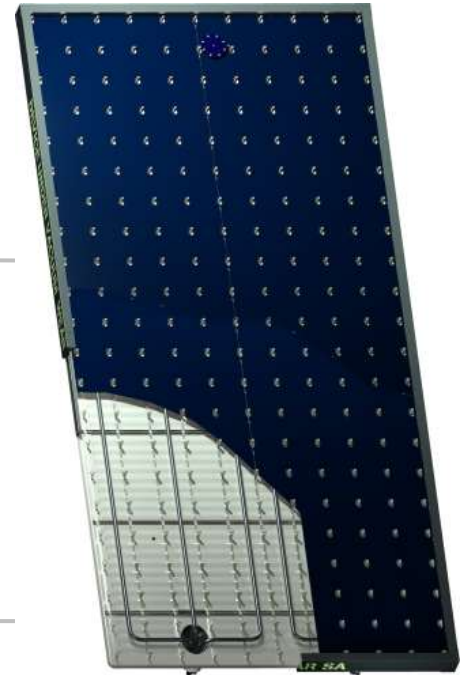


**PRODUCT DATASHEET: MT-Power: For Thermal Applications 100°C To 180°C**  
Unrivalled performance in any climate condition, without concentration

**MT-Power** is Thermal Vacuum Power Charged™: a revolutionary, high-end, high-vacuum flat solar thermal panel designed as an ideal thermal energy source in the medium temperature range (100°C – 180°C) for air conditioning/cooling, desalination and process heat in commercial and industrial applications.



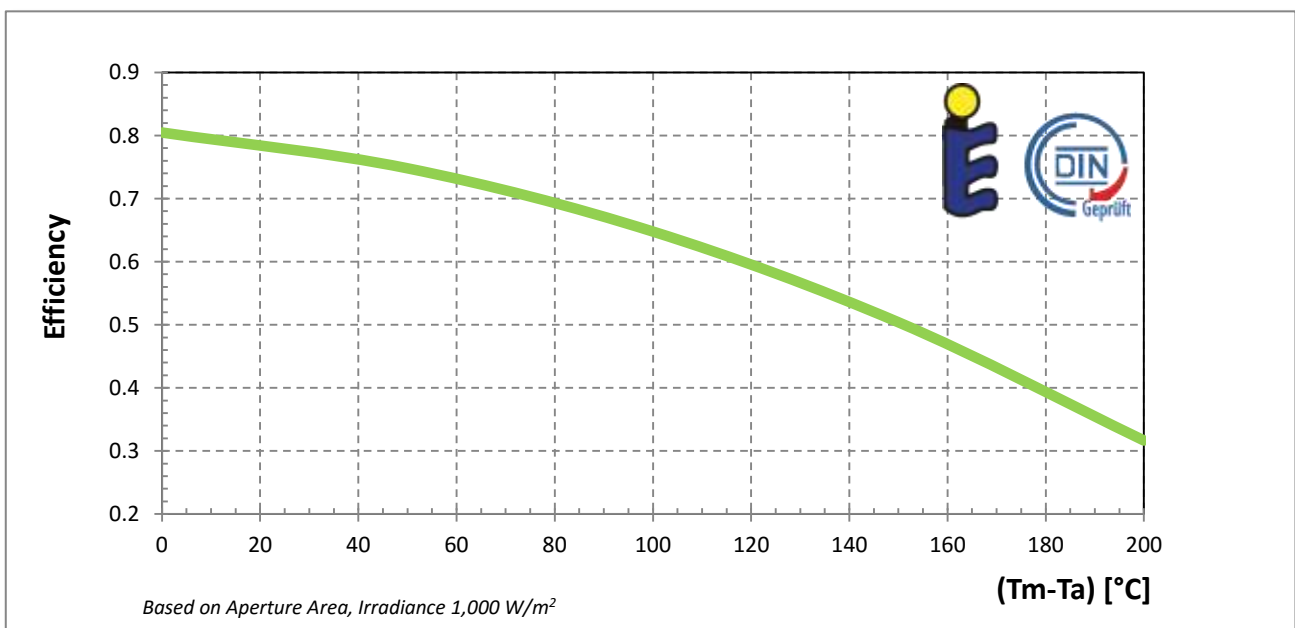
**Key FEATURES**

- ✓ Unique combination of planar layout and high-vacuum insulation
- ✓ Corrosion-proof all-metal casing
- ✓ Embedded return HTF flow under high-vacuum
- ✓ Made with materials qualified for long-lasting high-vacuum operation
- ✓ Spot-Check™ visual vacuum verification
- ✓ 100% recyclable

**Key ADVANTAGES**

- ✓ **Lowest cost per Watt**<sub>(thermal)</sub>
- ✓ **Highest peak performance:** 500 W<sub>th</sub>/m<sup>2</sup> at 180°C (equivalent to >700W<sub>cool</sub>); 650 W<sub>th</sub> at 130°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 (v4.2x)

Physical Characteristics	
Dimensions	see diagram for details
Gross Area	1.95 m <sup>2</sup>   21 sq. ft.
Aperture Area	1.84 m <sup>2</sup>   20 sq. ft.
Weight	52 Kg   114 lb
Volume of HT fluid	1.3 L   44 fl. oz.
Heat Absorber-Pipe	Al sheet + Cu pipe
Absorber Coating	Alanod Mirotherm 1300R
Back-plate	441 stainless steel
Glass Coating	Single-sided anti-reflective (interior face)
Connecting Ports	TVP proprietary
Operating Conditions	
Stagnation Temperature	310 °C   590 °F
Max. Operating Pressure	16 bar   232 psi
Pressure Drop H <sub>2</sub> O @ 260 l/h, 100°C	0.7 kPa   14.6 lb/sq. ft.

### Wide Range of Applications

Application	Machinery	Temp Needs (°C)	Peak Power
Air Conditioning / Cooling	Double-Effect Absorption Chiller	180	500 W
	Single-Effect Absorption Chiller	95	700 W
Desalination	MED/TVC	120 – 180	500 W
	MED	80 – 100	680 W
	MSF	70 – 90	720 W
Industrial Process Heat	Sterilization	140 – 150	570 W
	Dehydration, Dyeing	100 – 140	600 W
	Pasteurization	80 – 110	680 W

### Thermal Vacuum Power Charged™

Thermal Vacuum Power Charged™ technology is the foundation of the high-vacuum flat solar thermal panels, providing high efficiency, low cost and long durability. Using a patented, inorganic and flexible glass/metal seal, TVP Charged™ panels combine the advantages of a traditional planar layout (e.g. minimum dead space and maximum diffuse light capture) and complete suppression of convection losses due to high-vacuum insulation. Built with commonly available, inexpensive materials qualified for long-lasting high-vacuum products over the last 100 years (i.e. light bulbs and cathode ray tubes), the technology is specifically engineered for mass manufacturing.

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

