

THE HEAT PIPE VACUUM TUBE COLLECTOR

A German-made vacuum tube collector with a patented internal overheat protection



Dairy farm, Olar SC, USA



Upscale home, Tavistock ON, Canada

Solar heat is environmentally friendly and free source of energy!

FEATURES AND HIGHLIGHTS

- **Patented glass-metal connection** protects the vacuum permanently
- **Patented internal overheat protection** a non-mechanical technology that protects the system in the event of power/pump failure or water disruption
- **Vacuum tube technology** is unaffected by ambient temperatures
- **Multi-use collector** for solar heated domestic hot water, farm and industrial process heat, furnace support and pool heating
- **Versatile mounting** with an angle range from 20° to 90° offers more installation options. Tubes are able to be rotated and individually angled
- **Highly effective collector media** works well in defused light
- **Quick assembly** thanks to the innovative plug-in connection system of the tubes
- **ICC-SRCC high radiation thermal performance rating**
Category C: 52.6 kBtu/ft².day
Category D: 44.9 kBtu/ft².day
Category E: 38.0 kBtu/ft².day
- **10 year warranty**

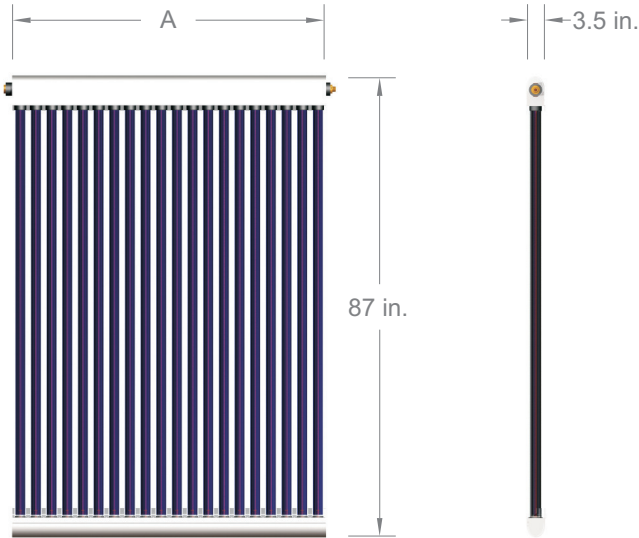
AkoTEC

PRODUCT DETAILS

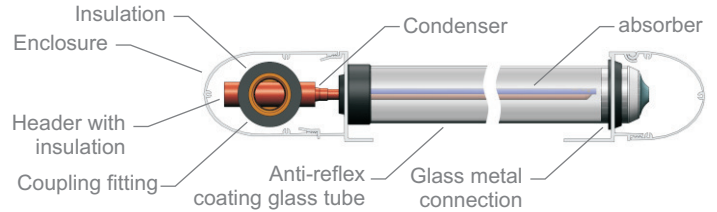
SCHEMATIC

Twenty tube collector shown

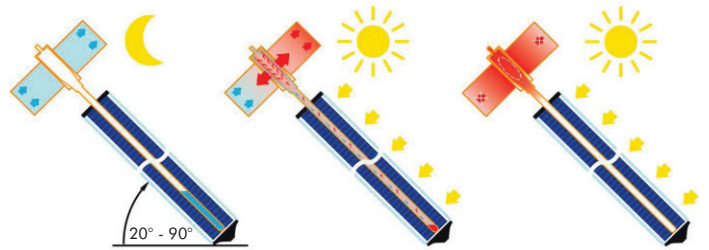
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CROSS SECTION VIEW



HOW SELF-SECURITY SYSTEM WORKS



Standby / night

In operation

Stagnation
320°F limit (160°C)

TECHNICAL SPECIFICATIONS

Heat Pipe Vacuum Tube Collector			
Specifications	HP10/1000	HP20/2000	HP30/3000
Number of tubes	10	20	30
Area	17.8 ft ² (1.7 m ²)	35.7 ft ² (3.3 m ²)	53.5 ft ² (5.0 m ²)
Width (A)	29.5 in (750 mm)	59.1 in (1500 mm)	88.6 in (2250 mm)
Height	87 in (2210 mm)		
Depth	3.50 in (88 mm)		
Weight (empty)	56 lbs (25 kg)	111 lbs (51 kg)	167 lbs (76 kg)
Temperature control	The temperature of the condensation vessel is limited to a maximum of 320 °F (160 °C)		
Fluid content	0.13 US gallons (0,5 L)	0.24 US gallons (0,9 L)	0.37 US gallons (1,4 L)
Collector flow rate	0.18 to 0.22 gpm (0,68 to 0,83 l/min)	0.36 to 0.44 gpm (1,37 to 1,66 l/min)	0.54 to 0.66 gpm (2,05 to 2,48 l/min)
Pressure loss with flow rate	0.03 psi (0.2 kPa)	0.09 psi (0.6 kPa)	0.32 psi (2.2 kPa)
Max. operating pressure	145 psi (1000 kPa)		
Absorber	High performance copper absorber, coated with Titan Nitrid Oxide; absorptance 96%		
Glazing	Anti-reflexcoating (nano-coating) applied onto the inner and outer side of the glass tube allows for an extraordinary high light transmission (97%), light reflection (3%)		
Mounting options	Pitched roof, facade or free standing		
Connections to lineset	3/4" NPT and 1/2" sweat		
SRCC certification	2010074A		

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