



ENN's PV-Thermal module combines electricity generation and hot water production in a single solar collector. This hybrid module is the ideal solution where there is limited space for solar installations, and provides a comprehensive solution for domestic hot water, solar heating, air conditioning, and electricity generation, all in one elegant package.

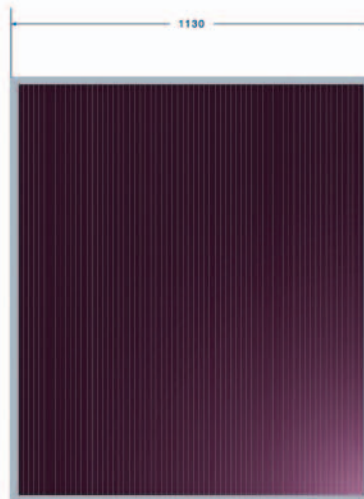
Advantage

- ◆ Produces electricity and hot water from the same module
- ◆ Reduced panel temperature makes for more efficient PV electricity generation
- ◆ Excellent aesthetic appearance for BIPV and BAPV applications

Module	Unit	EST-115-T	EST-120-T
Electrical Data			
Performance at Standard Test Conditions (STC): 1000W/m ² , 25°C, AM 1.5 spectrum			
Nominal Power (Pmax)	Wp	115	120
Open Current Voltage (Voc)	V	140	141
Short Circuit (Isc)	A	1.41	1.42
Max. Power Voltage (Vmpp)	V	103	105
Max. Power Current (Impp)	A	1.12	1.14
Max. System Voltage	V	1000	1000
Mechanical Data			
Length	mm	1330	
Width	mm	1130	
Thickness (excl. pipe)	mm	45	
Thickness (incl. pipe)	mm	85	
Effective Surface	m ²	1.4	
Weight	kg	42	
Liquid Capacity	L	1	
Max. Operating Pressure	Bar	6	
Max. Operating Temperature	°C	-20~+80	
Output Water Temperature	°C	40~50	
Thermal Efficiency of Module	%	55%	
Temperature Coefficient of Pmax	%/°C	-0.28	
Temperature Coefficient of Isc	%/°C	0.1	
Temperature Coefficient of Voc	%/°C	-0.35	
Installation Method		BIPV, BAPV	
Frame Material		Aluminum	

*All ratings +/-3%, unless otherwise specified.

