

**OMEGA TRADING**  
25 Still Road South, S426934, Singapore  
HP: (65) 81133468 / (65) 93677329  
Email: [omegatrading@gmail.com](mailto:omegatrading@gmail.com)  
URL: [www.omegathermal.com](http://www.omegathermal.com)

## **Air-Source Heat Pump Water Heater**

For The Commercial & Industrial Energy Recovery Market



- Substantial Electrical Savings
- CFC Free
- Environmentally Friendly
- Centralised System
- Renewable Energy

Environmentally  
Sound Refrigerant

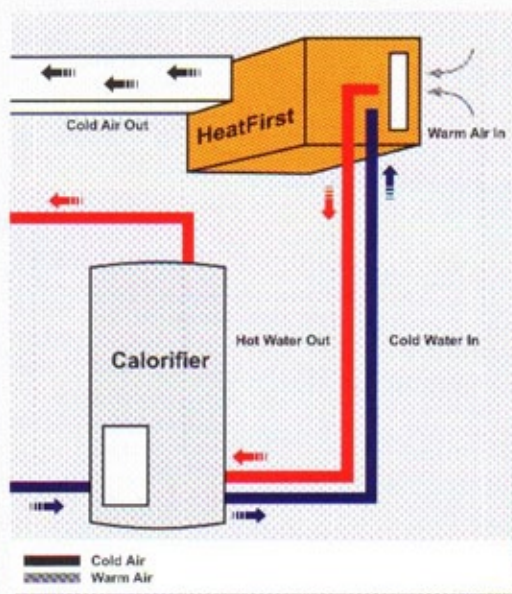


# Benefits Of HeatFirst Air To Water Heat Pump Water Heaters

- ✓ Free Cold Air
- ✓ Durability & Long Lasting
- ✓ Low Cost Operation
- ✓ Rapid Payback
- ✓ Environmentally Friendly
- ✓ Compact & Flexible
- ✓ Fully Automatic Control System
- ✓ Minimal Maintenance
- ✓ Suitable For Outdoor & Indoor Installation
- ✓ Manufacturer Warranty



## How The System Works



The air to water heat pump water heater works by taking surroundings heat and humidity from the air in a work area or open space and uses it to heat water. As a by-product and without any added costs, cool air is produced which can be ducted into the work area and provide "spot cooling" to work areas for increased employee comfort.

It is ideal for hotels, resorts, club houses, hospitals, kitchens and laundries, where daily hot water needs are great.

The HeatFirst air to water heat pump water heater heats the hot water at 1/3 the cost of other heaters plus provides FREE air conditioning. Reduced energy use and lower utility bills mean increased savings.

Storage tank sizing is critical to obtain the optimum system performance of HeatFirst. Water is circulated between the storage tank and HeatFirst by the HF circulating pump (primary). The water is heated each time it passes through the HeatFirst unit, so that the tank temperature gradually rises until the desired temperature of the differential temperature control is reached and the unit shuts off.



# HeatFirst Commercial Calorifier

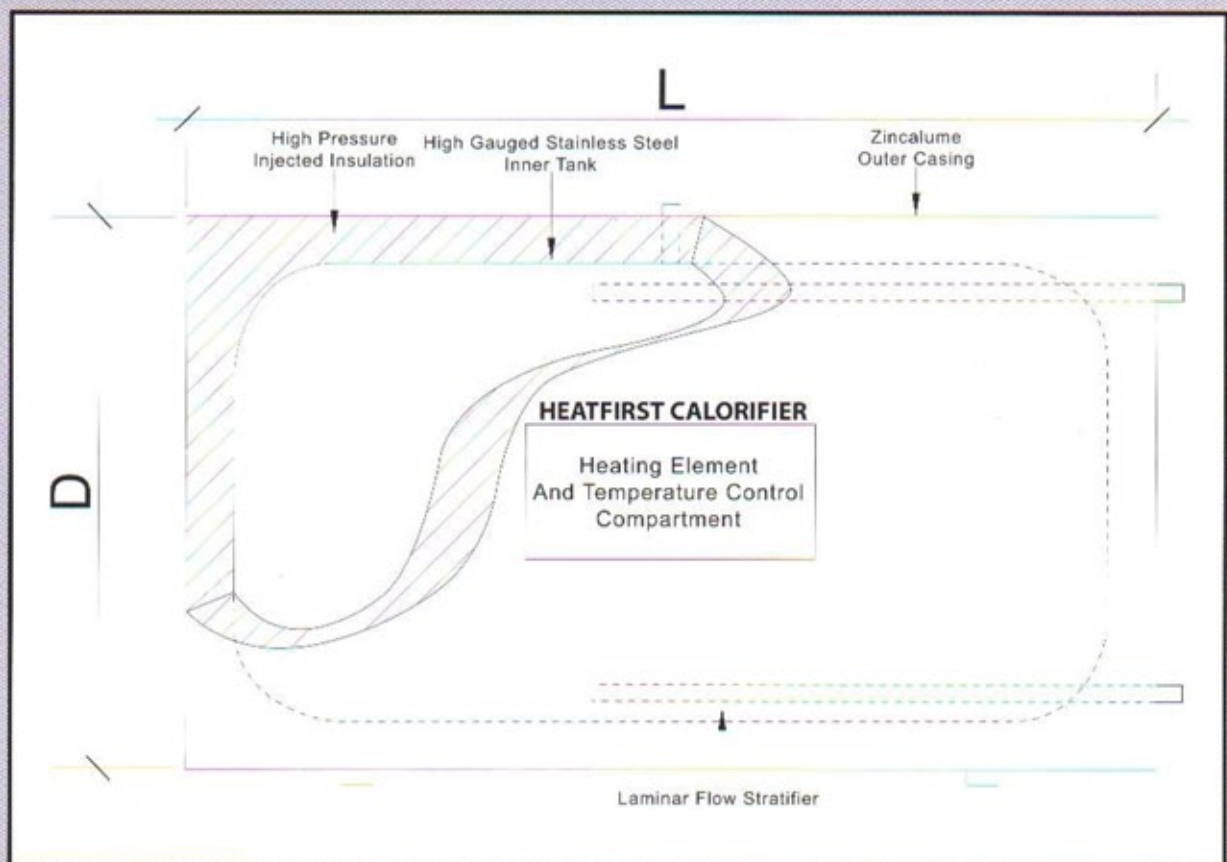
Adequate storage capacity heat pump water heating systems perform an important function. With proper sizing for adequate storage tank volume, the heat pump will be able to keep up with the peak hot water demand.

