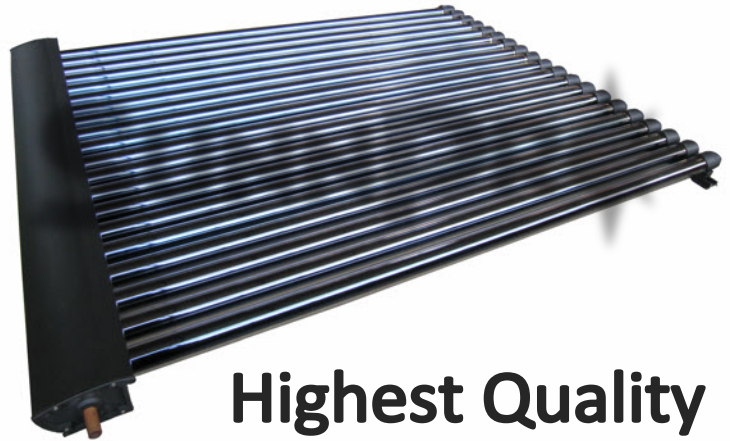


SUNNPRO SP-PLUS SERIES 10/15/20/30

SUNNPRO PLUS

A POWERFUL EASY FIX SOLAR COLLECTOR WITH IMPECCABLE QUALITY & REPUTATION. SIMPLE.

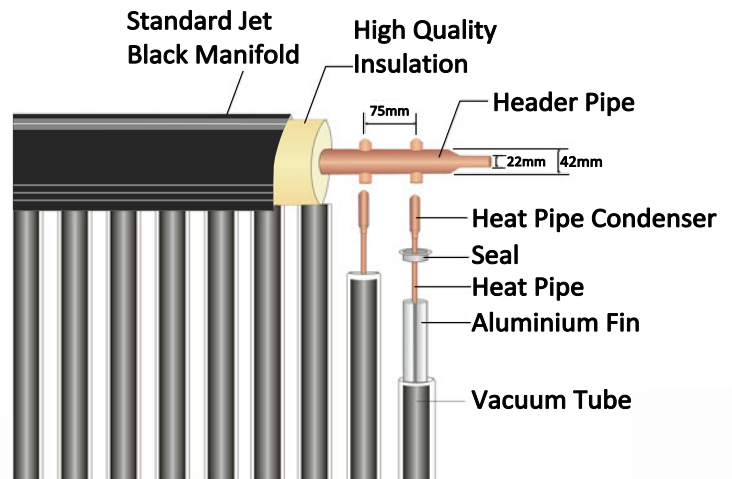
The all new **SUNNPRO PLUS** series offers the highest performing vacuum tubes with a low profile matt-black manifold and easy install black adjustable frame work. The all aluminium construction made from anti corrosive aluminium is both light weight and durable in all weather conditions. With a zero lost efficiency of $\eta_{0a} = 0.735$ (based on aperture) and an ultra low heat lost co-efficient of $^*1a = 1.349 \text{ W/m}^2\text{K}$, the SunnPro-Plus series is simply one of the highest performing collectors on the market today.



Highest Quality

WHY THE SUNNPRO PLUS SERIES:

- ONE OF THE HIGHEST PERFORMING COLLECTORS ON THE MARKET TODAY
Offering Fantastic Return on Investment
- SLIM MATT BLACK MANIFOLD WITH OPTIMAL INSULATION
Aesthetically Pleasing Yet Discreet
- EASY INSTALL FRAME - ADJUSTABLE POSITION
Quick Installation Time
- ALUMINIUM CONSTRUCTION
Durable Long Life
- TRIPLE LAYER VACUUM TUBES
Giving You Higher Output across many Light Spectrums
- LOW PRESSURE DROP MANIFOLD
Suitable For Domestic And Commercial Installations
- NO MOVING PARTS OR RUBBER SEALS
Durable Long Life
- LIGHT WEIGHT
Uncompromisingly Durable