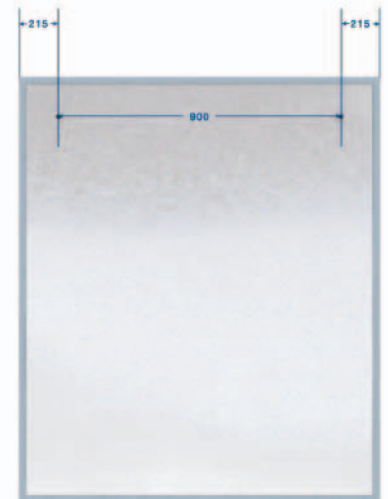
Front view

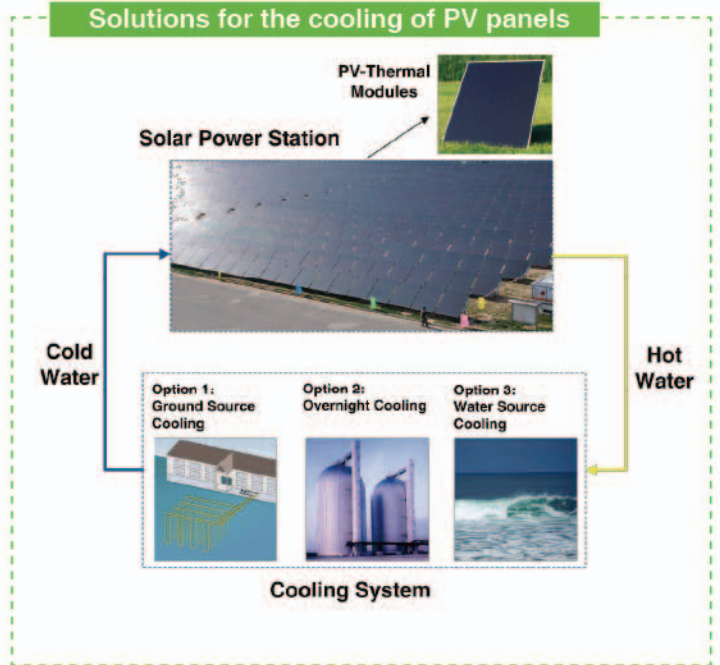
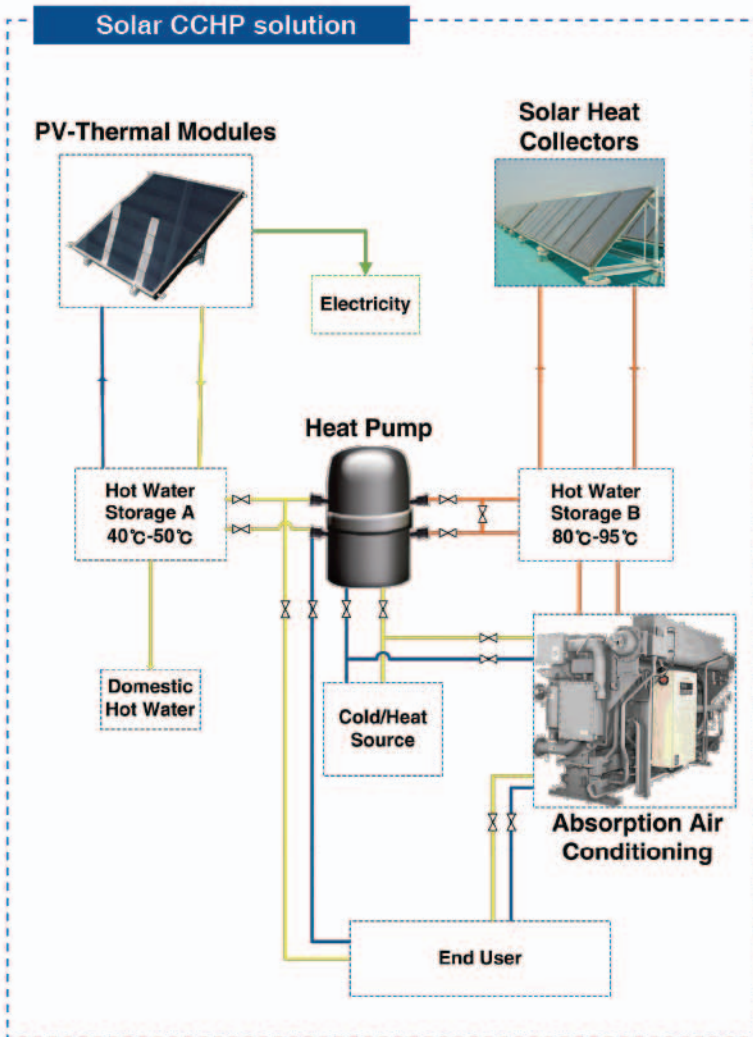


Side view



Back view





↑ Solutions for the cooling of PV panels

The PV generation yield of a solar power installation can be increased by cooling the solar panels. Various methods are available for cooling the panels, depending on the local geographical and environmental situation.

← Solar CCHP solution

Solar combined cooling, heat and power (CCHP) systems, in combination with a heat pump, allow each hybrid solar module to produce heat, provide cooling, and generate electricity. CCHP systems can satisfy dynamic demand from end users for heating, cooling and power generation.

→ Solutions for solar heating and domestic hot water

This solution generates both grid-connected electricity and heat in the form of hot water. The system is equipped with auxiliary heating devices, which guarantee 24/7 operation.

