heliodyne
SOLAR HOT WATER

COMMERCIAL SOLAR STATION

The Heliodyne COMmercial solar station (HCOM) is a plug & play, pump station that consists of two circulation pumps and a compact flat plate heat exchanger. HCOMs are available in 4 different sizes, each is designed to handle a specified maximum number of collectors. System features include Pressure Stagnation Protection (PSP), a unique Heliodyne feature that helps maintain glycol integrity, optional variable speed pumps for better performance and reduced pumping power, and internet connectivity for remote system monitoring. For very large installations, HCOM systems can be combined in parallel.

HOW IT WORKS

An HCOM heat-transfer system connects directly to the solar storage tank and collector array. Energy obtained from the collectors is transfered indirectly to the storage tank(s) through the heat exchanger. An expansion tank, sized to system requirements (and not included with the HCOM), is also attached in the configuration. As a plug & play unit, each HCOM installation requires less labor while ensuring high quality connections. WiFi / Ethernet connectivity or optional touchscreen control makes it easy to customize settings for optimum performance based on environmental conditions.

ICC-SRCC
SOLAR RATING & CERTIFICATION CORPORATION

MADE IN USA

SYSTEM MONITORING

During operation, the WiFi / Ethernet connection or optional touchscreen allows for easy access to all performance data compiled by the HCOM's Delta-T controller. When connected to the internet, facility managers and maintenance crews can remotely monitor and adjust controls or parameters such as flow, pressure and temperature performance. In the event of any excursion outside of defined limits, email alerts can be sent as notification. With the optional touchscreen, local access to all controls and performance data is possible. A MODBUS protocol tie-in on the controller board supports connection to building automation systems (BAS). If a protocol other than Modbus is used (e.g. Bacnet or Lonworks), then a field server is available as a gateway translator.

FEATURES	BENEFITS
Delta-T controller with WiFi / Ethernet connectivity	Allows for remote monitoring of flow, pressure and temperature, and for remote access to all controls
5.6" color LCD touchscreen control (optional)	Local at-a-glance monitoring of system performance and access to all system controls.
Pressure Stagnation Protection (PSP)	Ensures glycol will not break down due to fluid stagnation during high temperature conditions.
Optional variable speed pumps	Improves system optimization and efficiency. Also provides system longevity
Factory assembled plug & play configuration	Reduces system design and installation times, and ensures quality connections
Building automation system (BAS) tie-in	MODBUS protocol tie-in on Delta-T controller board allows for all data to be recorded and archived when connected to a BAS. Field server gateway translators available for other protocols.
Compact assembly	Small footprint, less floor space required.

