

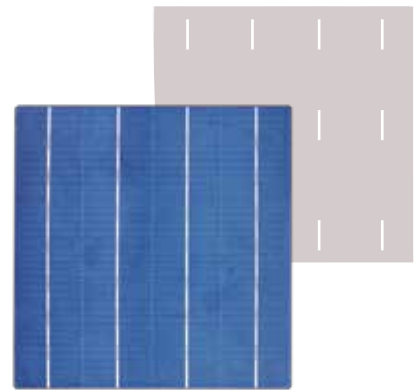
Multi Crystalline Silicon Solar Cells

RESERV[®] 624 Series S

RenewSys' production processes are automated from the incoming silicon wafer inspection/classification to the final cell sorting. The surface of **RESERV 624** cells are processed through acid texturization and have an isotropically textured surface. The cells are manufactured and tested for optimum performance and processing characteristics. Our Quality Control systems include checking every cell for mechanical faults, apart from electrical performance.

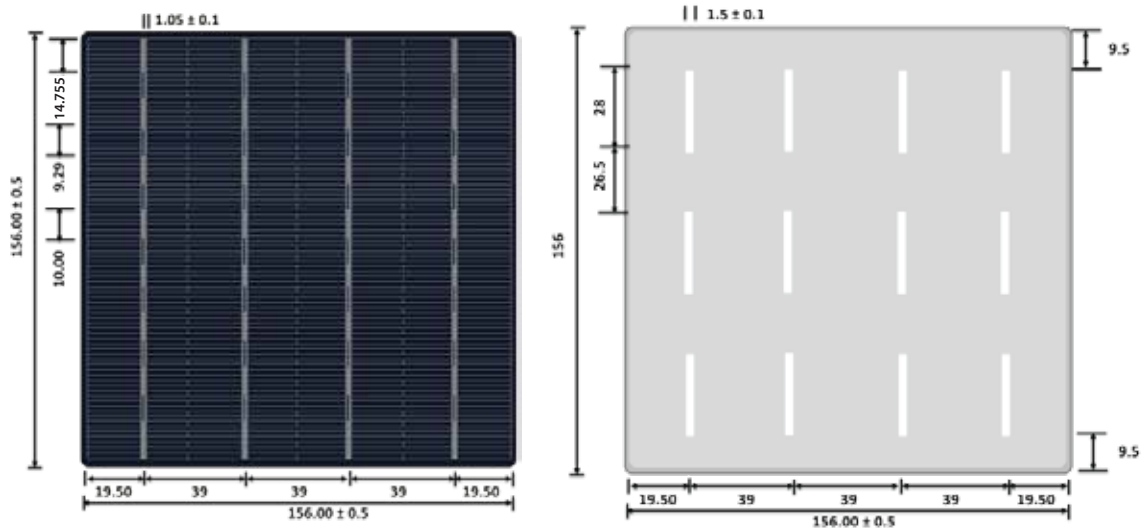
Features

Product	Multi Crystalline Silicon Solar Cell
Substrate	P-type Multi Crystalline Silicon Wafer
Device Structure	n ⁺ / p / p ⁺
Dimensions	Size: 156mm x 156mm ± 0.5mm Average Thickness: 200 ± 20µm
Front	Blue Anti-Reflective Coating (Silicon Nitride) Acid textured surface 1.05 ± 0.1 mm Silver bus bars Negative pole (-)
Back	Full-surface Aluminum BSF 1.5 ± 0.1 mm Silver bus bars Positive pole (+)



- High Conversion Efficiency
- Good Color Uniformity
- Statistical Process Control
- PID Free
- Focused in house R & D
- ISO 9001 Certified

