

Enabled with



SURFACE MATRIX SHINGLED RESIDENTIAL MODULE

M6 PERC 350–385 Wp

A new generation of shingled PV modules with excellent shading resilience and aesthetics

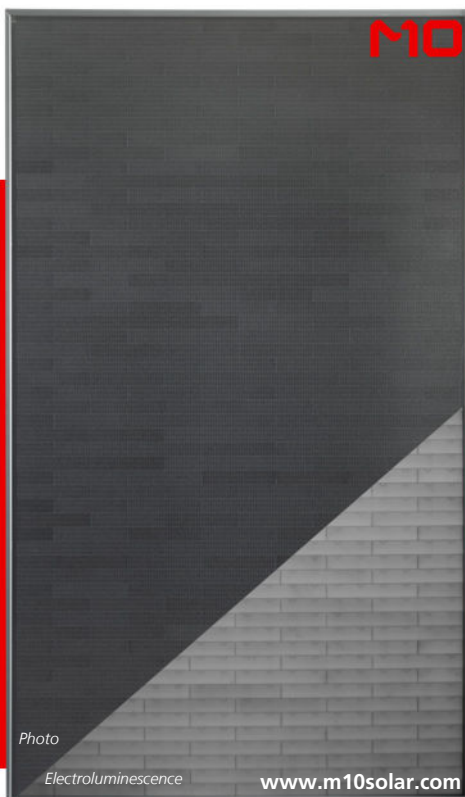
Developed with



20% more energy production with excellent shading resilience

Maximum solar cell packing density

Seamless aesthetical module design



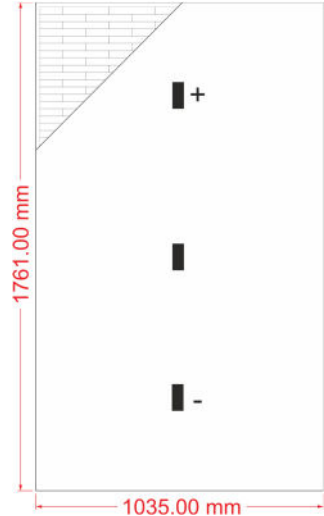
Photo

Electroluminescence

www.m10solar.com

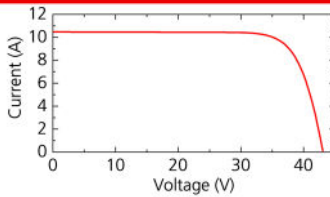
Mechanical Data

| | |
|----------------------|---|
| Dimensions [mm] | 1761 × 1035 × 35 |
| Weight [kg] | ca. 20 |
| Front cover | 3.2 mm thick toughened solar glass with anti-reflection coating |
| Back cover | Conventional black backsheet |
| Frame | Black anodized aluminum |
| Solar cell type | 396 shingle cells, monocrystalline p-type, PERC, 6th cut |
| Junction boxes | 3 diodes |
| Cell interconnection | Shingle matrix technology, electrically conductive adhesive (ECA), 1.2 mm overlap |



Electrical Data of Exhibition Module

| | |
|--------------------------|---------|
| η_{hostcell} | 21.2 % |
| I_{SC} | 10.5 A |
| V_{OC} | 43.2 V |
| P_{MPP} | 352.7 W |
| FF | 78.0 % |
| η_{module} | 19.4 % |



Reliability Tests

| | |
|---------------|---------|
| DH 1000 | pass |
| TC 200 | pass |
| ML 5400Pa | pass |
| Hot Spot Test | pass |
| Other | pending |

DH...damp heat 85% rh / 85 °C,
 TC...thermal cycling -40 °C / +85 °C,
 ML...mechanical load

High Performance Estimation*

| | | | |
|-----------------|----------------|------------------|-----------------|
| TOPCon G12 Host | TLS Cutting | Edge Passivation | Matrix Module** |
| 24.5 % | 23.6 % ± 0.2 % | 23.8 % ± 0.1 % | 22.3 % ± 0.2 % |

*) Highly depending on materials, processes and module design
 **) Glass with anti-reflection coating and 14.5 mm spacing to the edges