

## N series

# 210R N-type Monofacial Module

## 490W ~ 510W



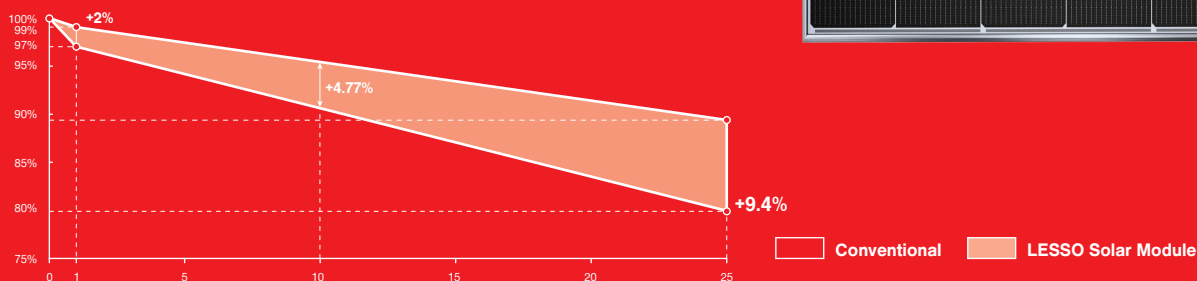
**12** years product  
workmanship warranty



**25** years linear power output  
warranty



**1%** 1st-year degradation  
**0.40%** annual degradation



## FEATURES AND BENEFITS



Topcon technology, higher power generation.



High density packaging, improving energy density.



Better temperature coefficient, more power generation.



Zero LID, increase power generation.



Even cloudy or foggy days, better weak illumination response.



Multiple weather, resistance tests, wider applicability.

LESSO 210R N-type Monofacial Module (54)



Power Range  
**490W ~ 510W**



Power Output Tolerance  
**0W ~ +5W**

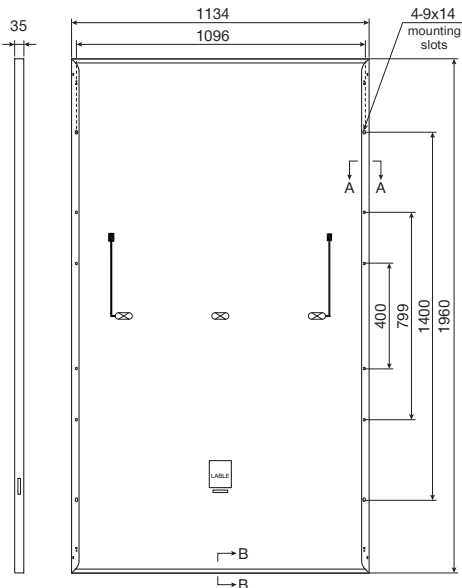


Maximum Efficiency  
**22.95%**

(Unit: mm)

Structure Performance

|                        |                                                                                                  |
|------------------------|--------------------------------------------------------------------------------------------------|
| Solar Cell Type        | 210R N-TOPCon Mono Cell (Half Cell)                                                              |
| Solar Cell Arrangement | 108pcs(6x18)                                                                                     |
| Module Dimension       | 1960×1134×35mm                                                                                   |
| Weight                 | 27.1kg                                                                                           |
| Front Glass            | 3.2mm, highly transparent tempered glass with anti-reflective coating                            |
| Back Sheet             | White                                                                                            |
| Frame                  | Anodized Aluminum Alloy                                                                          |
| Junction Box           | IP68 rated                                                                                       |
| Cable                  | 4mm², portrait 400mm (+) 200mm (-) , landscape 1400mm (+) 1400mm (-)<br>Length can be customized |
| Diode Quantity         | 3 pcs                                                                                            |
| Front side / Rear side | 5400pa / 2400pa                                                                                  |
| Connector              | MC4 Compatible                                                                                   |
| Per Pallet             | 31pcs                                                                                            |
| Per Container(40'HQ)   | 744pcs                                                                                           |

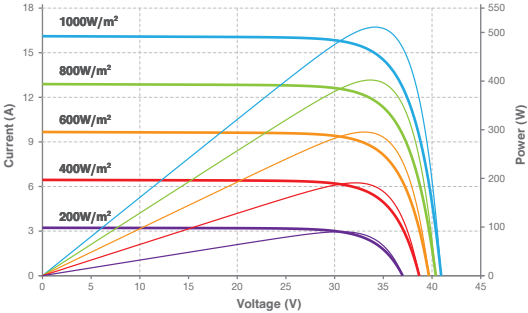


Section A-A & B-B

| Electrical Performance Parameters |                      |       |                   |       |                   |       |                   |       |                   |       |       |
|-----------------------------------|----------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|-------|-------|
| Model Type                        | 490C(HPM)54(210R)    |       | 495C(HPM)54(210R) |       | 500C(HPM)54(210R) |       | 505C(HPM)54(210R) |       | 510C(HPM)54(210R) |       |       |
| Testing Condition                 | STC                  | NMOT  | STC               | NMOT  | STC               | NMOT  | STC               | NMOT  | STC               | NMOT  |       |
| Nominal Max. Power                | P <sub>MAX</sub> (W) | 490   | 370               | 495   | 374               | 500   | 378               | 505   | 382               | 510   | 386   |
| Max. Power Voltage                | V <sub>MPP</sub> (V) | 32.95 | 30.91             | 33.08 | 31.03             | 33.21 | 31.15             | 33.34 | 31.27             | 33.47 | 31.39 |
| Max. Power Current                | I <sub>MPP</sub> (A) | 14.88 | 11.98             | 14.97 | 12.06             | 15.06 | 12.14             | 15.15 | 12.22             | 15.24 | 12.30 |
| Open Circuit Voltage              | V <sub>OC</sub> (V)  | 40.29 | 38.23             | 40.40 | 38.34             | 40.51 | 38.44             | 40.62 | 38.55             | 40.73 | 38.65 |
| Short Circuit Current             | I <sub>SC</sub> (A)  | 15.84 | 12.78             | 15.93 | 12.85             | 16.02 | 12.92             | 16.10 | 12.99             | 16.19 | 13.06 |
| Module Efficiency                 | (%)                  | 22.05 |                   | 22.27 |                   | 22.50 |                   | 22.72 |                   | 22.95 |       |

\* STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5; NMOT: Irradiance 800W/m², Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s; Power measurement tolerance ±3%.

Current-Voltage & Power-Voltage Curve (510C)



Temperature Characteristics

|                                             |         |
|---------------------------------------------|---------|
| Nominal Module Operating Temperature        | 44±2°C  |
| Temperature Coefficient (I <sub>sc</sub> )  | +0.043% |
| Temperature Coefficient (V <sub>oc</sub> )  | -0.25%  |
| Temperature Coefficient (P <sub>MAX</sub> ) | -0.30%  |

Maximum Parameters

|                              |           |
|------------------------------|-----------|
| Working Temperature          | -40~+85°C |
| Maximum System Voltage       | 1500V DC  |
| Nominal Maximum Fuse Current | 35A       |

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Data contained in these specifications is subject to change without notice.