PORTUGUESE MANUFACTURING
SINCE 1981

Economic Domestic Hot Water

1ST PORTUGUESE BRAND TO OBTAIN
HP KEYMARK
CERTIFICATION

A+
ENERGY EFFICIENCY CLASS

Latest Generation of Solar Technology. Works with sun, wind, rain, and even at night!

HOT WATER AVAILABLE 24 HOURS A DAY

SALINE ENVIRONMENT RESISTANCE

UP TO 3.8 COP WITHOUT SOLAR RADIATION

BUILT-IN 60X60 CM

SAVING UP TO 85%

LATEST GENERATION THERMODYNAMIC SOLAR TECHNOLOGY IN YOUR HOME.

- ENERGIE.PT -

Efficiency & Quality

in Domestic Hot Water Production

PORTUGUESE MANUFACTURING

SAVING **85%** UP TO

Maximum Return on Investment

- Stainless steel cylinder
- Minimum space required at home
- High level of efficiency and ecology
- Quiet operation
- Time scheduling with chrono function
- Easy installation
- Smart photovoltaic function
- Anti-legionella function
- Controller with software in 6 languages + Optional coil
- HP Keymark Certification

Thermodynamic Solar Panel Technology

- Anodized aluminum, with waterproof and flexible paint
- Easy to transport and install, only 8 kg. Dimensions: 2m x 0,8 m
- No glass, rubber or fragile materials
- No overheating and freezing problems
- It can be installed on the roof, wall, garden, etc.
- Panel efficiency does not decrease with age or dirt
- No need for cleaning and humidity resistant
- Estimated lifespan of 25 years
- Passed the corrosion test in a salt fog test- equivalent to 20 years
- Solar Keymark Certification

Solar Performance

Tested and certified according to the most rigorous European standards it has achieved an extraordinary coefficient of performance of 3,8 according to the EN16147. The testing was carried out without solar irradiance, wind or rain. To enhance the real operating performance even more we advise to install the thermodynamic solar pane facing South (North on the southern hemisphere), east or west. Vertically or horizontally on a wall, roof or flat roof, but always on a landscape position.

Solid & Robust

The thermodynamic solar panel is made of anodized aluminum with a special Solokote finish that ensures the unit is robust and long- lasting against corrosion, in particular when exposed to saline and/or aggressive environments. This innovative technical feature allows ENERGIE to provide a 10 year warranty against corrosion, ensuring peace of mind to the end user.

Simple & Ergonomic

The high efficiency of the hot water cylinder is achieved by using a high- density polyurethane foam that ensures a low heat loss rate, being able to keep the water heated for several days in a row even if the unit is turned off.

Sophisticated

The equipment's indoor unit has a stainless steel cylinder, as well as an external condenser. High density injected polyurethane insulation with cathodic protection. The thermodynamic block is equipped with a state-of-the-art compressor, with one of the lowest electrical consumptions on the market.

Latest Generation Technology

Make the right choice when it comes to choosing the most advanced system.

See warranty conditions

Thermodynamic Solar System

Solar Keymark and HP Keymark

Working principle

The evaporation of the fluid that runs inside the closed looped circuit happens on the solar panel by capturing the heat from the sun, wind, rain and surrounding air by natural convection. The heated fluid then travels to the compressor, that will compress the fluid increasing its pressure and also it's temperature. Then it goes to the heat exchanger where where this heat is transferred to the water. After this, an expansion valve will make the pressure and temperature drop to sub-zero values. The fluid travels up to the thermodynamic solar panel and the cycle repeats again.

See warranty conditions

Equipment

No ducts and no fans
No energy-consuming defrost cycles
Super efficient low consumption compressor
No need to install support equipment

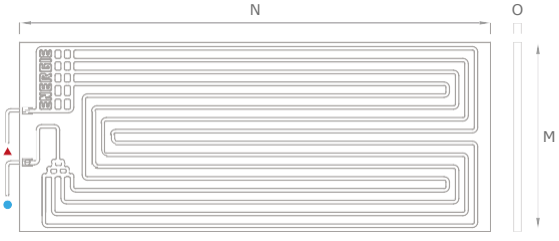
Thermodynamic Panel

Captures heat regardless of weather factors
Primary circuit does not need to dissipate excess heat on hotter day
Easy architectural integration, versatile without visual impact