Cell Layout



Specifications are in mm

Front View

Back View

Electrical Data *

Part No	Class	Efficiency Range (%)	Rated Power (Wp)	Max. Power Current I_{mpp} (A)	Short Circuit Current I_{sc} (A)	Max. Power Voltage V_{mpp} (V)	Open Circuit Voltage V_{oc} (V)	Fill Factor (%)
RESERV-624-1880	188	18.80 - 18.90	4.58	8.466	8.946	0.541	0.636	80.50
RESERV-624-1870	187	18.70 - 18.80	4.56	8.444	8.926	0.540	0.635	80.44
RESERV-624-1860	186	18.60 - 18.70	4.54	8.424	8.907	0.539	0.634	80.36
RESERV-624-1850	185	18.50 - 18.60	4.51	8.403	8.887	0.537	0.633	80.28
RESERV-624-1840	184	18.40 - 18.50	4.49	8.382	8.868	0.536	0.632	80.20
RESERV-624-1830	183	18.30 - 18.40	4.47	8.361	8.849	0.534	0.630	80.12
RESERV-624-1820	182	18.20 - 18.30	4.44	8.339	8.828	0.533	0.628	80.08
RESERV-624-1810	181	18.10 - 18.20	4.42	8.316	8.805	0.531	0.627	80.07
RESERV-624-1800	180	18.00 - 18.10	4.39	8.293	8.782	0.530	0.625	80.06
RESERV-624-1790	179	17.90 - 18.00	4.37	8.270	8.758	0.528	0.623	80.05
RESERV-624-1780	178	17.80 - 17.90	4.34	8.248	8.736	0.527	0.621	80.02
RESERV-624-1770	177	17.70 - 17.80	4.32	8.223	8.710	0.525	0.620	80.02
RESERV-624-1760	176	17.60 - 17.70	4.30	8.195	8.681	0.524	0.618	80.02
RESERV-624-1750	175	17.50 - 17.60	4.27	8.169	8.652	0.523	0.617	80.01
RESERV-624-1740	174	17.40 - 17.50	4.25	8.138	8.625	0.522	0.616	79.94
RESERV-624-1730	173	17.30 - 17.40	4.22	8.116	8.604	0.520	0.615	79.82
RESERV-624-1720	172	17.20 - 17.30	4.20	8.049	8.568	0.520	0.613	79.69
RESERV-624-1710	171	17.10 - 17.20	4.17	8.047	8.542	0.518	0.613	79.63
RESERV-624-1700	170	17.00 - 17.10	4.15	8.031	8.530	0.517	0.612	79.51

* Data under standard testing conditions (STC): 1000 W/m², 25 °C, AM 1.5 (Average accuracy is ±1.5% rel.).

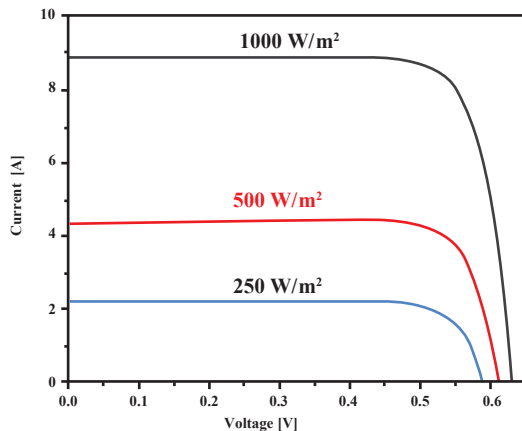
Temperature Coefficients

Voltage - 0.3138 % / K

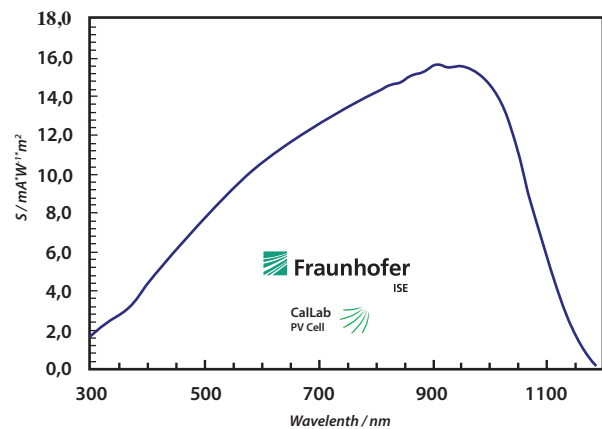
Current + 0.0415 % / K

Power -0.3962 % / K

IV Curve



Spectral Response



Process Recommendation

Solder Joint: Copper ribbons coated with 15-30 µm of Sn/Pb (60%/40%).

Soldering results may differ due to different flux, ribbons, soldering methods and parameters.

Disclaimer: Specifications and data are subject to change without prior notice.