

XN166B9

Monocrystalline X-Cells

Bifacial Solar Cell - Aquila 2.9B

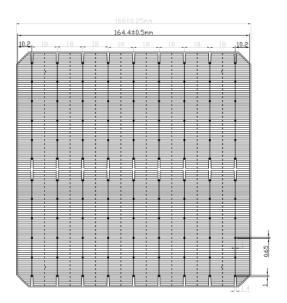
Dimension	166 mm x 166 mm ± 0.25 mm					
Thickness(Si)	165 +20/-30 μm					
Front	Anisotropically texturized surface and dark silicon nitride anti-reflection coatings 0.1±0.05 mm silver busbars					
Back	Polished surface and dark silicon nitride anti-reflection coatings 1.4±0.1 mm silver busbars with discontinuous soldering pads					

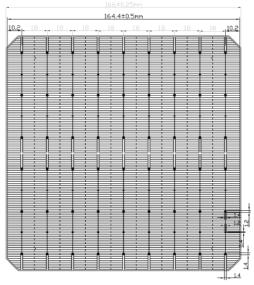


- High conversion efficiencies resulting in superior power output performance
- > No light induced degradation (LID)
- Outstanding power output even in low light or high temperature conditions
- > Optimized design for ease of soldering and lamination
- > Long-term stability, reliability and performance
- > Low breakage rate
- > Uniform color

Production and Quality Control

- > Precision cell efficiency sorting procedures
- > Stringent criteria for color uniformity and appearance
- > Reverse current and shunt resistance screening
- > ISO 9001, ISO 14001, and ISO 45001 certificated
- > Calibrated against Fraunhofer ISE





^{*} See the reverse side for more detail





Electrical Performance

Efficiency Code		235	234	233	232	231	230
Efficiency	Eff (%)	23.50	23.40	23.30	23.20	23.10	23.00
Power	P _{pm} (W)	6.44	6.42	6.39	6.36	6.33	6.31
Max. Power Current	I _{pm} (A)	10.63	10.62	10.60	10.56	10.54	10.52
Short Circuit Current	I _{sc} (A)	11.14	11.12	11.10	11.08	11.05	11.04
Max. Power Voltage	V _{pm} (V)	0.606	0.605	0.603	0.602	0.601	0.600
Open Circuit Voltage	V _{oc} (V)	0.701	0.701	0.700	0.700	0.699	0.699
Efficiency Code		229	228	227	226	225	224
Efficiency	Eff (%)	22.90	22.80	22.70	22.60	22.50	22.40
Power	P _{pm} (W)	6.28	6.25	6.22	6.20	6.17	6.14
Max. Power Current	I _{pm} (A)	10.50	10.48	10.44	10.42	10.40	10.38
Short Circuit Current	I _{sc} (A)	11.02	11.00	10.98	10.97	10.94	10.92
Max. Power Voltage	V _{pm} (V)	0.598	0.597	0.596	0.594	0.593	0.592
Open Circuit Voltage	V _{oc} (V)	0.698	0.697	0.697	0.696	0.696	0.695

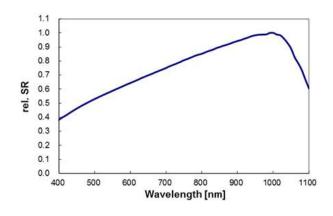
Standard test condition: AM1.5, 1000W/m², 25°C. Average accuracy of all tested figures is ±1.5% rel.

○ Temperature Coefficients

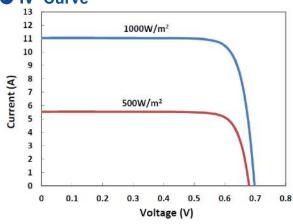
Current Temperature Coefficient	0.03 %/°C
Voltage Temperature Coefficient	-0.27 %/°C
Power Temperature Coefficient	-0.31 %/°C

Standard test condition : AM1.5, 1000W/m², 25°C.

○ Spectral Response(SR)







Specifications subject to change without prior notice. MOTECH reserves the rights of final interpretation and revision of this datasheet.

Jul 2022 AQ2.9B_01