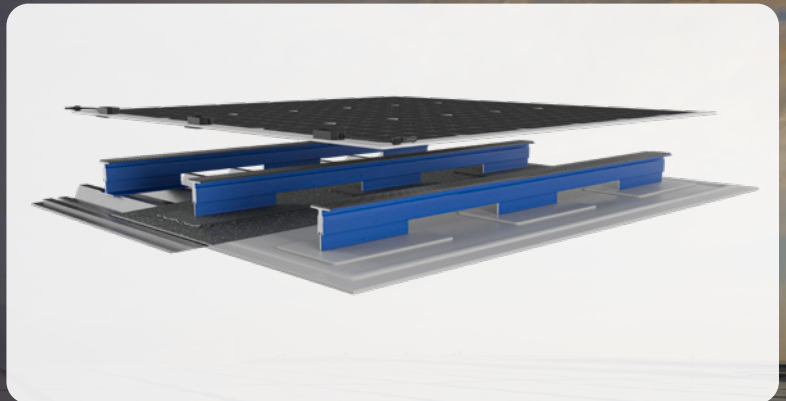


## CompleteKit System Data Sheet

The world's first clip-on, clip off  
ultra lightweight solar system

Specifically designed for load-restricted  
structures of new and existing commercial  
and industrial buildings.



Flat roofs



Pitched roofs



Curved roofs



Facades



Historical buildings



Carport



SolarClip® | CompleteKit  
for Metal Roofs



SolarClip® | CompleteKit  
for Bitumen Roofs



SolarClip® | CompleteKit  
for Membrane Roofs



### LIGHTWEIGHT SOLAR

System weight (PV  
module + substructure)  
starting at: 4 kg/m<sup>2</sup>

PV module efficiency:  
22.7–23.4 %



### MULTY SURFACE

Roofs: Metal, bitumen  
and membrane

Metal facades,  
containers, curved  
rooftops

No drilling, no  
permanent adhesives



### FAST INSTALLATION

Up to 4x faster than  
traditional solar

Only 30 minutes  
per module

Pre-assembled:  
reduce time and errors



### RELIABLE

210 km/h wind  
resistance (Category 4  
Hurricane Wind Scale)

Hail strike and micro-  
cracking resistance



### WARRANTY

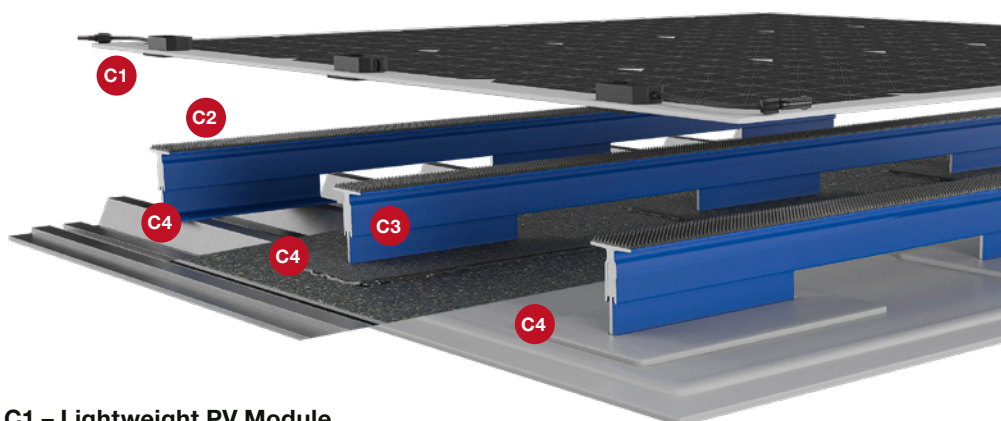
15 years  
combined system

25 years  
power performance



# System Components

The SolarClip® | CompleteKit is a lightweight solar substructure system. A modular, detachable photovoltaic (PV) mounting solution designed for integration into building envelopes (roofs & facades).



