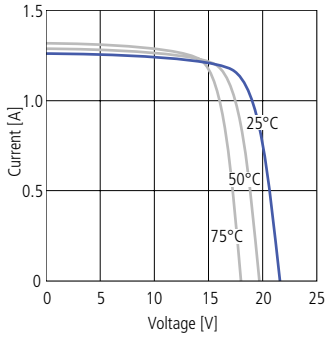
Cells

Number of cells in series	36
Cell technology	monocrystalline
Cell shape	rectangular

Electrical Performance

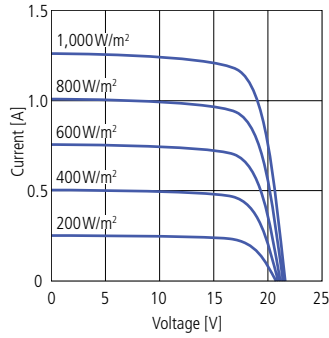
Electrical Performance

for different temperatures, at AM=1.5, E=1,000W/m²



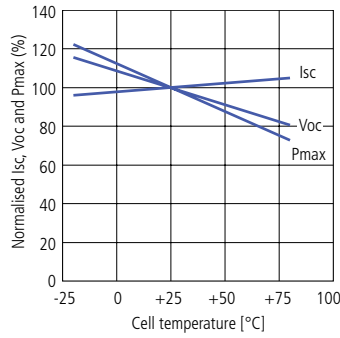
Electrical Performance

for different irradiation, at 25 °C



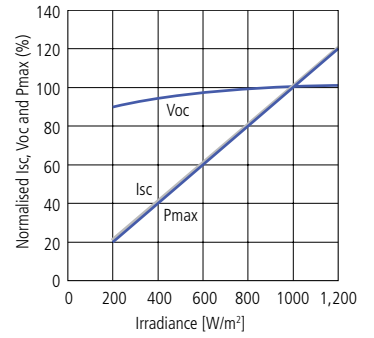
Temperature Dependence

of Isc, Voc and Pmax

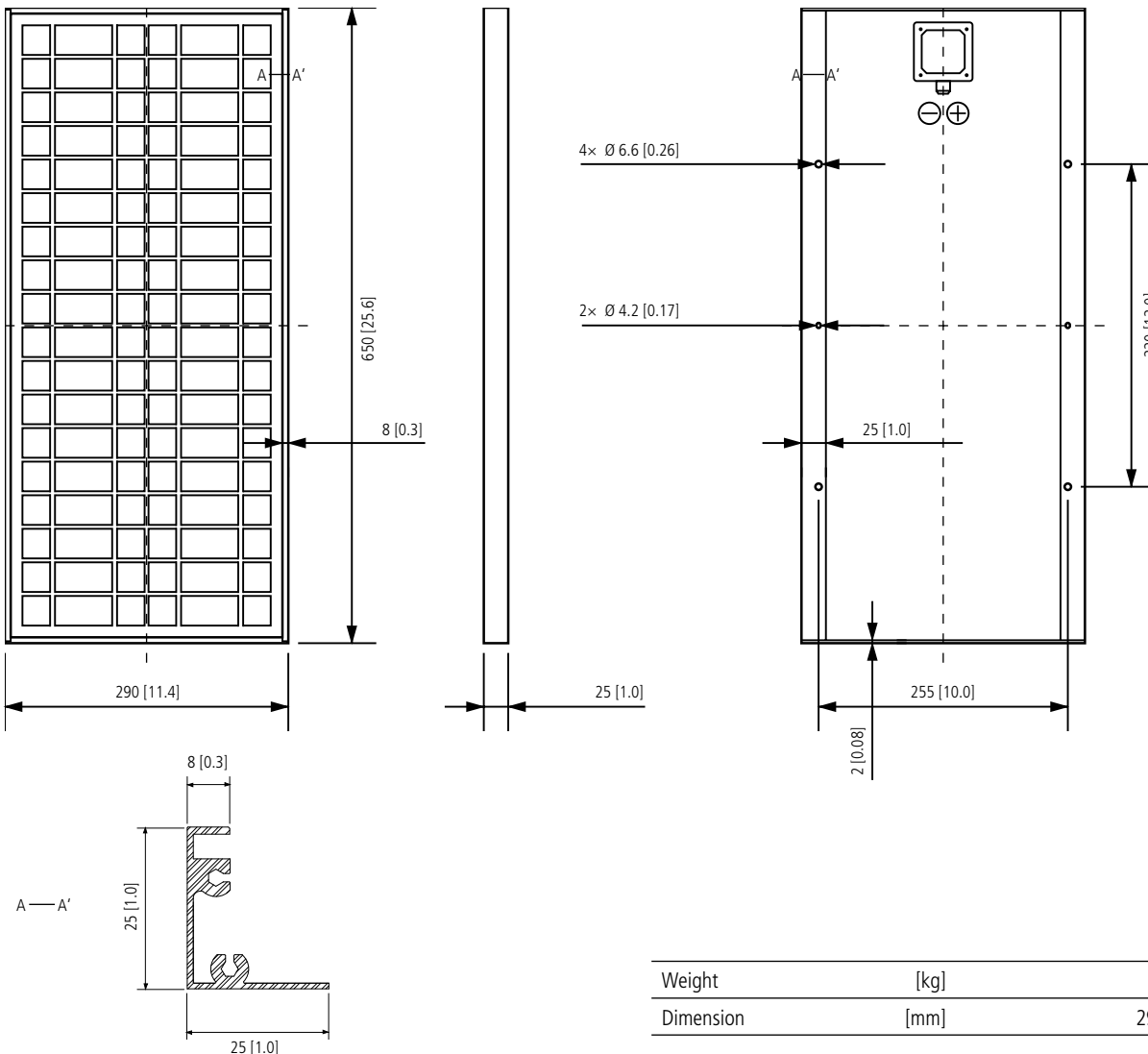


Irradiation Dependence

of Isc, Voc and Pmax at 25 °C



Physical Specifications mm [in]



Weight	[kg]	2.3
Dimension	[mm]	290 × 650 × 25