RenewSys RESERV 625 PV 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. Our production processes are automated from the incoming silicon wafer inspection/classification to the final cell sorting. The surface of RESERV 625 cells are processed through acid Texturization and have an isotropically textured surface.

**Cell Layout**

Front View

Back View

Specifications are in mm

**Features**

- **Product**: Multi Crystalline Silicon Solar PV Cell
- **Substrate**: P-type Multi Crystalline Silicon Wafer
- **Device Structure**: n⁺ / p / p⁺
- **Dimensions**: Size: 156.75mm x 156.75mm ± 0.25mm  
  Average Thickness: 200 ± 20µm
- **Front**: Blue Anti-Reflective Coating  
  (Silicon Nitride)  
  Acid textured surface  
  0.8 ± 0.1 mm Silver bus bars  
  Negative pole (-)
- **Back**: Full-surface Aluminum BSF  
  1.4 ± 0.1mm Silver bus bars  
  Positive pole (+)

- High Conversion Efficiency
- Good Color Uniformity
- Statistical Process Control
- On the fly 100 % EL testing
- Focused in house R & D
- ISO 9001, OHSAS 18001 certificated
- PID Free

*Cell images for representation purpose only*
## 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-625L1-1880 | 188   | 18.80 - 19.00        | 4.62             | 8.48                          | 8.95                          | 0.545                         | 0.637                         | 81.03          |
| RESERV-625L1-1860 | 186   | 18.60 - 18.80        | 4.57             | 8.45                          | 8.93                          | 0.541                         | 0.636                         | 80.48          |
| RESERV-625L1-1840 | 184   | 18.40 - 18.60        | 4.52             | 8.39                          | 8.90                          | 0.539                         | 0.633                         | 80.18          |
| RESERV-625L1-1820 | 182   | 18.20 - 18.40        | 4.47             | 8.37                          | 8.88                          | 0.534                         | 0.629                         | 80.01          |
| RESERV-625L1-1800 | 180   | 18.00 - 18.20        | 4.42             | 8.36                          | 8.85                          | 0.529                         | 0.626                         | 79.79          |
| RESERV-625L1-1780 | 178   | 17.80 - 18.00        | 4.37             | 8.31                          | 8.83                          | 0.526                         | 0.624                         | 79.41          |
| RESERV-625L1-1760 | 176   | 17.60 - 17.80        | 4.32             | 8.28                          | 8.81                          | 0.522                         | 0.621                         | 79.12          |

* Standard test Conditions: AM 1.5, 1000 w/m², 25°C (Accuracy is ± 1.5% rel.)

## IV Curve

![IV Curve Graph](image1)

## Spectral Response

![Spectral Response Graph](image2)

## Temperature Coefficients

Voltage: \(-0.3190 \% / K\)  
Current: \(+0.0485 \% / K\)  
Power: \(-0.3854 \% / K\)

## 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.