

GIN156M3

6" Multicrystalline Silicon Solar Cell

Features

Performance and Quality

- All products passed in-line optical inspection.
- 100% inspected for shunt resistance and reverse current.
- Standard cells calibrated by Fraunhofer ISE.
- Regularly monitor product performance and soldering properties.
- Lower series resistance in the individual cell, more power harvest in the PV module/system.
- More contact area for soldering, thinner ribbon can be used, less stress on the cell during lamination process.

Environment Friendly

- All products conform to the regulation of RoHS.
- Recyclable card board and sponge used for inner package and also cartons.

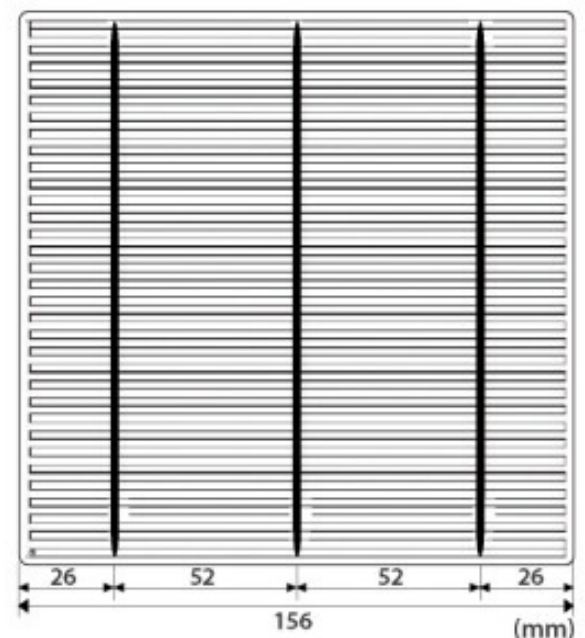
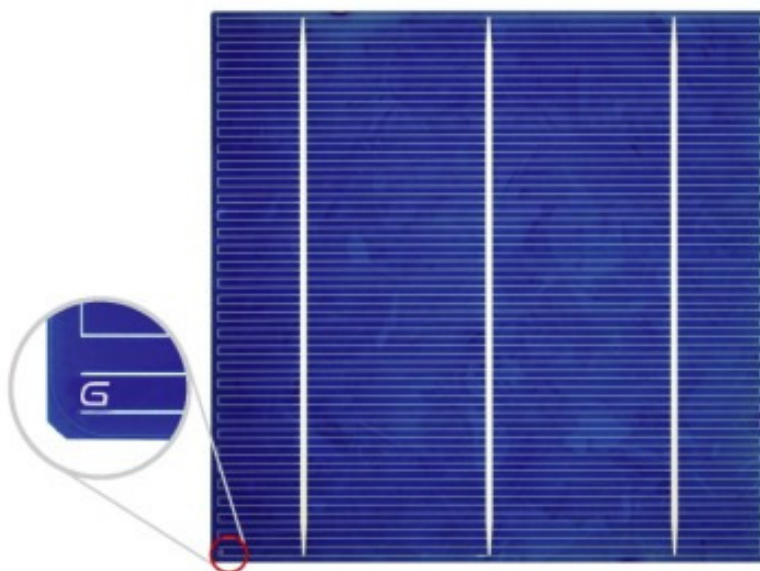
Highly Efficient Logistics

- 2D barcode on all package labels, ready for fast digital incoming control.

Physical Characteristics

Dimensions	156mm X 156mm \pm 0.5mm	Thickness(Si)	180 μ m \pm 20 μ m
Front	Acid textured surface with SiNx anti-reflecting coating Color : Blue & Light Blue 3 bus-bars in 1.5 mm \pm 0.1mm width Distance between bus-bars : 52 mm Negative pole (-)		200 ~ 220 μ m \pm 30 μ m
		Back	Aluminum back surface field 3 bus-bars in 3.0 mm \pm 0.1mm width Distance between bus-bars : 52 mm Positive pole (+)

