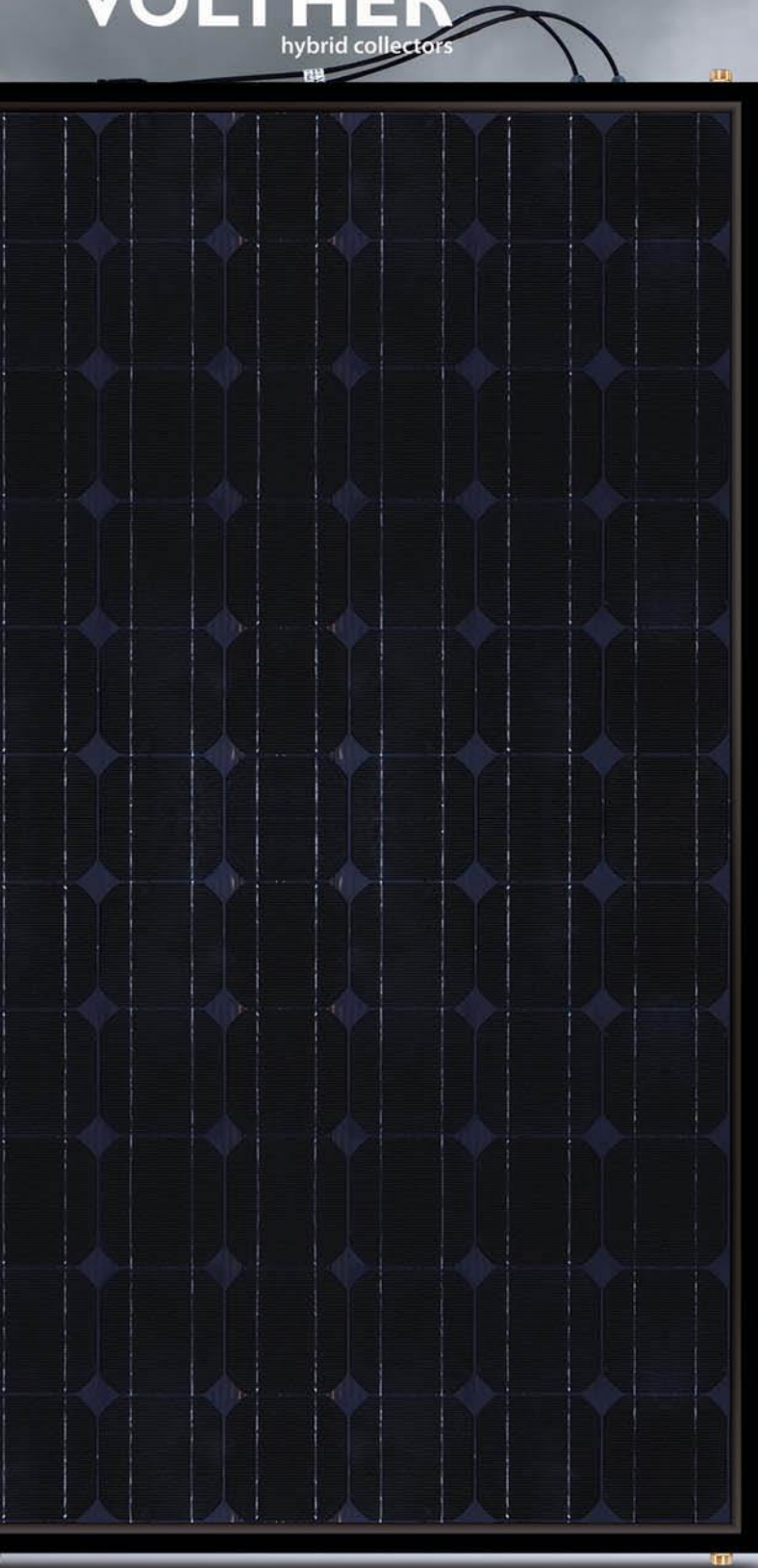


**VOLTHER**  
hybrid collectors



# Volther Hybrid Collectors

## PV-T Hybrid Collectors

In these systems, production of both electricity and hot water is done simultaneously. In PV modules, as the module temperature increases, the efficiency of the module drops down. In hybrid modules, the module heat is absorbed in order to produce hot water. In this way, PV efficiency is optimized as the heat is transferred into water for hot water production.



**SOLIMPEKS**

Solar Energy Corp. | [www.solimpeks.com](http://www.solimpeks.com)

	Powervolt	Powertherm
Dimensions	828x1601x90 mm	870x1640x105mm
Weight	24,4 kg.	34.4 Kg
Liquid Content	1.2 Lt	1,2 Lt
Absorber panel	Mono-Crystalline	Mono-Crystalline
Number of cells	72	72
Cells Dimensions	125x125 mm	125x125mm
WP(W) Nominal power	190	175
Imp(A) Nominal current	5.2A	5.2A
Isc(V) short circuit current	5.6A	5.6A
Vmp(V) Nominal current	36.5V	36.5V
Voc(V) Open circuit voltage	45.2V	45.2V
Heat exchanger	Copper strip	Copper strip
Internal Piping	Copper	Copper
Flow (L/H)	65 l/h	65 l/h
Test pressure Bar	20	20
Operating Pressure Bar	10	10
Cover Glass	PV Glass	Extra Solar Glass
Sealing	EPDM&Silicon	EPDM & Silisyum
Maximum Temperature	<110 °C	<110 °C
Housing	Embossed Aluminium	Embossed Aluminium
Rear side	Aluminium	Aluminium
Product warranty	10 years	10 years
Quality Guaranty	90% < 10 years	90% < 10 years
Efficiency Guaranty	80% < 20 years	90% < 20 years

Radiation $\Delta T = 10^{\circ}\text{C}$	1000 $Q = 55 \text{ l/h/m}^2$	W/m <sup>2</sup>	$\eta$
T out	Wth/m <sup>2</sup>	We/m <sup>2</sup>	Wth/m <sup>2</sup>
10°C	>680	146,00	>82,0 %
20°C	680	138	81 %
40°C	557	123	68 %
60°C	475	108	58 %
80°C	370	96	46 %

