

SolarMat Solar Panels. CPC and Flat Panel Collectors.

CPC Collectors



- Vacuum tube collector - designed according to the thermos flask principle.
- Excellent solar yield as a result of minimal heat loss and greater output.
- Long service life as a result of excellent quality.
- An additional mirror behind the tubes increases energy yield particularly in the transition phase.
- Gross area amounts to 2.69 (14 Tube) or 3.95 sq m (21 Tube).
- Simple and cost-saving installation, as the collector is pre-assembled on an installation frame.
- A choice of collector area connections connected on one side or both sides.
- Can be combined with all MHG boilers
- Keymark Approved

Flat Panel Collectors



- High-performance solar heating systems for installation in all new and retrofit applications.
- Optimally matched complete system, consisting of high-performance flat or tubular collectors, with solar unit, controller, collector connection and installation kit plus accessories.
- Can be used in combination with all heating systems.
- Top Quality, "Made in Germany".
- Extremely high energy cost savings as a result of powerful collectors with full absorption.
- Optimised solar yield as a result of mineral wool insulation at the sides.
- Extremely weather-resistant, hail-proof and durable as a result of special aluminium frames and a cover made of 4mm, extra-strong solar safety glass.
- Keymark Approved

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Type	Units	Solarmat FL/DH	Solarmat FL/EM	Solarmat CPC 14	Solarmat CPC 21
External Dimensions	mm	1870 x 1150 x 95	1870 x 1150 x 75	1650 x 1630 x 140	1650 x 2390 x 140
Gross Surface Area	M ²	2.18	2.15	2.69	3.95
Absorber Coating		Sunselect	Sunselect	Aluminum-Nitrid	Aluminum-Nitrid
Absorption Factor	%	95	95	92	92
Optical Efficiency	%	80.10	77.60	65	65
Weight	Kg	38	37	50	65
Emission Factor	%	5	5	6	6
Loss Factor	W/m ² K	K ₁ = 3.65 K ₂ = 0.0169	K ₁ = 3.95 K ₂ = 0.0165	K ₁ = 1.016 K ₂ = 0.002	K ₁ = 1.016 K ₂ = 0.002
Max Temperature	°C	203	191	265	265
Fluid Content	L	1.13	1.73	1.1	1.7
Effective Absorption Area	M ²	2.0	2.0	2.2	3.3
Number of Tubes		Double Harp	Meander	14	21
Collector Type		Flat Collector	Flat Collector	Compound Parabolic Concentrator	Compound Parabolic Concentrator
Collector Connections		½" Flat Faced	½" Flat Faced	12mm Copper	12mm Copper
Construction Material		Aluminum Profiles, 50mm Mineral Insulation	Aluminum Profiles, 30mm Mineral Insulation	Copper Core, Aluminum Collector	Copper Core, Aluminum Collector
Collector Inclination		>20°	>20°	>15°	>15°
Glass Specification		Solar Shatter Proof 3.2mm	Solar Shatter Proof 3.2mm	Borosilicate 1.6mm	Borosilicate 1.6mm
Maximum Pressure	Bar	10	10	10	10
Accreditations/Test Certification		ISFHE GERMAN INSTITUTE FOR STANDARDISATION EN 12975-2:2000, Blue Angel	ISFHE GERMAN INSTITUTE FOR STANDARDISATION EN 12975-2:2000, Blue Angel	Stuttgart ITW, Test report No. 99 Col148, Design licensing No. 08-228-743	Stuttgart ITW, Test report No. 99 Col148, Design licensing No. 08-228-743
Support/Brackets		Collector yield kWh / m ² / a > 525 RAL-UZ 73 Compliant	Collector yield kWh / m ² / a > 525 RAL-UZ 73 Compliant	Collector yield kWh / m ² / a > 525 RAL-UZ 73 Compliant	Collector yield kWh / m ² / a > 525 RAL-UZ 73 Compliant
Keymark #		011-75367 F	011-75366 F	011-751173 R	011-751173 R

The following matched items are also available to ensure that the solar system operates at its peak performance.

- Controls.
- Mounting systems.
- Pumping stations.
- Pressure vessels.
- Calorifiers.
- Solar fluid.

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