Appearance and Drawing



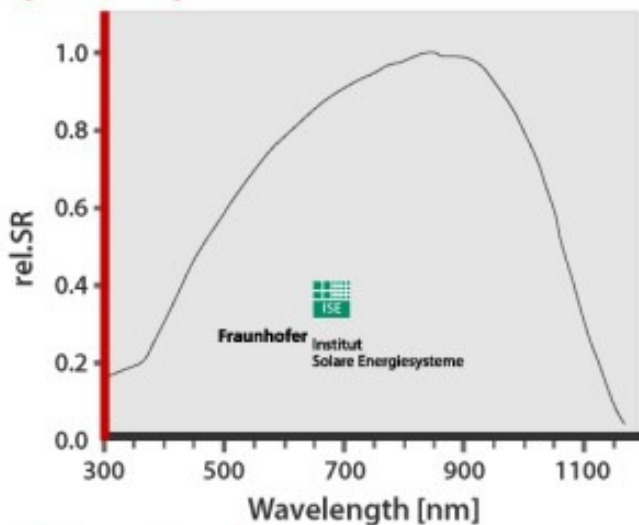
Electrical Characteristics under STC*

Code	16.40	16.20	16.00	15.80	15.60	15.40	15.20	15.00	14.80	14.60
Efficiency Range [%]	16.5-16.3	16.3-16.1	16.1-15.9	15.9-15.7	15.7-15.5	15.5-15.3	15.3-15.1	15.1-14.9	14.9-14.7	14.7-14.5
Average Power [W]	3.99	3.94	3.89	3.85	3.80	3.75	3.70	3.65	3.60	3.55
Power Range [W]	4.02-3.97	3.97-3.92	3.92-3.87	3.87-3.82	3.82-3.77	3.77-3.72	3.72-3.67	3.67-3.63	3.63-3.58	3.58-3.53
Short Circuit Current I_{sc} [A]	7.92	7.90	7.88	7.86	7.83	7.80	7.75	7.70	7.66	7.61
Open Circuit Voltage V_{oc} [mV]	625	623	621	619	617	614	612	610	609	607
Current at 0.5V [A]	7.69	7.65	7.60	7.56	7.51	7.46	7.38	7.31	7.24	7.17
Maximum Power Current I_{MPP} [A]	7.51	7.47	7.43	7.39	7.35	7.31	7.26	7.22	7.18	7.14
Maximum Power Voltage V_{MPP} [mV]	524	522	520	518	516	513	510	508	506	504
Fill Factor [%]	78.83	78.75	78.61	78.37	78.19	77.96	77.78	77.58	77.30	76.92
Temperature coefficients	Isc: 0.05%/°C		Voc: -0.36%/°C		FF: -0.157%/°C		Power: -0.46%/°C			

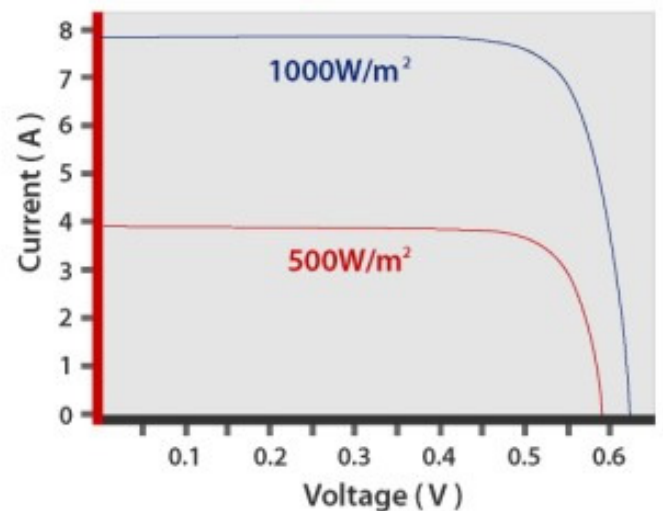
*STC (Standard Testing Conditions): 1000W/m², AM1.5, 25°C.

The above data are average figures presently measured. Reference data are callbrated by Fraunhofer ISE Freiburg.

Spectral Response



I-V Curve of Efficiency 15.80% Cell



Irradiance Dependence

Irradiance [W/m ²]	1000	900	500	300	200
Isc	100%	90.0%	49.9%	29.9%	20.0%
Voc	100%	99.8%	97.1%	94.8%	93.0%

GINTECH ENERGY CORPORATION

Taipei Main Office

8F, No. 396, Sec. 1, Nei Hu Rd., Neihu Technology Park, Taipei City 114, Taiwan, R.O.C.

Tel: +886-2-2656-2000 Fax: +886-2-2656-0593 E-mail: sales@gintech.com.tw

www.gintechenergy.com

Specifications and data may change without prior notice due to product development.