



BS-370MDG-390MDG-144

Monocrystalline module

BRITISH SOLAR

Characteristics

System Voltage:

The maximum voltage is promoted to 1500V and the module strings are extended by 50% which reduces the overall system BOS.

Wide Range of Products:

Mono-PERC bifacial module with half-cell technology and power output range 370W-390W. Bifacial technology enables additional energy harvesting from the rear side (up to 30%)

High Reliability:

Guaranteed mechanical resistance to severe weather conditions for reliable power output. Compliant with IEC 61215 and IEC 61730. Severe salt mist, ammonia & blown sand resistance, for seaside, farm and desert environments. Excellent mechanical load 2400Pa & snow load 5400Pa resistance.

Traceability:

Flash report and embedded bar code ID for each module for complete traceability.

Low-light Performance:

Advanced glass and surface texturing ensure excellent performance in low-light environments. Anti-reflective & anti-soiling surface minimize power loss from dirt and dust

Wide Range of Applications:

Independent systems (households, power supplies for remote areas, remotesystems) and grid-connected photovoltaic power stations (residential, commercial, industrial power supply systems).



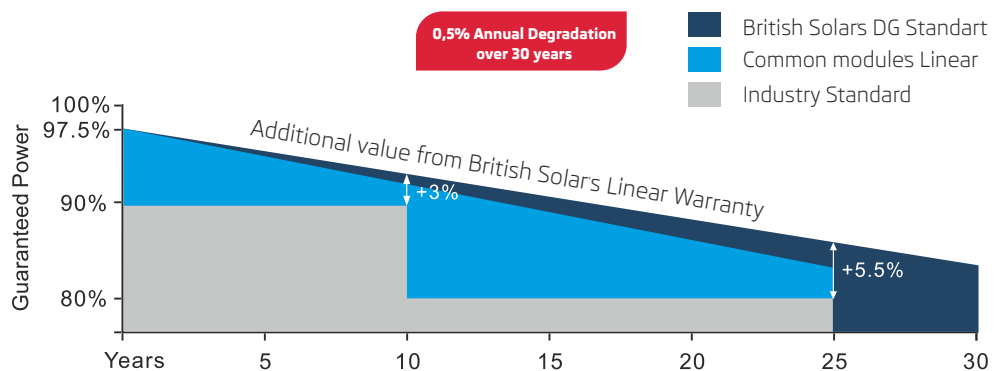
12 years limited product warranty
First year guarantee no less than 97,5% power output
30 years guarantee no less than 80% power output

Certification



Photon
LABORATORY

Warranty



★ Please check the valid version of Limited Product Warranty which is officially released by British Solar.

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ELECTRICAL CHARACTERISTICS AT STC

MODELS	BS-370MDG-144	BS-375MDG-144	BS-380MDG-144	BS-385MDG-144	BS-390MDG-144
Nominal Power (Pmax), W	370	375	380	385	390
Open Circuit Voltage (Voc), V	47,6	47,75	48	48,15	48,3
Short Circuit Current (Isc), A	9,9	10	10	10,2	10,3
Voltage at Nominal Power (Vmp), V	39,8	39,9	40,05	40,15	40,25
Current at Nominal Power (Imp), A	9,3	9,4	9,5	9,6	9,7
Module Efficiency (%)*	18,4	18,6	18,9	19,1	19,4

STC: Irradiance 1000 W/m² Cell Temperature 25°C, Air Mass AM 1.5 according to EN 60904-3.
Bifacial factor: 75%±5 *Module Efficiency (%): Round-off to the nearest number

Electrical characteristics with different rear side power gain (reference to 380Wp front)

Bifacial Gain**	Pmax/W	Voc/V	Isc/A	Vmpp/V	Imp/A
5%	399	48,00	10,61	40,05	9,98
10%	419	48,00	11,11	40,05	10,45
15%	438	48,00	11,62	40,05	10,93
20%	457	48,00	12,12	40,05	11,40
25%	476	48,00	12,63	40,05	11,88
30%	495	48,00	13,13	40,05	12,35