C1



## C1 – Lightweight PV Module

- Module agnostic solution. We offer light flexible (560W) and light rigid (520W) modules
- Ensures fast, reliable fixation

C2



## C2 – Hook & Loop Fixation

- Provides mechanical buffer for thermal length changes, expansion joints and material deformation

C3



## C3 – Metal Click System

- Our unique, patented click system for strong engagement
- Ventilation and water retreat guarantee (6.1 cm clearance)
- Panels are mounted without drilling or direct gluing to building surfaces
- Two attachment modes:
  - Vertical click-in (full engagement, locked)
  - Horizontal sliding (controlled detachment)

C4



## C4 – Fix Patches

- Surface-specific patches for membrane, bitumen and metal surfaces
- Attached using welding, heat, or adhesion – becomes a monolithic element with the building surface
- No drilling required – your roof is intact

Adhesives



## Adhesives

- A broad range of adhesives compatible with multiple surfaces and PV modules ensure durable bonding
- Easily removable for fully reversible installation
- Fully compliant with building regulations

## Technical Features & Advantages

- **Weight:** Starting at 4 kg/m<sup>2</sup> (including substructure)
- **Installation Time:** 30 min per module (vs. 2+ hours traditional)
- **Wind Resistance:** Tested at 210 km/h
- **Water Drainage:** ≥ 6 cm clearance ensures compliance with roof water management requirements
- **Roof Integrity:** No drilling, no adhesives directly on roof, no structural damage
- **Modularity:** Pre-assembled modules reduce on-site labor and human error
- **Reversibility:** Panels detachable without damaging roof or facade surfaces
- **Thermal Compensation:** Built-in tolerance for expansion and deformation

## Installation & Handling

- Delivered as a pre-fabricated system package from one source
- Modules arrive pre-assembled with integrated substructures
- Installation steps:
  1. Prepare fixation patches on building envelope
  2. Position and secure secondary substructure
  3. Click-in lightweight PV modules via primary fixation system
  4. Verify acoustic “click” signal for full engagement
- Detachment by horizontal sliding of the click-fixation system

## Applications

- **Rooftops with low load capacity**
- **Facade integration** (vertical installations)
- **Temporary/leased buildings** (removable without damage)
- **Multi-surface adaptability** (membranes, composites, metals)

## Technical Specifications (Summary)

| Parameter                   | Specification                               |
|-----------------------------|---------------------------------------------|
| System Type                 | Lightweight PV mounting system              |
| Weight (incl. substructure) | Starting at 4 kg/m <sup>2</sup>             |
| Fixation Type               | Clip-on/clip-off, reversible                |
| Substructure                | Dual detachable (primary + secondary)       |
| Water Drainage Clearance    | ≥ 6.1 cm                                    |
| Wind Resistance             | Up to 210 km/h                              |
| Roof Integrity              | No drilling, no adhesives on roof           |
| Modularity                  | Pre-fabricated, pre-assembled, scalable     |
| Compatibility               | Module-agnostic (after test validation)     |
| Installation Time           | 30 minutes per module (including logistics) |

## Compliance & Quality

- Designed to meet EU building & PV safety standards
- Adhesives and materials selected per local regulatory recommendations
- Automotive-grade components for structural reliability
- Quality assurance: all elements supplied from one source with full compatibility guarantee

SolarClip® | CompleteKit  
for Metal Roofs



SolarClip® | CompleteKit  
for Bitumen Roofs



SolarClip® | CompleteKit  
for Membrane Roofs



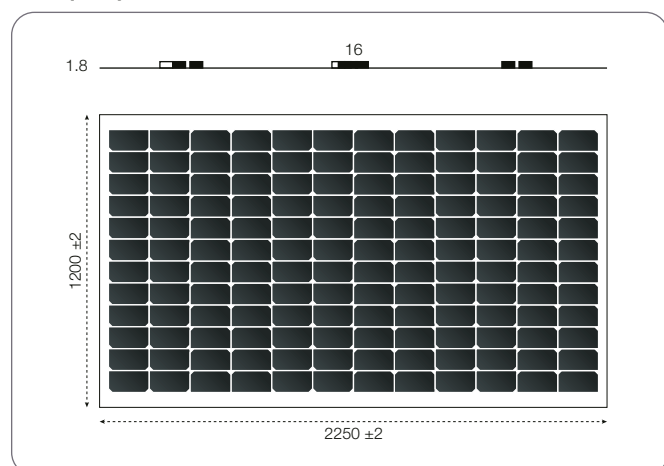
# SolarClip® | Flex 560

SC-F-560-TN-ZK-WBC

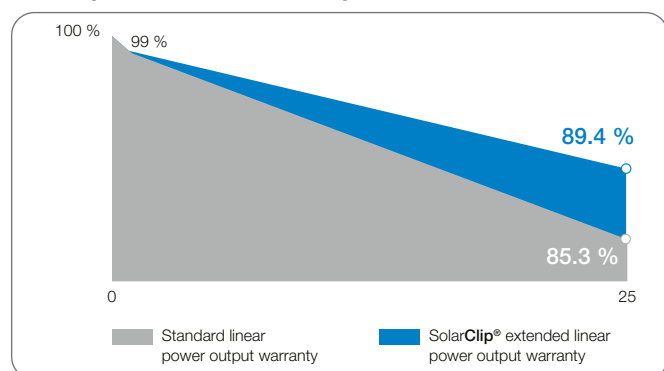
Powered by ZKFN

Flexible yet durable ultra-light panels suitable for multiple types of roofs and surfaces including curved roofs, BIPV facades, container and standalone installations.

