



ABSOLICON

One-axis solar tracking
increases output

High-reflectance
surface coating

Receiver pipe with heat
transfer fluid

Shock-proof,
hardened glass cover

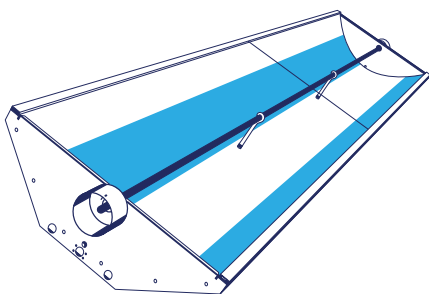
Robust, corrosion
resistant design

ABSOLICON T160 SOLAR COLLECTOR

Absolicon T160 is a medium-sized parabolic concentrator for heat up to 160°C & process steam.

Based on more than 20 years of research and development, the Absolicon T160 is a state-of-the-art solar collector with record-high performance.

It's certified with Solar Keymark and ICC-SRCC, proving its high reliability and quality, and the technology is protected by several patents.



SCAN
TO READ MORE
ABOUT OUR
TECHNOLOGY

Our certificates - quality stamped in writing

Each collector goes through strict quality tests during the production stages according to international standards.



Reg.no 011-7S2902C

Reg.no 10002145



Record-high optical efficiency

Captures >76% of the solar energy hitting the collector.



Warranty

The collector comes with a 5-year hardware warranty.



Lifetime

Expected performance lifetime of collectors exceed 25 years.



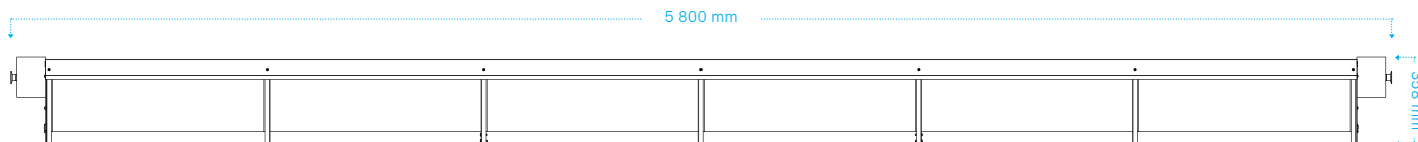
Streamlined design

Optimized by its streamlined design that allows mass production.

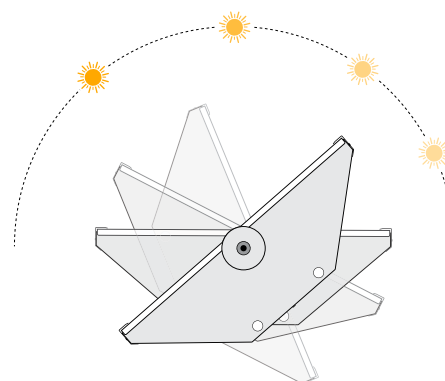
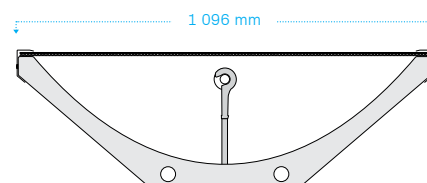


Patented technology

Absolicon T160 technology and components are protected by several patents.



Collector Type	Glass-covered parabolic trough collector
Recommended heat transfer fluid	Water, Propylene Glycol (max 40%)
Volume of heat transfer fluid	2.2 Liters
Inner diameter of receiver tube	21.9 mm
Maximum mechanical load	1000 N/m ²
Operational temperature	60 - 160°C
Design temperature	210°C
Design pressure	20 bar(g)
Stagnation temperature	460°C
Receiver	Stainless steel, optically selective coating
Glass	4 mm hardened glass, anti-reflective coating
Reflector	Silver based reflector on steel sheet
Weight	148 kg
Aperture area	5.51 m ²
Gross area	6.04 m ²



TRACKING SYSTEM MAKES THE COLLECTOR FOLLOW THE SUN TO MAXIMIZE PERFORMANCE

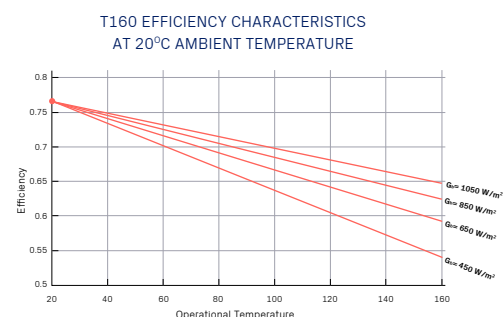
PERFORMANCE PARAMETERS

BASED ON APERTURE AREA

BASED ON GROSS AREA

η_0	0.764	0.697
a_1	0.8 W/m ² K	0.73 W/m ² K
a_2	0 W/m ² K ²	0 W/m ² K ²
a_5	1626 J/m ² K	1483 J/m ² K
K_d	0.12	0.12

TEST METHOD: ISO 9806:2013, CLAUSE 28



INCIDENCE ANGLE MODIFIER IN EAST-WEST ORIENTATION

θ	10	20	30	40	50	60	70	80	90
$K_b(0, \theta)$	0.99	0.99	0.98	0.96	0.91	0.77	0.53	0.18	0

COLLECTOR PRESSURE DROP

Flow rate [m ³ /h]	0.0	0.3	0.6	0.8	1.4	1.8
Pressure drop [mbar]	0.0	4	9	16	40	63

