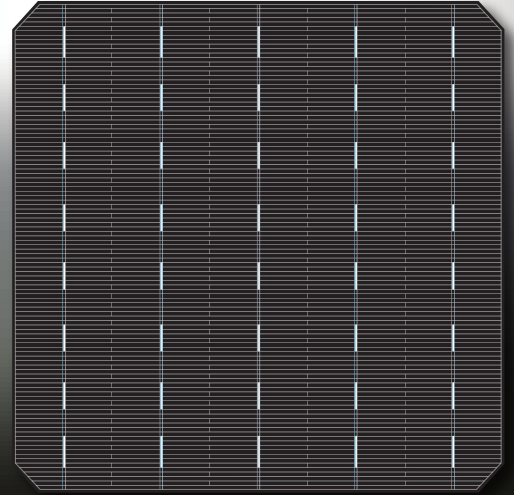


Black21 Series Ultra-Efficient

NS6WL

Mono-Crystalline Solar Cell



Features

- Ultra-Efficient solar cells with an anisotropically etched surface
- Silicon nitride anti-reflection coating
- Silver front contact bars and aluminum local back surface field

Performance and Quality

- Proper handling from incoming inspection through production, outgoing inspection and packaging
- 100% checked for reverse current and visual appearance
- Calibrated against Fraunhofer ISE
- RoHS compliance
- **100% PID Resistance**

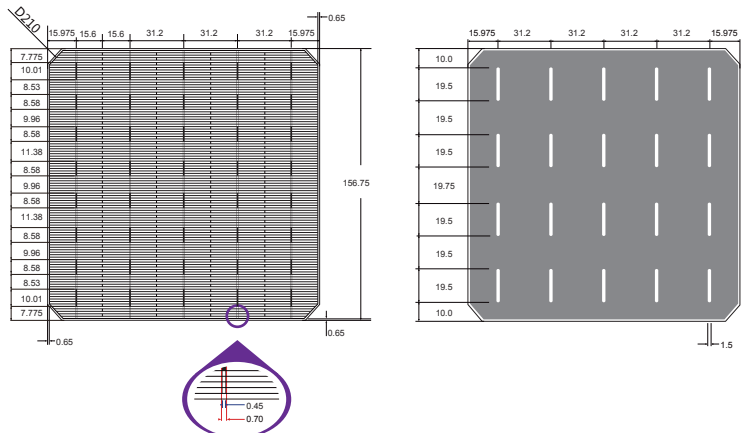
Packaging

- Minimize the risk of broken cells with special design
- Label with product information

Physical Characteristics

Dimension	156.75 mm x 156.75 mm ± 0.25 mm
Cell's Thickness (si)	180 μm ± 30 μm
Front Side (-)	Silicon nitride anti-reflection coating 0.7 mm silver busbar
Back Side (+)	Aluminum local back surface field 1.5 mm (silver) discontinuous soldering pads

Cell Layout



Mono-Crystalline Solar Cell

NS6WL Ultra-Efficient



Electrical Characteristics

Class	Efficiency Range (%)	Rated Power (Wp)	*Maximum Power Current (A)	*Short Circuit Current (A)	*Maximum Power Voltage (V)	*Open Circuit Voltage (V)
210	21.0-21.1	5.131	9.039	9.642	0.568	0.668
211	21.1-21.2	5.155	9.073	9.652	0.568	0.669
212	21.2-21.3	5.180	9.106	9.662	0.569	0.669
213	21.3-21.4	5.204	9.139	9.673	0.569	0.670
214	21.4-21.5	5.228	9.173	9.683	0.570	0.670
215	21.5-21.6	5.253	9.206	9.693	0.571	0.671
216	21.6-21.7	5.277	9.239	9.704	0.571	0.671
217	21.7-21.8	5.302	9.272	9.714	0.572	0.672
218	21.8-21.9	5.326	9.305	9.724	0.572	0.672
219	21.9-22.0	5.351	9.338	9.735	0.573	0.673

Test condition : 1000 W / m², AM 1.5, 25°C Power measuring tolerance: ±1.5% rel.

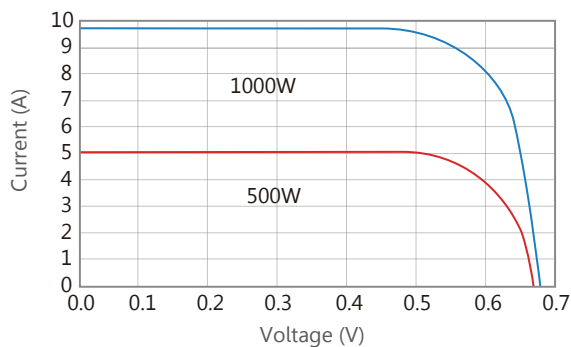
Temperature coefficients

Current (%/K)	0.0400
Voltage (%/K)	-0.2889
Power (%/K)	-0.3632

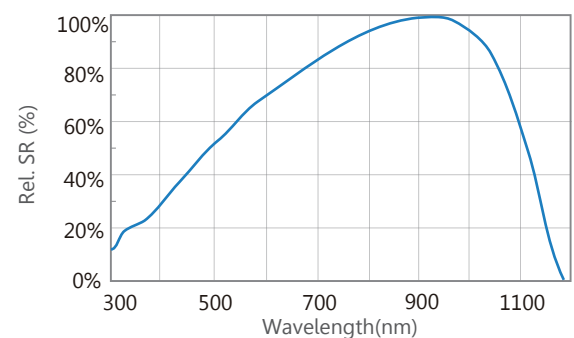
Light Intensity Dependence

Intensity [W/m ²]	V _{mpp}	I _{mpp}
1000	1.000	1.000
900	0.998	0.899
500	0.977	0.497
300	0.955	0.297
200	0.936	0.197

IV-Curve



Spectral Response



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