

**AS500-520G12R-108**

Bifacial Half-Cell PV Module



*1962±2*

*1400±2*

*990±2*

|  |  |
| --- | --- |
| Cell | N-type TOPCon Mono |
| No.of cells | 108(12x9) |
| Cable Length | 300mm(+)/300mm(-) |
| Cable Cross Section Size | 4mm²(IEC) |
| Junction Box | IP68 |
| Connector | MC4 Compatible |
| Weight | 27.4kgs±3% |
| Cells Type | Mono 182x105mm |
| Dimension(LxWxT) | 1962±2mmx1134±2mmx30±1mm |
| Packaging | 37pcs/pallet ; 814pcs/40HQ(30mm) |

*1134±2*

*30/35±1*

*H*

*9*

*14*

*30/35*

*30/35*

Back

Front Side

Remark: customized frame color and cable length available upon request

N-type TOPCon Mono

**500-520W**

AS500-520G12R-108 Bifacial

Bifacial Half-Cell PV Module

**OPCON**

**ELECTRICAL CHARACTERISTICS** STC:AM1.5 1000W/m² 25℃ NOCT:AM1.5 800W/m² 20℃ 1m/s Test uncertainty for Pmax ±3%

**MECHANICAL SPECIFICATION**

Module Type AS500G12R-108 AS505G12R-108 AS510G12R-108 AS515G12R-108 AS520G12R-108

W



**N-TYPE TOPCON** moduIe couId increase power

Testing Condition STC NOCT STC NOCT STC NOCT STC NOCT STC NOCT

generaⅥon by 3%+ per wa廿 compared with PERC

Maximum Power(Pmax/W) 500 379 505 382 510 386 515 390 520 394

Open Circuit Voltage(Voc/V) 39.83 37.68 40.08 37.92 40.32 38.14 40.58 38.39 40.81 38.61

Short Circuit Current(Isc/A) 15.98 12.74 16.05 12.81 16.14 12.87 16.22 12.93 16.30 12.99

**HIGHER** power output

BifaciaI moduIe back–side power increase 5–25%

+

**COMPATIBLE** with mainstream trackers eﬀecⅥve product for uⅥIity power pIant

Lower degradaⅥon rate, **BETTER** shading toIerance First–year ≤1%, 2–30 year ≤0.4%

**30**

**0.4**%

Annual degradation

**15**

Year

Warranty for Extra Linear Power Output

Year

Warranty for Materials and Processing



|  |
| --- |
| Voltage at Maximum Power(Vmp/V) 33.11 31.32 33.28 31.48 33.44 31.63 33.62 31.80 33.79 31.97 |
| Current at Maximum Power(Imp/A) 15.10 12.08 15.17 12.14 15.25 12.20 15.32 12.26 15.39 12.31 |
| Module Efficiency(%) 22.47 22.70 22.92 23.15 23.37 |
| **ELECTRICAL CHARACTERISTICS OPERATING PARAMETERS** |
| Maximum power（W） 525.00 530.25 535.50 540.75 546.00 | Maximum System Voltage 1500VDC |
| Module efficiency STC（%） 23.59% 23.84% 24.07% 24.31% 24.54%5% | Operating Temperature -40℃~+85℃ |
| Maximum 15% | power（Total） 575.00 580.75 586.50 592.25 598.00 | Maximum Series Fuse 30A |
|  | Module efficiency STC（%） 25.84% 26.11% 26.36% 26.62% 26.88% | Maximum StaticLoad,Front 5400Pa(112lb/ft²) |
| Maximum 25% | power（Total） 625.00 631.25 637.50 643.75 650.00 | Maximum StaticLoad,Back 2400Pa(50lb/ft²) |
| Module efficiency STC（%） 28.09% 28.38% 28.65% 28.94% 29.21% | Safety Class Class Ⅱ |

**LINEAR PERFORMANCE WARRANTY**

**LOWER** Temp. **COEFFICIENT**

|  |  |
| --- | --- |
|  |  |

More power generaⅥon under high–temperature

**RELATIVE POWER [%]**

 **99%**

100%

95%

90%

85%

80%

75%

 Standard p-Type PERC  n-Type TOPCon



 ISO

9001:2015

*INMETRO*



|  |  |  |
| --- | --- | --- |
|  |  |  **87.4%** |
|  |  |
|  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

1 5 10 15 20 25 30

**Years**



***Amosolar Co.,ltd***

**I-V CURVE(AS500-520G12R-108)**

**OPERATING PARAMETERS**

Norminal Operating Cell Temperature(NOCT) 45±2℃

Temperature Coefficiency of Isc +0.045%/℃

Temperature Coefficiency of Voc -0.025%/℃

Temperature Coefficiency of Pmax -0.29%/℃

\*Specs are subject to change without further notification

***Amosolar Co.,ltd***

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