

Powering a Brilliant Future

Silver frame PV-MBA1BG247 / PV-MBA1BG250 / PV-MBA1BG255

Black frame PV-MBA1CG247 / PV-MBA1CG250 / PV-MBA1CG255



High Efficiency

Samsung solar modules deliver high efficiency, requiring less installation space and lower BOS costs.



Proven Performance

Samsung solar modules deliver more electricity under real world conditions thanks to superior temperature performance. (CEC conversion yield: 90.3% under PV USA test conditions)



Positive Power Output Tolerance

Samsung solar modules and cells avoid any power loss due to their positive output tolerance (0 / +2%) and narrow sorting range.



Low Mismatch Loss

Narrow current band allows for sort-free field installation and optimized solar array performance.



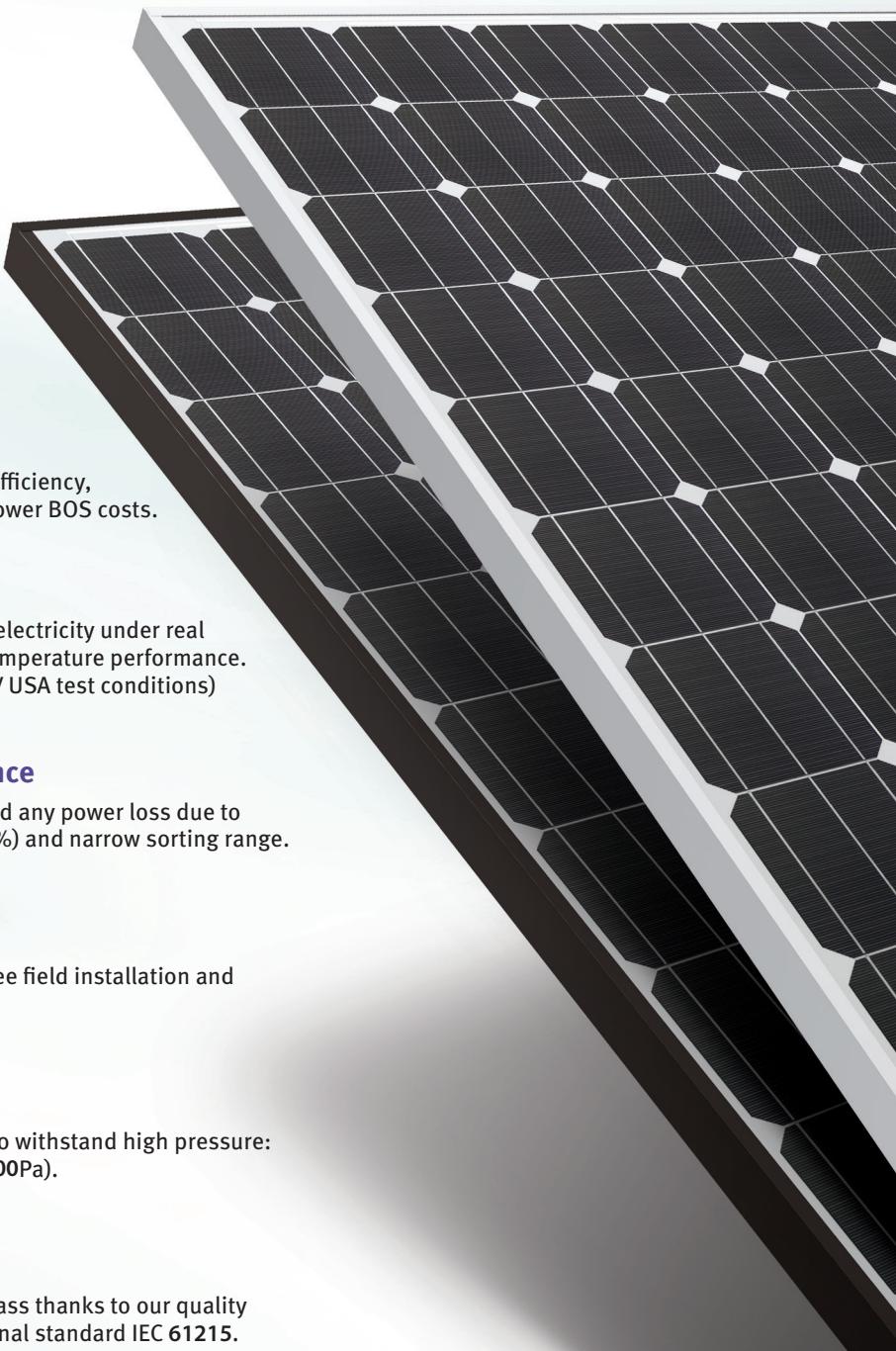
Superior Durability

Samsung solar modules are certified to withstand high pressure: wind loads (2,400Pa), snow loads (5,400Pa).



Strict Quality Testing

Samsung solar modules are best-in-class thanks to our quality assurance system following international standard IEC 61215.



