

SQ LARSTONE

Solar Tiled Roof™

BIPV module FRS 105W/HC257 21/Mo 30/Tu

Seamlessly integrates with concrete, clay, or ceramic roof tiles, preserving classic aesthetics with an almost invisible appearance while generating clean solar power. Ideal for buildings with traditional architecture. Each BIPV module replaces six traditional roof tiles, ensuring seamless almost invisible transition.

Peak Power

105_{Wp}
~185 W/m²



The Beauty of Doing More

Hassel Free Three-Component System

BIPV module, Mounting clamp & Protective L-profile.

FAST & Effective Installation

Similar to standard roofing, no structural strain.

Invisible & Aesthetic

Batten-mounted system that interlocks with 11 types of traditional tiles.

Architectural Compatibility

Suitable for heritage and design-sensitive zones.

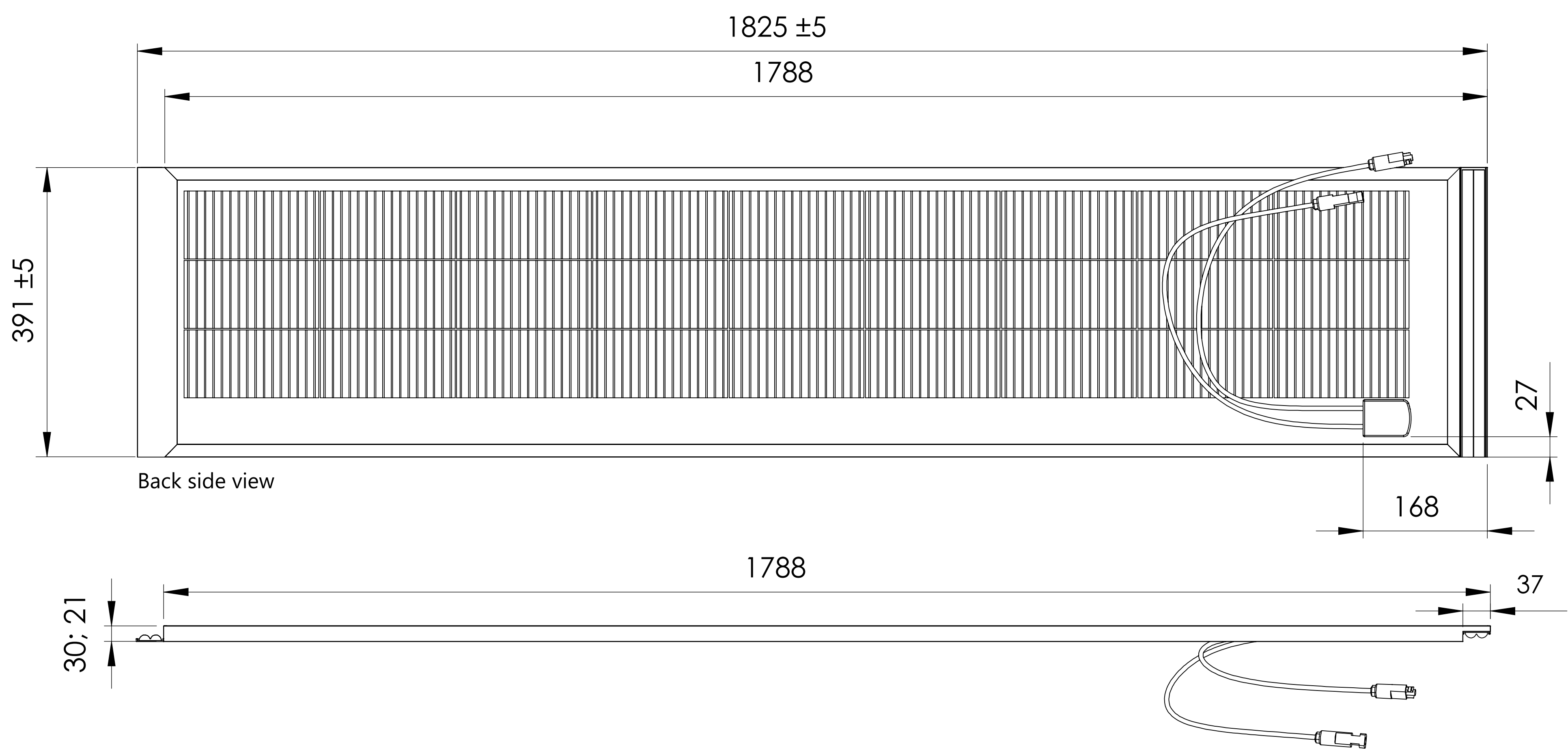
Regulation-Ready

Complies with energy and solar mandates for new builds or retrofits.

Prefab-Friendly

Optimized for scalable, uniform construction workflows.





ELECTRICAL DATA

BIPV Module Peak Power (P_{max})	105 Wp ~185 W/m ²
Cells	27x Monocrystal Half-Cut N-type Bifacial 182x91mm
BIPV Module Efficiency	15.2 %
Maximum Reverse Current (I_R)	15 A
Maximum System Voltage (V)	1000 V
Open Circuit Voltage (V_{oc})	19.62 V
Short Circuit Current (I_{sc})	6.53 A
Maximum Power Voltage (V_{mpp})	17.54 V
Maximum Power Current (I_{mpp})	6.01 A
Number of Bypass Diodes	1

WORKING CONDITIONS

Operating Temperature	-40°C to +85°C
Mechanical Loads (design load)	Snow: 5400 Pa (~550 kg/m ²) Wind: 2400 Pa (~224 kg/m ²)
Impact Resistance	HW 3 hailstones Ø 25 mm at 23 m/s (83 km/h)
Minimum Roof Slope	14 degrees