## Size (mm)



## Linear performance warranty



## Electrical performance parameters (STC\*)

| Specification           |        |     |               |
|-------------------------|--------|-----|---------------|
| Max-Power               | PMPP   | [W] | 560           |
| Power Tolerance         | 0~+3 % | [W] | 0~5 w         |
| Max-Power Voltage       | VMPP   | [V] | 45.29         |
| Max-Power Current       | IMPP   | [A] | 12.37         |
| Open-Circuit Voltage    | Voc    | [V] | 53.05         |
| Short-Circuit Current   | Isc    | [A] | 12.96         |
| Max. system voltage     | IEC/UL | [V] | 1500V DC(IEC) |
| Max. series fuse rating |        | [A] | 25            |

\* Irradiance=1000 W/m², Module temperature=25°C, AM=1.5

## Temperature coefficient

| Specification                   |        |  |        |
|---------------------------------|--------|--|--------|
| Temperature-coefficient of PMPP | [%/°C] |  | -0.29  |
| Temperature-coefficient of Voc  | [%/°C] |  | -0.26  |
| Temperature-coefficient of Isc  | [%/°C] |  | 0.045  |
| NOCT                            | °C     |  | 45±2°C |

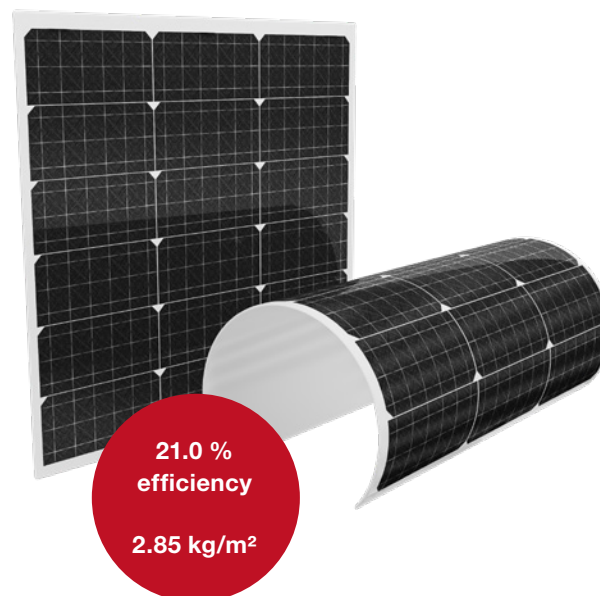
## Electrical performance parameters (NMOT \*)

| Specification/Model   |      |     |        |
|-----------------------|------|-----|--------|
| Max-Power             | PMPP | [W] | 421.68 |
| Max-Power Voltage     | VMPP | [V] | 42.44  |
| Max-Power Current     | IMPP | [A] | 9.95   |
| Open-Circuit Voltage  | Voc  | [V] | 50.40  |
| Short-Circuit Current | Isc  | [A] | 10.46  |

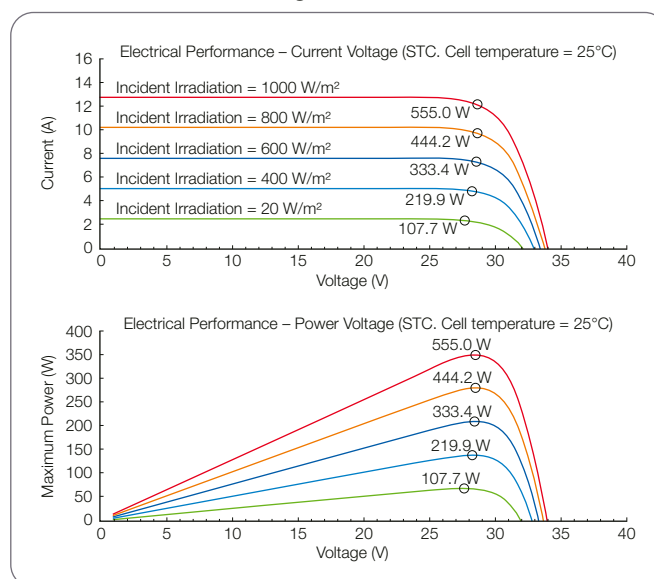
\* Irradiance=800 W/m², Ambient temperature=20°C, Wind speed=1 m/s