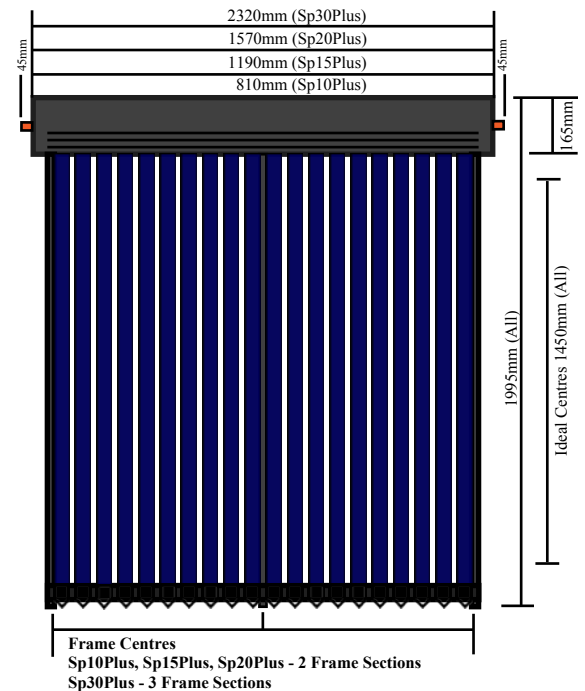
The Certification Mark for Onsite Sustainable Energy Technologies

DIN CERTCO

Anerkanntes Prüflaboratorium

THE ALL NEW
PLUS SERIES
FROM SUNNPRO.

MATERIALS	
Glass Tube	High Quality Borosilicate Glass
Tube Size (mm)	58 x 1800
Selective Coating	AIN/AIN-SS/CU (Three UP Layers)
Heat Pipe Material	TU1 Copper
Exchanger Material	Copper
Heat Pipe Diameter (mm)	Condenser: 24mm / Body 8mm
Manifold Header Pipe (mm)	TP2 Copper, Diameter 35mm
Manifold Casing	Anodized Aluminum Alloy
Insulation	Rock Wool with Polyurethane Foam
Sealing Material	Silicone Rubber
Tube Holder	UV Stabilized Nylon
Sealing Material	Silicone Rubber
Contact Sheets	Aluminum Finish
Frame	Aluminium Alloy
Support Stand	Aluminium Alloy
Inlet/Outlet Connection	22mm copper



SIZING

MODEL NAME	SP-PLUS 10	SP-PLUS 15	SP-PLUS 20	SP-PLUS 30
Gross size (mm) (W x L)	810mm x 1995mm	1190mm x 1995mm	1570mm x 1995mm	2320mm x 1995mm
Flat roof installation size (mm)	N/A	1420 x 1235 x 1420	1420 x 1610 x 1420	1420 x 1610 x 1420
Aperture area (m ²)	0.94m ²	1.397m ²	1.87m ²	2.806m ²
Absorber area (m ²)	0.82m ²	1.199m ²	1.603m ²	2.448m ²
Dry Weight (kg)	36kg	51kg	70kg	103kg
Fluid Volume (L)	0.75Ltr	1Ltr	1.37Ltr	1.9Ltr

TECHNICAL

MODEL NAME	SP-PLUS 10	SP-PLUS 15	SP-PLUS 20	SP-PLUS 30
Number of Tubes	10 Tubes	15 Tubes	20 Tubes	30 Tubes
Heat Transfer Medium	pure water/glycol	pure water/glycol	pure water/glycol	pure water/glycol
Working Pressure	6 bar	6 bar	6 bar	6 bar
Max Testing Pressure	12 bar	12 bar	12 bar	12 bar
Max Working Temperature	280°C	280°C	280°C	280°C
Zero Loss Efficiency η° (on Aperture)	72.6% (0.726)	73.5% (0.735)	73.5% (0.735)	73.5% (0.735)
Heat Loss Coefficient α_1	1.668W/(m ² K)	1.349W/(m ² K)	1.349W/(m ² K)	1.349W/(m ² K)
Recommended Tilt	-15° - 75°	-15° - 75°	-15° - 75°	-15° - 75°

**SUNNPRO OFFERS
TECHNOLOGY WITH CONFIDENCE.
INTERNATIONALLY.
EVERYDAY.**

Power Maximum Power Output Per Collector Module (based on SP-PLUS 30)

t_m t_a (K)	400 (W/m ²)	700 (W/m ²)	1000 (W/m ²)
0	825	1444	2062
10	783	1402	2020
30	673	1292	1911
50	530	1148	1767
70	352	971	1590