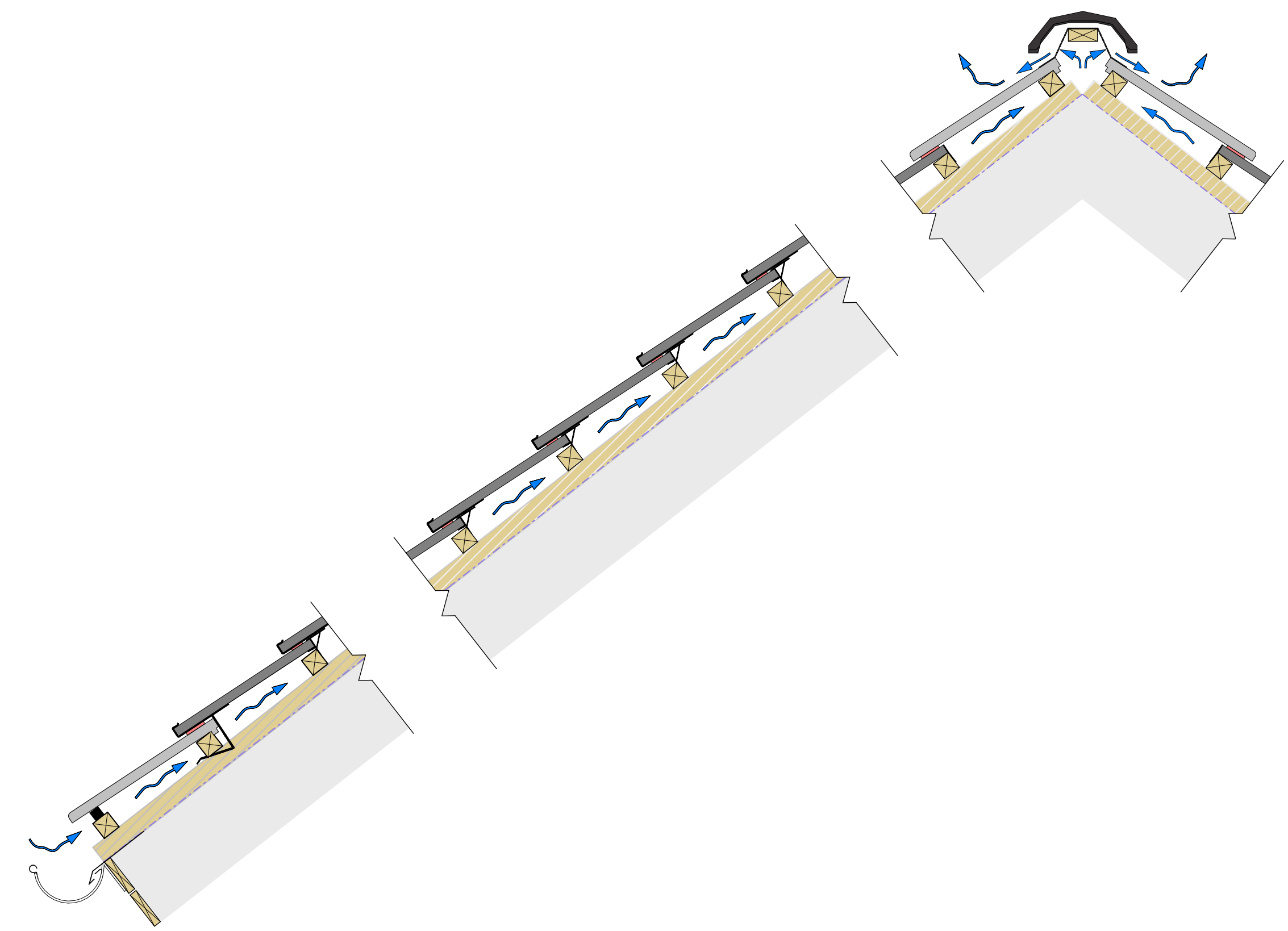


MECHANICAL SPECIFICATIONS

External Dimensions	L: 1825 x W: 391 ±5mm H: 30; 21mm (Mo; Tu)
Visible Area	L: 1788 x W: 308-315 mm ~0.55 m ²
Weight	~9.7 kg ~14 kg/m ²
Glass	Front - 2.0 mm solar glass with ARC Back - 2.0 mm heat strengthened glass
Frame	Anodized Aluminum frame (Black, RAL9005)
Junction Box	SY-898: IP-68, Class-II, DC-1500V
Junction Box Cable	60 cm; 4.0mm ²
Electrical Connector	Stäubli MC4 Evo (PV-KBT4/6II-UR; PV-KST4/6II-UR)
Performance Warranty	25-years, on the 80% of the min. performance
Product Warranty	20-years, >40-years roofing lifespan
Packaging	Tu: 80 pcs / Mo: 100 pcs per pallet; 1950 x 1100 mm
Designed & Assembled in	Estonia, European Union (EU)

PATENTS, CERTIFICATIONS & STANDARDS

Patents	EP3319228A1 by Solarstone
Fire Class Certification	EN 13501-2018: Broof (t1) EN 13501-2018: Broof (t2)
Wind Driven Rain	CEN/TR 15601:2012: Class B
EN Directives	EN IEC 61730: Safety Qualification EN IEC 61215: Design Qualification



Member of:



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STR21MO105WC25 | STR30TU105WC25
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IMPORANT

Please read safety and installation instructions before using the product.
Use only with inverters with Arc-Fault Circuit Interrupter (AFCI).
Use with underlayment membranes designed for PV panel installations. These must be watertight, UV-resistant, and suitable for a temperature range of -40°C to +120°C (e.g., Riwega USB Protector Head FH 240 or Isola Iso-D Xtra Nordic, or any membrane conforming to EN 13859-1:2014).