## Mechanical parameters

| Specification   |                                    |
|-----------------|------------------------------------|
| Cell Type       | Topcon 182.2 mm × 91.87 mm         |
| Size            | 2250 × 1200 × 1.8 mm               |
| Thickness       | 1.8 mm (junction box not included) |
| Weight          | 7.6 kg (2.8 kg/m²) ± 2 %           |
| Connector       | MC4 Compatible                     |
| Junction-box    | Triad Junction box IP68            |
| Backboard color | White                              |



## Curve characteristic diagram



## Application parameters

| Specification               |                               |
|-----------------------------|-------------------------------|
| Max. system voltage         | DC 1500 V                     |
| Power Tolerance             | 0~+5 W                        |
| Operating temperature range | -40°C~+85°C                   |
| Max. series fuse rating     | 25 A                          |
| Mechanical Load             | Front 5400 Pa<br>Back 2400 Pa |

## Package

| Transportation   | Container size | Quantity (PCS) | Quantity (per pallet) |
|------------------|----------------|----------------|-----------------------|
| Container        | 40' HQ         | 1260           | 70                    |
| Platform Trailer | 13 m           | 1400           | 70                    |
| Platform Trailer | 17.5 m         | 1960           | 70                    |

## Quality Assurance

| Certification |              |
|---------------|--------------|
| IEC61215      | IEC61730     |
| ISO9001:2015  | CE compliant |

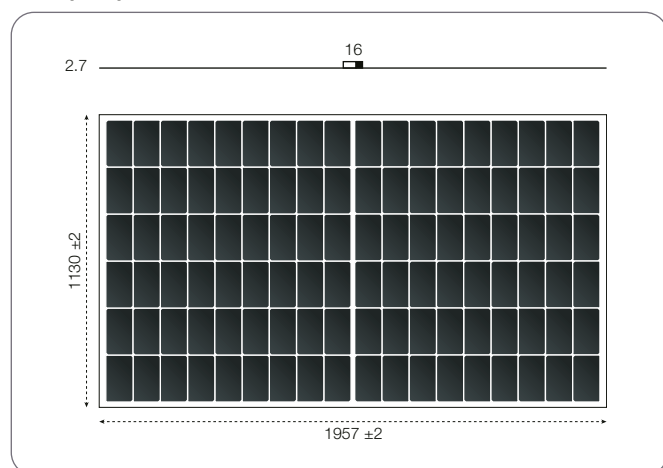
# SolarClip® | Rigid 520

SC-R-520-TN-ZK-WBC

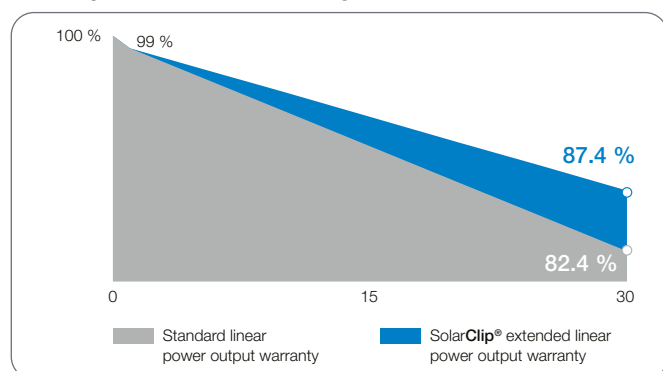
Powered by ZKFN

Light rigid solar panels are tough and durable – even walkable without damage – ideal for load-restricted roof applications.