Did You Know That

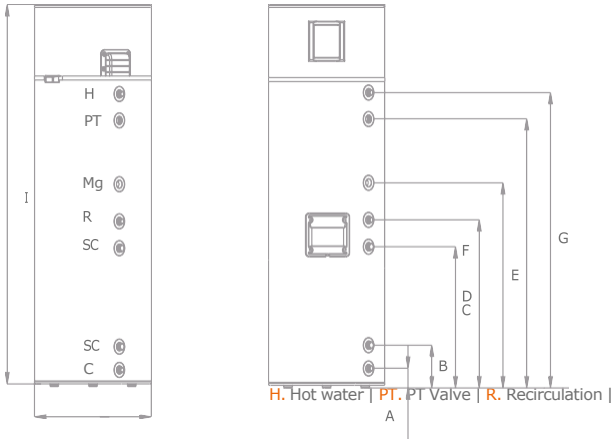
This thermodynamic hot water system has only one component with electrical consumption, which is the super efficient low consumption compressor. Since the capacity to capture heat from the environment is primarily ensured by solar radiation, wind or rain, it is superior to any other equipment intended for the same purpose, the savings are maximum. System maintenance is practically null, and longevity is very high.

Equipment: **Thermodynamic Solar Panel**



▲Suction Line Liquid Line

Equipment: **Storage Water Heater**



H. Hot water | PT. PT Valve | R. Recirculation |

C. Cold Water | Mg. Magnesium anode | Sc. Solar Coil

H

rear connections
300 i / 300 ix

front connections
200I / 200IX /250I /250 IX

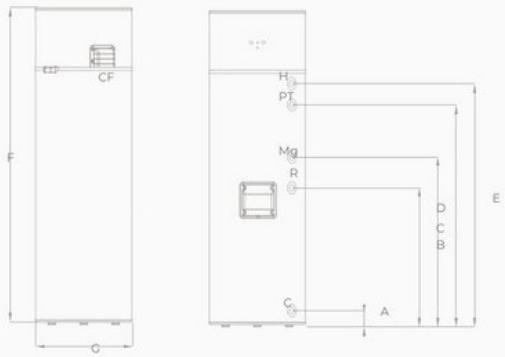
Technical Data - Cylinder & Thermodynamic Block		250i
Net Weight	Kg	68
Volume	L	250
Water Heater	-	Stainless Steel
Cathodic Protection	-	Mg Anode (1"1/4)
Water - Inlet and Outlet		3/4"
Hydraulic Connections PT Value	Pol	1/2"
Recicrulcation		3/4"
Insultaion	-	High-density Polyurethane 50mm
Maximum Working Pressure	bar	7
Maximum Working Temperature	°C	80
Heat Loss (EN12897)	KWh/24	1.01
Absorbed Power (Avg/Max)		350 | 600
Thermal Power	h	1150 | 2100
Electric Backup	W	1500
Refrigerant Fluid / Qt. 1	W	R134a/1100
Piping Material	W	Copper (DHP ISO1337)
Liquid Line | Asp. Line	-/g	1/4" | 3/8"
Power Supply	V/Hz	220 - 240 / Single Phase / 50 ou 60 ₂
Operating Temperatures	°C	-5 | 45
Thermodynamic Solar Panel		
Material	-	Anodized Aluminium Solarcoat
Dimensions (W x H x D)	mm	2000 x 800 x 20
Weight	Kg	8
Performance		
Load Profile	-	XL
Coefficient of Performance (COP)	-	3.8
Energy Efficiency Class	-	A+
Energy Efficiency	-	155
Annual Energy Consumption	KWh/Year	1078
Amount of Useful Water at 40°C	L	349
Interior Sound Level	dB	47

*The amount of fluid must be verified by the installer. In certain cases, it is necessary to adjust the amount of fluid to guarantee the correct functioning of the system. The 60Hz frequency is only available upon order.

** According to EN16147, Delegated Regulation (EU) N°812/2013 and Delegated Regulation (EU) N°814/2013

Dimensions (mm)	250i
A	99
B	840
C	1025
D	1343
E	1475
F	1915
G	850
H	800
I	2000
J	20

Equipment: Storage Water Heater



Equipment: Thermodynamic Solar Panel

Suction Line. Liquid Line

H. Hot water | PT. PT Valve | R. Recirculation
C. Cold Water | Mg. Magnesium anode
CF. Refrigerator Connections L | V