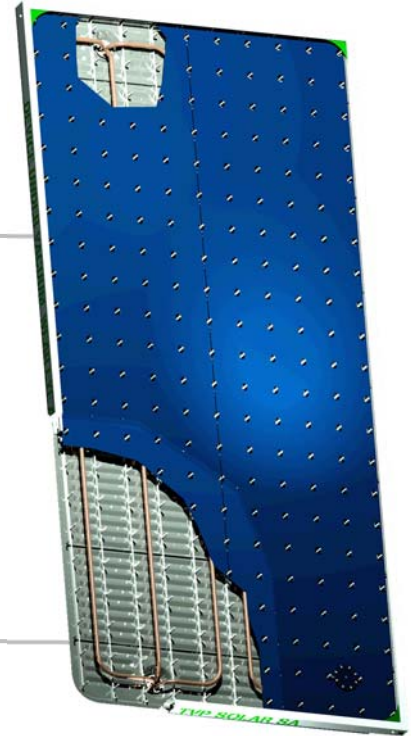


MT-Power: Thermal Applications 100°C To 180°C

Unrivalled performance in any climate condition, without concentration

MT-Power is Thermal Vacuum Power Charged™: revolutionary, high-end, high-vacuum flat solar thermal panel designed as an ideal thermal energy source for large-scale applications between 80°C and 180°C such as: air conditioning, desalination, and process heat.



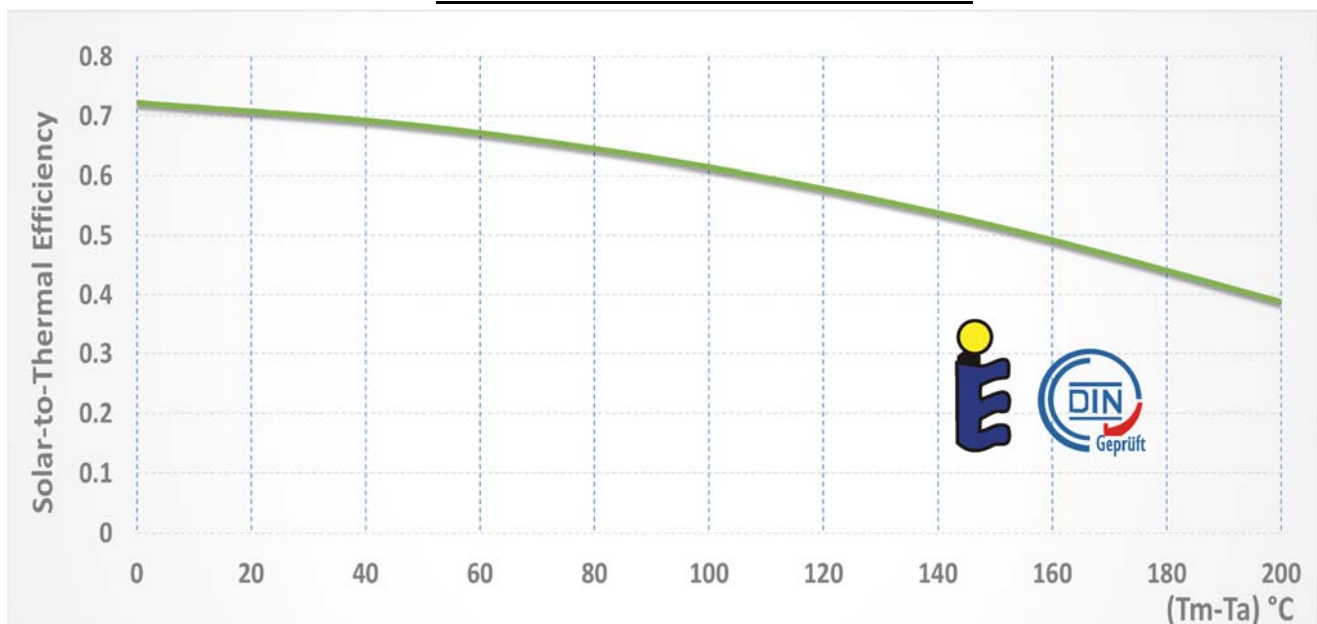
Key FEATURES

- ✓ Designed to operate above 100°C in large-scale deployments
- ✓ Flat for more active surface, high-vacuum for best performance
- ✓ Embedded return HTF flow to maximise deployment scalability
- ✓ Corrosion-proof all-metal casing for any environment
- ✓ Made with materials qualified for long-lasting high-vacuum operation
- ✓ Spot-Check™ to visually verify vacuum insulation
- ✓ 100% recyclable

Key ADVANTAGES

- ✓ **Lowest cost per Watt_(thermal)**
- ✓ **Highest peak performance:** 500 W_{th}/m² at 180°C (T_{amb} = 30°C)
- ✓ **Highest yearly average output:** due to maximum diffuse light capture
- ✓ **Long durability:** no degradation of performance over long-lasting product lifetime
- ✓ **Zero panel maintenance:** no need for precision cleaning and no serviceable mechanical parts
- ✓ **Superior design for solar fields:** minimizes footprint and balance of system, as well as easing installation

MT-Power Performance Curve



MT-Power is the only solar thermal panel with Solar Keymark certification to 200°C

TVP Solar MT-Power Specifications (v4 SK)

<i>Physical Characteristics</i>	
Dimensions	see diagram for details
Unit Gross Area	1.96 m ² 21 sq. ft.
Aperture Area	1.84 m ² 20 sq. ft.
Weight	53 kg 117 lb
Fluid Volume	1.4 L 47 fl. oz.
Heat Absorber-Pipe	Al sheet + Cu pipe
Absorber Coating	Alanod Mirotherm
Back-plate	AISI 441 stainless steel
Glass Coating	Single-sided anti-reflective (interior face)
Connecting Ports	SMS PN16
<i>Operating Conditions</i>	
Stagnation Temperature	302 °C 576 °F
Max. Operating Pressure	16 bar 232 psi
Pressure Drop H ₂ O @ 260 l/h ; 50°C	1.4 kPa 138 mm H ₂ O

MT-Power v4 Solar Keymark-Certified Thermal Performance

Application	Machinery	T _m (°C)	Peak Power
Air Conditioning / Cooling	Double-Effect Absorption Chiller	175	1.1 kW
	Single-Effect Absorption Chiller	90	1.3 kW
Desalination	MED/TVC	150	1.2 kW
	MED, and MSF	80	1.4 kW
Industrial Process Heat	HTF Heater	160	1.1 kW
	Steam Boiler Feedwater	130	1.2 kW
	Dryers / Ovens	110	1.3 kW
	Tank Temperature Control	90	1.3 kW
	District Heating	80	1.4 kW

Built On Thermal Vacuum Power Charged™ Technology

Thermal Vacuum Power Charged™ family of technologies are designed to make, maintain, and inspect the high-vacuum in TVP flat panels, key to the industry-best sun-to-thermal efficiency. Make: innovations in manufacturing process & equipment, as well as materials such as the patented inorganic, flexible glass/metal seal to resist mechanical stresses and contain the vacuum. Maintain: novel use of materials qualified for long-lasting high-vacuum products, and a patented self-regenerating getter pump assembly to preserve high-vacuum insulation and high performance over panel lifetime. Inspect: patented visual verification tool inside TVP panels showing high-vacuum state for easy deployment troubleshooting.

Thermal Vacuum Power Charged™ panels harness the full power of solar thermal technology – providing unrivalled performance for any thermal application in any climate condition, without concentration.

