

PREMIER EFFICIENCY COLLECTORS AND ENERGY TERMINAL

EnerWorks Premier Efficiency 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 25	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	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
Based on gross area
Comparison collector selection based on similar net aperture area
** EnerWorks collectors certified with 50% solution of propylene glycol



THE ENERWORKS SPECTRUM
COMMERCIAL SOLUTION

Integrated, energy-saving,
turn-key solutions



For larger commercial and industrial applications, the EnerWorks Spectrum Commercial Solution offers reliability, flexibility and unrivalled efficiencies, engineered to maximize performance, save money and contribute to a healthier environment. EnerWorks's pre-engineered thermal solutions can be integrated into new construction or retrofitted to existing structures. Freeze-protected EnerWorks Premier Efficiency Collectors are roof-, rack- or wall-mounted in arrays sized to optimize solar energy capture. The solar energy, captured as heat, is channeled to the EnerWorks Energy Terminal, our award-winning integration of the key components of a solar water heating system. Within the Energy Terminal, the heat is transferred to your water, an effective and economical way to provide hot water and heat for commercial and industrial applications.

The EnerWorks Spectrum Commercial Solutions can be engineered to provide solar cooling, space heating and other secondary applications in addition to solar water heating.



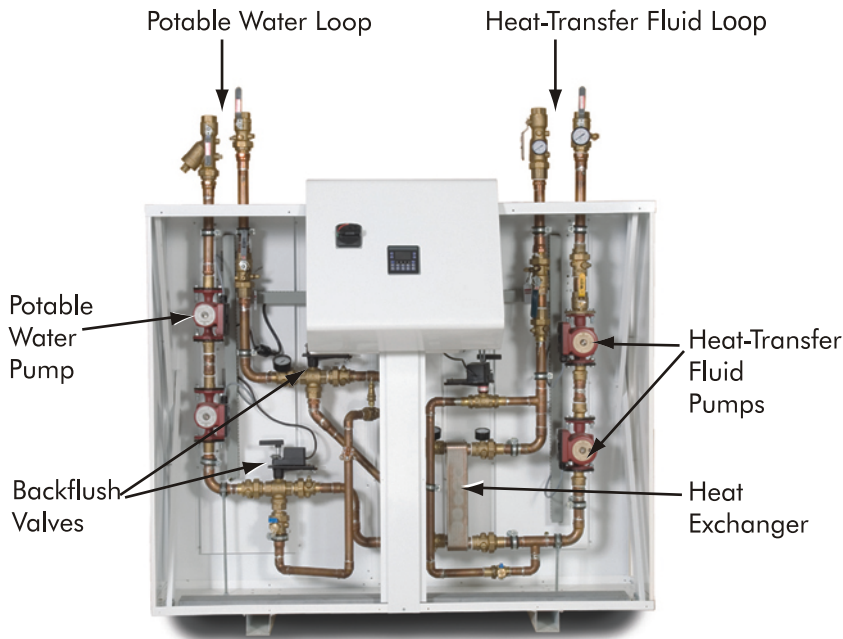
PRODUCT FEATURES

- Premier Efficiency Collectors in repeatable 10-collector modules
- Commercial-scale Energy Terminals 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

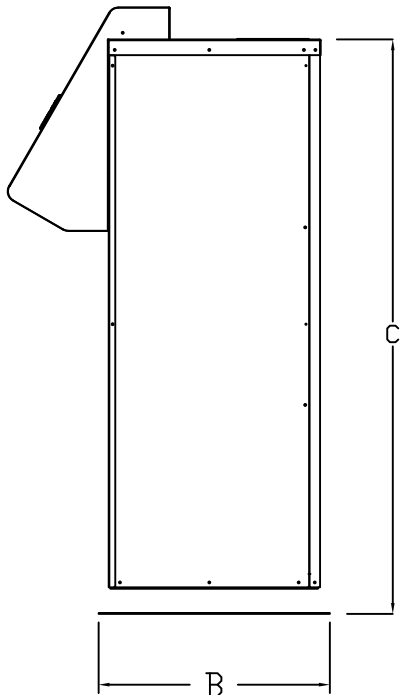
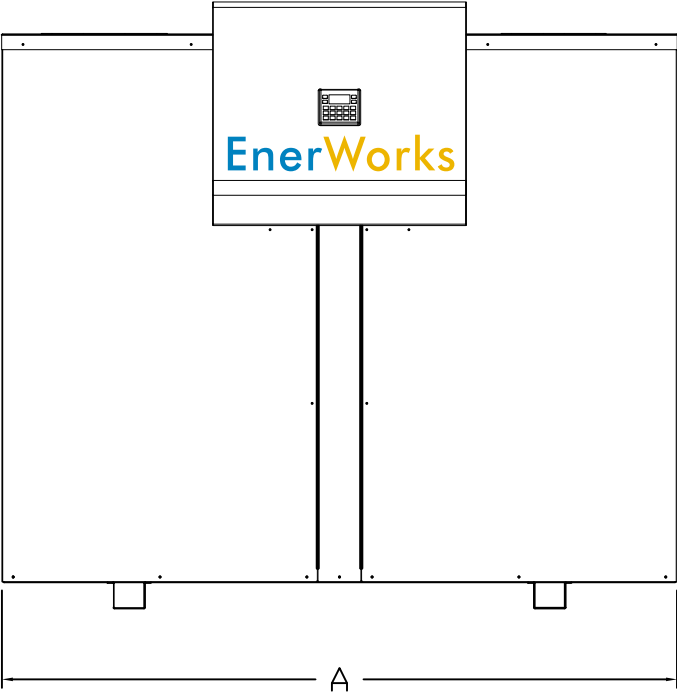
THE ENERWORKS ENERGY TERMINAL