Silver frame	PV-MBA1BG247	PV-MBA1BG250	PV-MBA1BG255
Black frame	PV-MBA1CG247	PV-MBA1CG250	PV-MBA1CG255

Measured at STC : Irradiance 1000W/m², AM 1.5, and cell temperature 25°C

Maximum power	P _{max} (Wp)	247	250	255
Maximum power voltage	V _{mp} (V)	30.5	30.7	31.1
Maximum power current	I _{mp} (A)	8.11	8.15	8.21
Open circuit voltage	V _{oc} (V)	37.6	37.8	38.1
Short circuit current	I _{sc} (A)	8.64	8.68	8.75
Module efficiency		15.15%	15.33%	15.64%

Measured at NOCT : Irradiance 800W/m², ambient temperature 20°C, wind speed 1m/s

Maximum power	P _{max} (Wp)	180	182	187
Maximum power voltage	V _{mp} (V)	27.7	28.0	28.2
Maximum power current	I _{mp} (A)	6.49	6.53	6.63
Open circuit voltage	V _{oc} (V)	34.9	35.0	35.3
Short circuit current	I _{sc} (A)	6.46	6.49	6.55

* Power output may vary by 0% / +2% and other electrical parameters by ±3%.

System integration parameters

Maximum system voltage (IEC)	1,000 V
Maximum system voltage (UL)	600 V
Maximum series fuse rating	15 A
Limiting reverse current	15 A

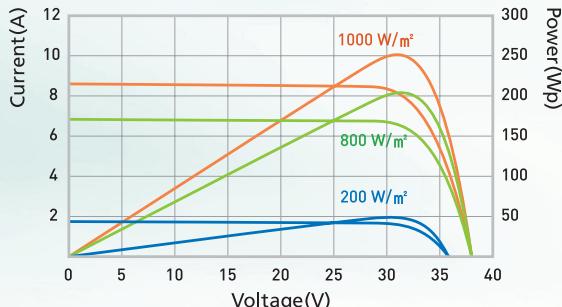
Safety ratings & Warranties

Fire Safety Classification	Class C
Certifications	IEC 61215, IEC 61730, UL 1703
Warranty	10 years limited product warranty
Performance guarantee	10 years limited warranty of 90% power output 25 years limited warranty of 80% power output

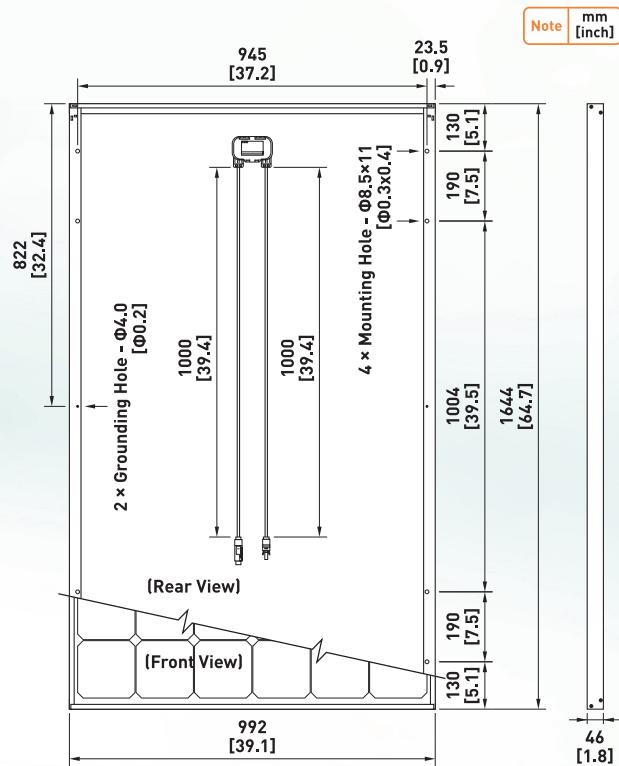
Qualification test

Temp cycling range	-40°C to 85°C for 200cycles
Damp heat test	85°C and 85% relative humidity for 1000hr
Front load test (Snow)	5400Pa
Rear static load test (Wind)	2400Pa
Hailstone impact test	25mm hail at 23m/s from 1m distance

I-V curve



Dealer information box



Physical characteristics

Cells per module	60						
Cell type	Mono-crystalline silicon						
Module dimensions	1644x992x46mm (64.7x39.1x1.8 inches)						
Module weight	20.2kg (44.5 lbs)						
Front Glass	Low iron tempered glass						
Junction box	<table border="1"> <tr> <td>Connector type</td> <td>MC4</td> </tr> <tr> <td>IP grade</td> <td>IP65</td> </tr> <tr> <td>Output cables</td> <td>(-) 1000mm, (+) 1000mm (-) 39.4 inches, (+) 39.4 inches</td> </tr> </table>	Connector type	MC4	IP grade	IP65	Output cables	(-) 1000mm, (+) 1000mm (-) 39.4 inches, (+) 39.4 inches
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IP grade	IP65						
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Temperature coefficients

NOCT	45 ± 2°C
TC Isc	0.034%/K
TC Voc	-0.325%/K
TC Pmax	-0.438%/K

(NOCT : Nominal Operating Cell Temperature)

Packing configuration

Container	40'HC
Pieces per pallet	20
Pallets per container	28

* All data subject to change without prior notice.

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