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SOLAR HOT WATER

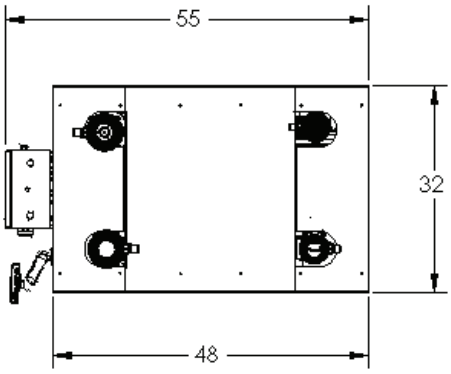
HCOM Premium

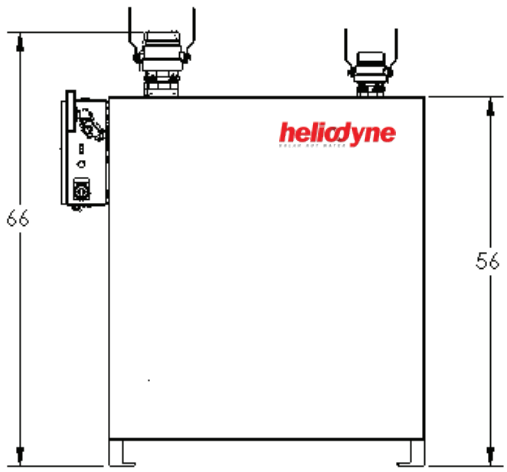
HCOM Technical Specifications

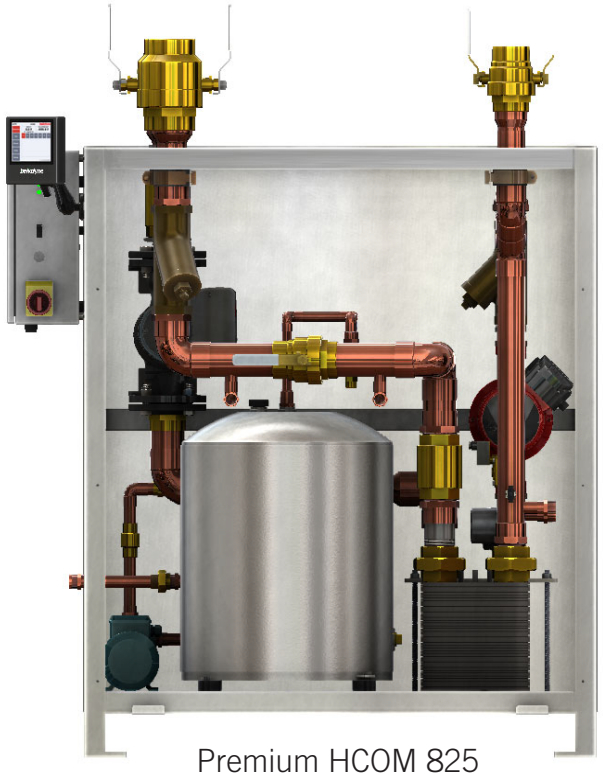
30 amp dedicated breaker needed

Premium Models	HCOM 825	HCOM 550	HCOM 275	HCOM 180	HCOM 120
Ball Valve Connections - Collector	3”	3”	2.5”	2”	1-1/2”
Ball Valve Connections - Storage Tank		2.5”	2”	1-1/2”	1-1/2”
Power Supplies	Single Phase,230VAC, 60Hz, 20A		Single Phase 115VAC, 60Hz, 20A		
Collector Side Circulator	MAGNA3 65-150 (230V)		2.5” MAGNA3 40-180 (115V)		
Storage Tank Side Circulator	UPS 40-80/4 B (230V)		UPS 40-80/4 B (115V)	UPS 32-80 B (115V)	
Maximum Collector Surface Area (ft^2)	96 GOBI G410 3,855 ft^2	64 GOBI G410 2,570 ft^2	32 GOBI G410 1,285 ft^2	24 GOBI G410 964 ft^2	16 GOBI G410 642 ft^2
Pressure Drop	15’	15’	15’	10’	10’
Pressure Relief	Dual 3/4”, 150 PSI			3/4”, 150 PSI	
Potable Water Backwash & Glycol Catch Tank	Yes				
Maximum Operating Conditions	150 PSIg / 230°F				
Heat Transfer Fluid	0-50% Dyn-O-Flo HD and Water				
Securing and Leveling	4x Holes in Mounting Feet for 1/2”-13 Threaded Lag Bolts				
Shipping Weights in lbs.	1,000	880	790	480	420

*For outdoor install specify HCOM xxx x1x. HCOM xxx x1x is designed for outdoor installation (mild climate). Controller is built into a NEMA 4 classified enclosure. The plumbing fixtures, pumps, and sensors are built into a NEMA 3 classified enclosure.







Premium HCOM 825

Note: Internal plumbing is subject to change for improvements. Above image may not reflect final system configuration.