For larger commercial and industrial applications, EnerWorks has engineered the award-winning EnerWorks Energy Terminal, which integrates the key components of a solar thermal system. An integrated pump, heat exchanger and an intelligent controller system are all contained in a compact housing, eliminating the need to source and assemble components from a variety of sources and simplifying installation. Pre-assembled and factory-tested, the Energy Terminal contains quiet, reliable multi-speed pumps and a tuneable Programmable Logic Controller which ensure reliable, cost-effective performance and enable customization for each installation, optimizing performance for the specific site conditions. The double-wall heat exchanger has visual leak detection and automatic back-flush to minimize maintenance 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 kW_{th}; 135,000 to 1,000,000 BTU/hr) and are compatible with EnerWorks' Premier Efficiency 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	
	kW _{th}	BTU/hr	in	mm	in	mm	in	mm		Ø in	Ø mm
20	40	135,000	64.25	1632	22	559	54.66	1388	15	1-1/4	31.75
40	80	275,000									
60	100	340,000									
80	160	545,000	88.5	2248	32.4	823	61.5	1562	20	2	50.8
100	200	680,000									
120	300	1,000,000	88.5	2248	32.4	823	61.5	1562	30	2	50.8



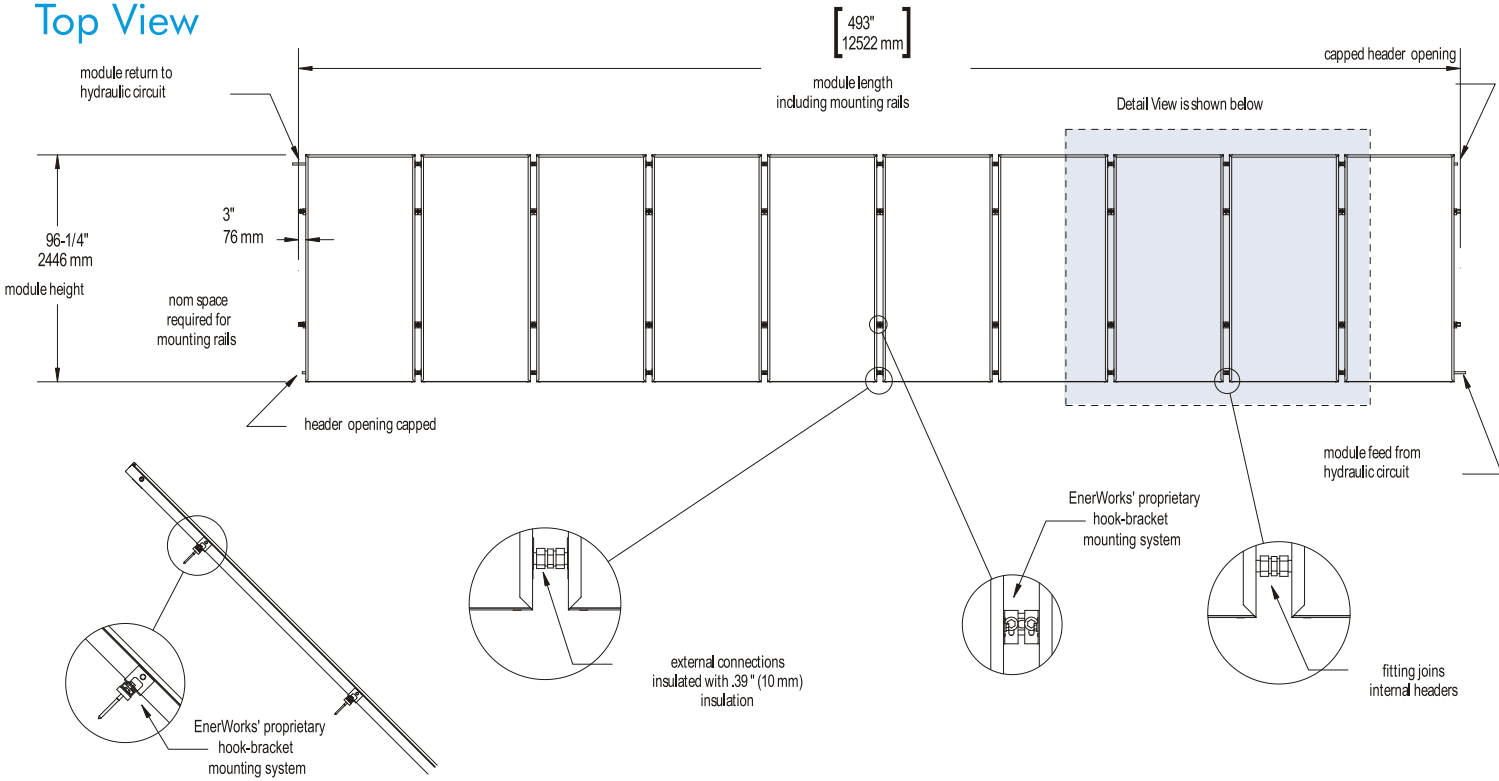
THE ENERWORKS PREMIER EFFICIENCY COLLECTORS

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. Rated by the EcoEnergy Program as the highest efficiency flat plate collector on the market, the EnerWorks Premier Efficiency Collector is the optimal solution for commercial and industrial applications requiring year round water heating.

PREMIER EFFICIENCY COLLECTOR MODULES
Up to 10 Collectors: Internal Headers, Hook-Bracket Mounting



Top View



Detail View

The EnerWorks Premier Efficiency 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.

