

EnerWorks

Commercial Solar Collectors and Solar Energy Units

EnerWorks High Performance Commercial Solar Collectors Achieve Top SRCC OG-100 Ratings*

Solar Rating & Certification Corporation (SRCC) Thermal Performance Rating

			SRCC Thermal Performance Rating Warm Climate - Clear Day		
Company	Model	Type	1000 Btu/collector/day	Btu/ft ² /day*	kWh _{th} /m ² /day*
EnerWorks **	Commercial Collector	Flat-Plate	37	1196	3.8
Heliodyne	Gobi 408	Flat-Plate	37	1147	3.6
Viessmann	Vitosol 100 SV1, SH1	Flat-Plate	34	1105	3.4
Schuco USA	Premium V, H, LA	Flat-Plate	32	1067	3.4
Sun Earth	Empire IC-32	Flat-Plate	31	1032	3.3
King Solar (AET)	KS-32	Flat-Plate	30	1003	3.1
Viessmann	Vitosol 300 Type SP3, 2m2	Tubular	26	839	2.7
Apricus	AP-22	Tubular	26	810	2.5
Thermomax	Solamax AST20	Tubular	23	750	2.3

Solar Rating & Certification Corporation (SRCC) Thermal Performance Rating

			SRCC Thermal Performance Rating Cold Climate - Clear Day		
Company	Model	Type	1000 Btu/collector/day	Btu/ft ² /day*	kWh _{th} /m ² /day*
EnerWorks **	Commercial Collector	Flat-Plate	25	808	2.6
Heliodyne	Gobi 408	Flat-Plate	23	713	2.2
Viessmann	Vitosol 100 SV1, SH1	Flat-Plate	23	810	2.5
Schuco USA	Premium V, H, LA	Flat-Plate	19	688	2.2
Sun Earth	Empire IC-32	Flat-Plate	20	698	2.2
King Solar (AET)	KS-32	Flat-Plate	22	595	1.9
Viessmann	Vitosol 300 Type SP3, 2m2	Tubular	23	742	2.4
Apricus	AP-22	Tubular	22	685	2.2
Thermomax	Solamax AST20	Tubular	16	522	1.6

Reference: *Solar Rating and Certification Corporation, www.solar-rating.org October 2007
Based on gross area
Comparison collector selection based on similar net aperture area
** EnerWorks collectors certified with 50% solution of propylene glycol



Printed on recycled paper.

Printed in Canada Dec. 2007. Ver.4
Assembled in Canada from domestic and imported components.



EnerWorks

Commercial Solar Collectors and Solar Energy Units

Integrated, energy-saving, turn-key solutions

EnerWorks designs and manufactures solar heating equipment and solar collectors for commercial use. EnerWorks' pre-engineered thermal solutions can be integrated into new construction or retrofitted to existing structures. A solar thermal system is an effective and economical way to provide hot water and heat for commercial applications. EnerWorks' commercial solar heating solutions save money and contribute to a healthier environment.



PRODUCT FEATURES

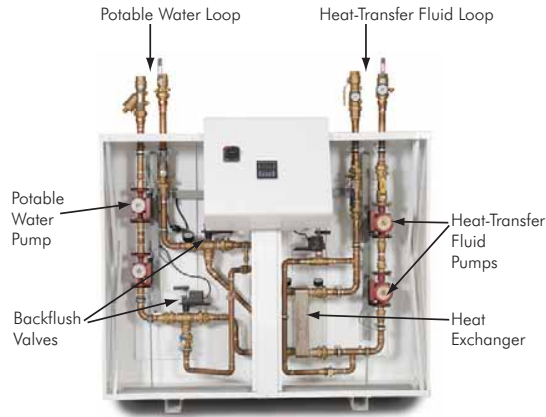
- High-Performance Solar Collectors in repeatable 10-collector modules
- Commercial-scale Solar Energy Units in three sizes, supporting 20-120 collectors (40 to 300 kW_{th}; 135,000 to 1,000,000 BTU/hr)
- Pre-engineered solar water heating solutions for new or retrofit construction

APPLICATIONS

- Hospitals, term-care and assisted-living facilities
- Hotels
- Multi-family accommodation
- Community centers, particularly with pools
- Small commercial, including car washes, laundries, restaurants and salons
- Industrial processes
- Government buildings