**Bifacial Gain: The additional gain from the rear side compared to the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL CHARACTERISTICS AT NMOT

MODELS	BS-370MDG-144	BS-375MDG-144	BS-380MDG-144	BS-385MDG-144	BS-390MDG-144
Nominal Power (Pmax), W	276,7	280,3	284,4	288,1	291,8
Open Circuit Voltage (Voc), V	43,8	43,9	44,2	44,3	44,4
Short Circuit Current (Isc), A	8,12	8,2	8,28	8,36	8,45
Voltage at Nominal Power (Vmp), V	36,5	36,6	36,7	36,8	36,9
Current at Nominal Power (Imp), A	7,59	7,67	7,75	7,83	7,92

NMOT: Irradiance at 800 W/m², Ambient Temperature 20°C, Wind Speed 1m/c.

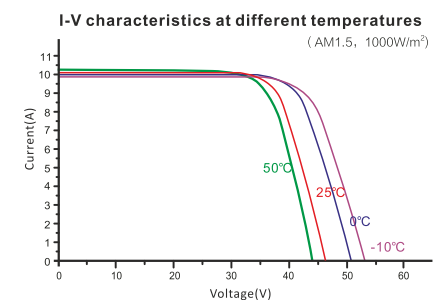
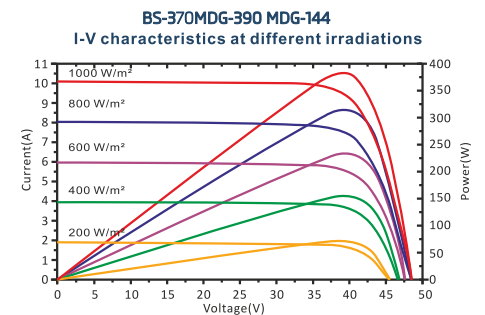
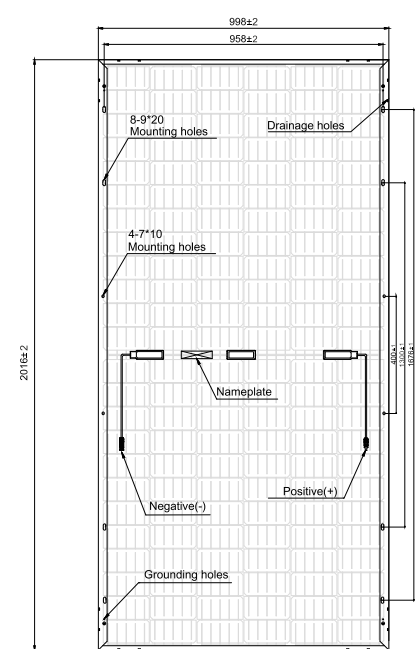
MECHANICAL DATA

Solar cells	Monocrystalline, 5BB
Cell configuration	144 cells (6x12+6x12)
Module dimensions	2016x998x25mm
Weight	26kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	Tempered Glass
Frame	Anodized Aluminium Alloy type 6063T5, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0 mm ² (12AWG), Positive(+)270mm, Negative(-)270mm

TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	45°C±2°C
Temperature Coefficient of Voc	-0,29%/°C
Temperature Coefficient of Isc	0,05%/°C
Temperature Coefficient of Pmax	-0,39%/°C
Operational Temperature	-40°C-+85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	20A
Limiting Reverse Current	20A

Dimensions of PV Module Unit: mm



PACKAGING CONFIGURATION

	40ft	20ft
Number of modules per container	880	400
Number of modules per pallet	40	40
Number of pallets per container	22	10
Packaging box dimensions (LxWxH), mm	2080x1100x1135	2080x1100x1135
Box gross weight, kg	1100	1100