## Size (mm)



## Linear performance warranty



## Electrical performance parameters (STC\*)

| Specification           |        |     |               |
|-------------------------|--------|-----|---------------|
| Max-Power               | PMPP   | [W] | 520           |
| Power Tolerance         | 0~+3 % | [W] | 0~5 w         |
| Max-Power Voltage       | VMPP   | [V] | 33.79         |
| Max-Power Current       | IMPP   | [A] | 15.4          |
| Open-Circuit Voltage    | Voc    | [V] | 39.78         |
| Short-Circuit Current   | Isc    | [A] | 15.84         |
| Max. system voltage     | IEC/UL | [V] | 1500V DC(IEC) |
| Max. series fuse rating |        | [A] | 25            |

\* Irradiance=1000 W/m², Module temperature=25°C, AM=1.5

## Temperature coefficient

| Specification                   |        |        |
|---------------------------------|--------|--------|
| Temperature-coefficient of PMPP | [%/°C] | -0.33  |
| Temperature-coefficient of Voc  | [%/°C] | -0.27  |
| Temperature-coefficient of Isc  | [%/°C] | 0.045  |
| NOCT                            | °C     | 45±2°C |

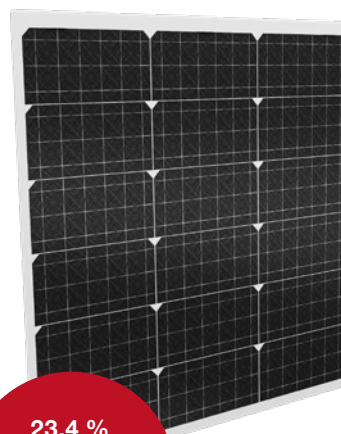
## Electrical performance parameters (NMOT \*)

| Specification/Model   |      |     |        |
|-----------------------|------|-----|--------|
| Max-Power             | PMPP | [W] | 400.68 |
| Max-Power Voltage     | VMPP | [V] | 27.03  |
| Max-Power Current     | IMPP | [A] | 14.48  |
| Open-Circuit Voltage  | Voc  | [V] | 32.22  |
| Short-Circuit Current | Isc  | [A] | 15.05  |

\* Irradiance=800 W/m², Ambient temperature=20°C, Wind speed=1 m/s

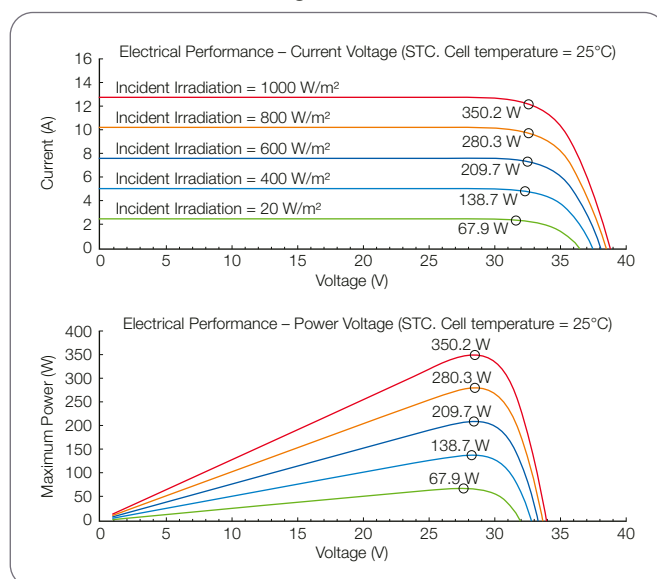
## Mechanical parameters

| Specification   |                                     |
|-----------------|-------------------------------------|
| Cell Type       | Topcon 182.3 mm × 105 mm            |
| Size            | 1957 × 1130 × 2.7 mm (w/o J-box)    |
| Glass           | 1.6 mm (heat-strengthened glass)    |
| Weight          | 13.0 kg (5.9 kg/m²) ±2 %            |
| Connector       | 4 mm², Wire length 400 mm (custom.) |
| Junction-box    | IP68 / MC4 Compatible               |
| Backboard color | White                               |



23.4 %  
efficiency  
5.9 kg/m²

## Curve characteristic diagram



## Application parameters

| Specification               |                               |
|-----------------------------|-------------------------------|
| Max. system voltage         | DC 1500 V                     |
| Power Tolerance             | 0~+5 W                        |
| Operating temperature range | -40°C~+85°C                   |
| Max. series fuse rating     | 25 A                          |
| Mechanical Load             | Front 3600 Pa<br>Back 2400 Pa |

## Package

| Transportation   | Container size | Quantity (PCS) | Quantity (per pallet) |
|------------------|----------------|----------------|-----------------------|
| Container        | 40' HQ         | 1080           | 60                    |
| Platform Trailer | 13 m           | 1200           | 60                    |
| Platform Trailer | 17.5 m         | 1680           | 60                    |

## Quality Assurance

| Certification |              |
|---------------|--------------|
| IEC61215      | IEC61730     |
| ISO9001:2015  | CE compliant |

# The Future of Lightweight Solar Solutions



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