

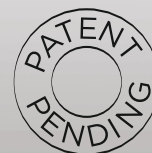
JET Black series

280W / 285W / 290W 60 CELLS

High Efficiency PERC Cells



PERLIGHT
smart.black



THE REAL BLACK IN SOLAR SLEEK, POWERFUL, STYLISH MONOCRYSTALLINE SILICON SOLAR MODULE

HIGH QUALITY BLACK WELDING STRIPS - Prevents over heating of the panel (Patent pending)

LONGER LIFE - Less panel degradation over the life of the panel

ULTRA SMOOTH TEMPERED GLASS - Less dust and grime collecting on the panels

NEW GENERATION ANTI REFLECTIVE GLASS COATING - Increases light transmittance

HIGH QUALITY EVA FILM - Widens light transmittance range



ELECTRICAL PERFORMANCE

Module type	PLM-290MA-60 Series							
Power output	P_{max} W	270	275	280	285	290	295	300
Power output tolerances	ΔP_{max} %	0 - 3						
Voltage at Pmax	V_{mpp} V	31.73	31.44	31.64	31.78	31.98	32.25	32.54
Current at Pmax	I_{mpp} A	8.51	8.75	8.85	8.97	9.07	9.15	9.22
Open-circuit voltage	V_{oc} V	38.42	39.11	39.24	39.35	39.58	39.89	40.11
Short-circuit current	I_{sc} A	9.08	9.16	9.24	9.36	9.46	9.52	9.61
Solar Module Efficiency	Eff. %	16.60	16.90	17.21	17.52	17.83	18.13	18.44

STC: 1000W/m² irradiance, 25°C cell temperature, AM 1.5g spectrum according to EN 60904-3.

THERMAL CHARACTERISTICS

Nominal operating cell temperature	NOCT	°C	45±2
Temperature coefficient of Pmax	γ	%/°C	-0.40
Temperature coefficient of Voc	β_{Voc}	%/°C	-0.30
Temperature coefficient of Isc	α_{Isc}	%/°C	0.06
Temperature coefficient of Vmpp	β_{Vmpp}	%/°C	-0.35

OPERATING CONDITIONS

Max. system voltage	1000V _{DC}
Limiting reverse current	15A
Operating temperature range	-40°C to 85°C
Max. static load front (e.g., snow)	5400Pa
Max. static load back (e.g., wind)	2400Pa
Max. hailstone impact (diameter / velocity)	25mm / 23m/s

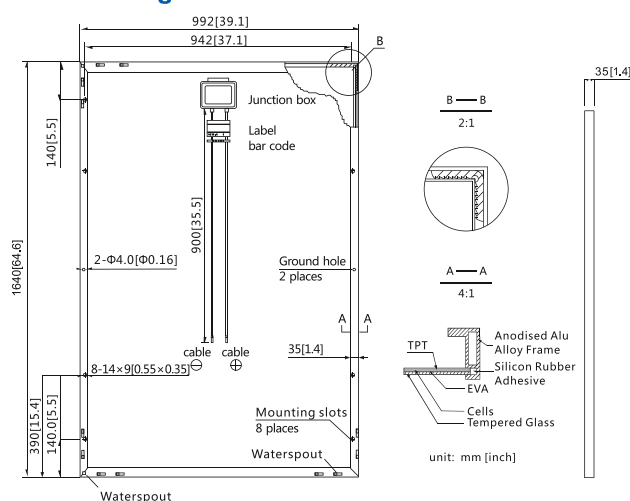
MECHANICAL CHARACTERISTICS

Front cover (material / thickness)	low-iron tempered glass / 3.2mm
Backsheet (color)	black
Cell (quantity/material/dimensions)	60/monocrystalline silicon/156x156mm
Frame (material / color)	anodized aluminum alloy / black
Junction box (protection degree)	≥IP67
Cables & Plug connectors	900mm/4mm ² & MC4 compatible/IP67
Module Dimensions (L / W / H)	1640mm x 992mm x 35mm
Module Weight	17.6kg

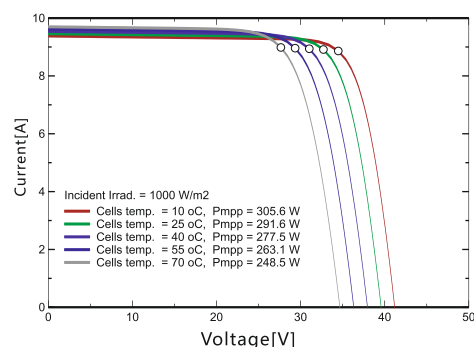
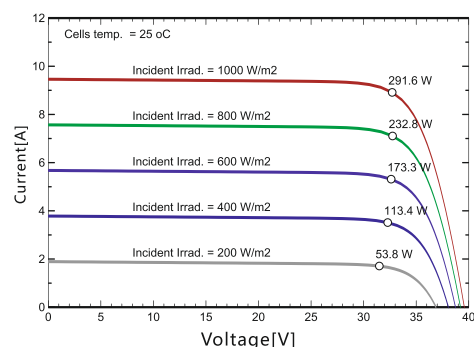
PACKING DETAILS

Container	20'GP	40'HQ
Pieces per pallet	60	66
Pallets per container	6	14
Pieces per container	360	924

Module Diagram:

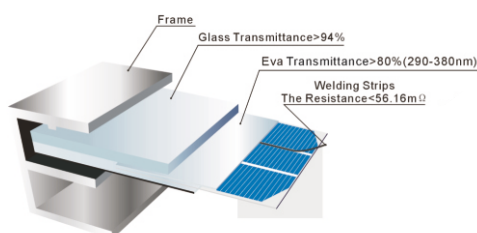


Electrical Curves:



Perlight Partners

ALL BLACK PANELS



REGULAR BLACK PANELS