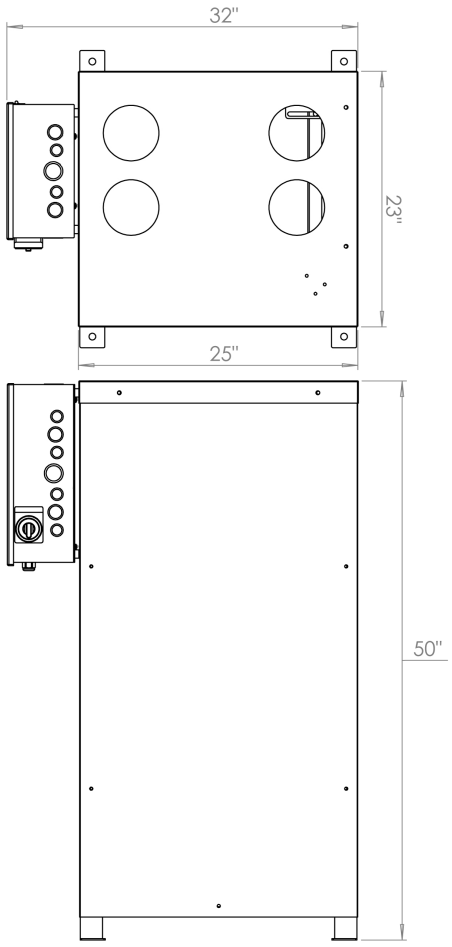
HCOM Standard

HCOM Technical Specifications

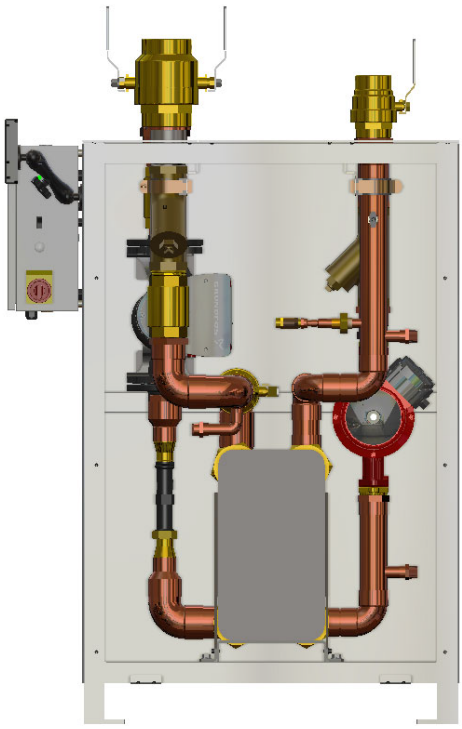
30 amp dedicated breaker needed

Standard Models	HCOM 825	HCOM 550	HCOM 275	HCOM 180	HCOM 120
Ball Valve Connections - Collector	3”	3”	2.5”	2”	1-1/2”
Ball Valve Connections - Storage Tank	2.5”	2.5”	2”	1-1/2”	1-1/2”
Power Supplies	Single Phase 230VAC, 60Hz, 20A		Single Phase 115VAC, 60Hz, 20A		
Collector Side Circulator	MAGNA3 65-150 (230V)		UPS 40-160 (115V)		UPS 32-160 (115V)
Storage Tank Side Circulator	UPS 40-80/4 B (230V)		UPS 40-80/4 B (115V)	UPS 32-80 B (115V)	
Maximum Collector Surface Area (ft^2)	96 GOBI G410 3,855 ft^2	64 GOBI G410 2,570 ft^2	32 GOBI G410 1,285 ft^2	24 GOBI G410 964 ft^2	16 GOBI G410 642 ft^2
Pressure Drop	15’	15’	15’	10’	10’
Pressure Relief	3/4”, 150 PSI				
Potable Water Backwash & Glycol Catch Tank	No				
Maximum Operating Conditions	150 PSIg / 230°F				
Heat Transfer Fluid	0-50% Dyn-O-Flo HD and Water				
Securing and Leveling	4x Holes in Mounting Feet for 1/2”-13 Threaded Lag Bolts				
Shipping Weights in lbs.	900	750	650	500	400

*For outdoor install specify HCOM xxx x1x. HCOM xxx x1x is designed for outdoor installation (mild climate). Controller is built into a NEMA 4 classified enclosure. The plumbing fixtures, pumps, and sensors are built into a NEMA 3 classified enclosure.



Note: The above standard frame applies to HCOM 120, 180, and 275
For HCOM 550 and 825 Standard Dimensions, contact us



Standard HCOM 825

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