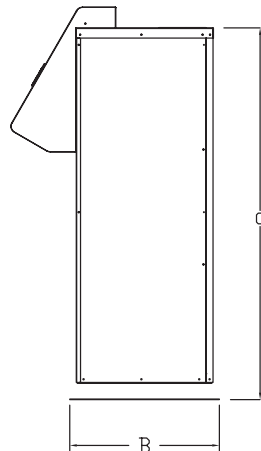
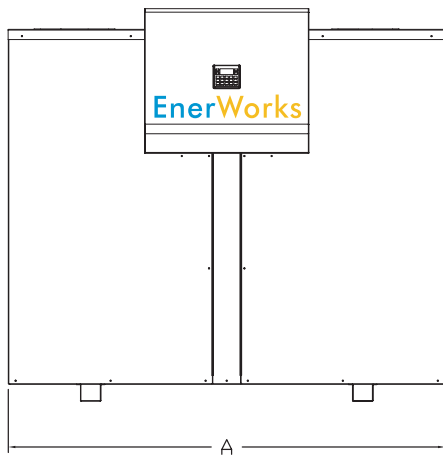
EnerWorks Commercial Solar Energy Unit



The compact Solar Energy Unit is preassembled and factory-tested for quick installation. The intelligent control system ensures reliable performance and extended service intervals. Quiet, reliable, multi-speed pumps and a tuneable PLC control allow customization of the Solar Energy Unit, optimizing the performance and reducing costs. The double-wall heat exchanger has visual leak detection and automatic back-flush to reduce service requirements. Daily valve exercising and a heat exchanger bypass during cold start-ups ensure trouble free operation.

Available in three sizes, the systems support 20 to 120 solar collectors (40 to 300 kWh; 135,000 to 1,000,000 BTU/hr) and are compatible with EnerWorks' Micro-Flow Collectors. Options include energy metering, control for external heat exchanger operation and integration with building systems.

Number of Collectors	SEU Rating		A		B		C		Circuit Amperage	Connections	
	kWh	BTU/hr	in	mm	in	mm	in	mm		A	Ø in
20	40	135,000							15	1-1/4	31.75
40	80	275,000	64.25	1632	22	559	54.66	1388			
60	100	340,000							20	2	50.8
80	160	545,000	88.5	2248	32.4	823	61.5	1562			
100	200	680,000							30	2	50.8
120	300	1,000,000	88.5	2248	32.4	823	61.5	1562			



EnerWorks Commercial Solar Collectors

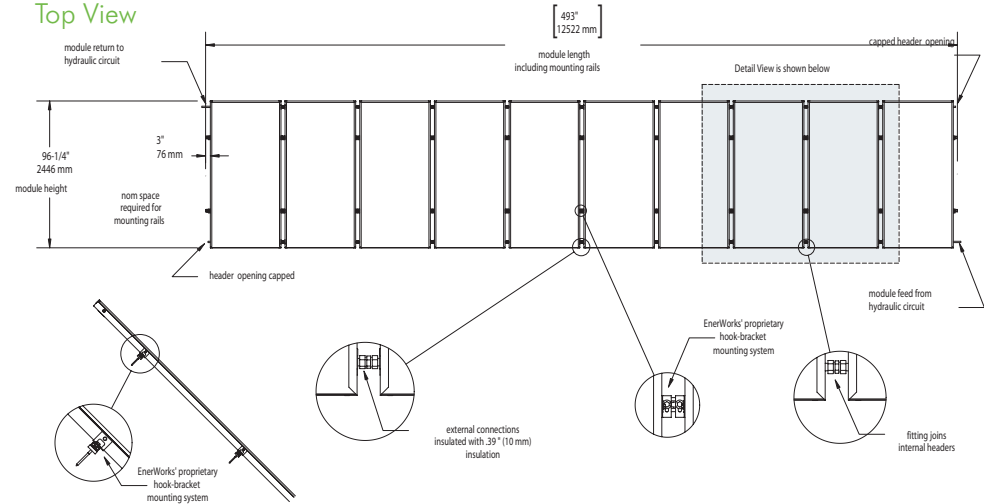
For commercial applications requiring water temperatures between 104°F to 158°F (40°C - 70°C) and daily volumes between 105 - 20,000 US gallons (400 liters - 75 000 liters), solutions can be customized to target temperatures up to 220° F (140° C). Commercial users requiring warm air may use the energy via a standard fin-fan coil unit (water-to-air heat exchanger with fan). Process fluids can be heated using fluid-to-fluid heat exchangers.

SOLAR COLLECTOR MODULES

Up to 10 Collectors: Internal Headers, Hook-Bracket Mounting



Top View



Detail View

Solar collectors are assembled in modules of up to 10 collectors across, 1 to 2 collectors high in flat-roof, sloped-roof and wall-hanging configurations. Arrays can range in size from 1 to 100 modules (1000 collectors) in food service, farm, laundry, beauty salon, motels etc. Commercial collectors should be specified for thermal applications with year round, daily or frequent load requirements.