Another important function of HeatFirst is the water stratification. It provides to the heat pump. HeatFirst heat pumps are provided with its own internal (primary) water circulating pump. This pump is sized to increase the water temperature 8 to 14 degree Celsius as it passes through the heat pump.

The water is stored within the high grade stainless steel inner tank. Primary circuit water from the lowest point of the tank is drawn out by the built-in primary water circulating pump in HeatFirst where it is heated and returned to the calorifier. The continuous heating and recirculation raises the overall temperature in the calorifier.

Cold mains water is fed into the lower level of the inner tank through the uniquely designed Laminar Flow Stratifier to form an imaginary cushion so that cold water does not mix freely for constant distribution of hot water from the system.

HeatFirst heat pumps are made of fine selected quality components supported by UL and TUV certifications from USA and Germany. HeatFirst is designed and manufactured to suit and tap the unlimited abundant of heat in the tropical climate for maximum efficiency. Therefore, HeatFirst is free from fouling and corrosion problems associated with systems using water as heat source.



HeatFirst Calorifier  
Heating Element & Temperature Control Compartment





## Air Source All In One Heat Pump For Consumer Energy Recovery Market

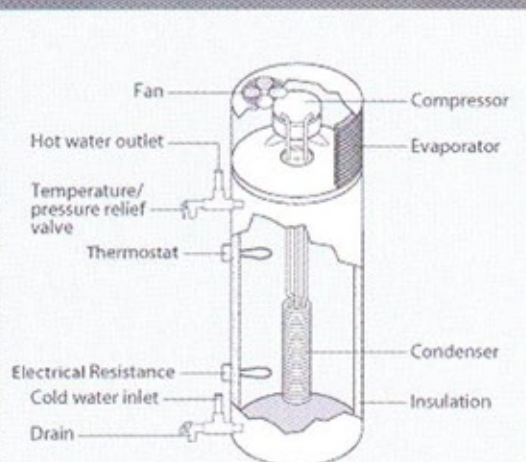
The new revolutionary HeatFirst All-In-One Heat Pump keeps you warmth, comfortable all year-round and save your water heating cost up to 80%.

Comfort, durable design, consistent performance, reliability and ultimate efficiency all in one.

- Premium stainless steel inner tank & stainless steel housing for durable & anti-rust.
- Built-in submerged heat exchanger, more efficient.
- Low standby electric booster.
- Built-in sacrificial anode to prolong the life-span of the tank.
- Environmentally friendly refrigerant R410A.
- Fully automatic control system.

It's application is ideal for all kind of landed properties, homes, apartments, condominiums, restaurants and small hotels.

### Product Design & Slice Viewed



### Product Specification

Model	HFM-200L	HFM-250L	HFM-300L
Rated Heating Capacity, kW/hr (Btu/hr)	5 (17,065)		
Tank Capacity, Liters	200	250	300
Max Rated Outlet Temperature, °C	60		
Power Supply	240V/1phase/50Hz		
Fan Speed, RPM	950		
Noise Level, dB(A)	51		
Unit Dimension, mm (Diameter x Height)	Ø560 x 1830	Ø600 x 1925	Ø640 x 1820
Weight, kG (Empty/Operating)	82/278	88/333	95/389
Cold & Hot Outlet Water Connection	3/4" BSP		
Safety Valve & Condensation Drain	3/4" BSP		
Refrigerant	R410A		
Type of Compressor	Rotary		
Co-efficient of Performance (C.O.P)*	3.8 - 4.2		
Inner Tank material	Premium Grade Stainless Steel		
External Tank Material	Stainless Steel		
Tank Insulation Material	High Pressure Injected Polyurethane Foam 45kG/m3		
Standby Electric Booster, kW	2 (Optional 3kW)		
Incoming Power Requirement, Amp	20		
Full Operation Amperage	6		

Note: Above C.O.P is based on 30 degree Celsius inlet dry bulb @ 85% RH.  
The above specifications are subject to change without prior notice.



## HeatFirst Features

### General

HeatFirst is the answer to your total hot water solution. Packaged air-source heat pumps are factory wired, charged, and tested. Its low operating noise levels, high output heating capacity, high efficiency, with environmentally safe refrigerants are integrated into the design.

### Refrigerant

Environmentally friendly R134a refrigerant. 60°C and higher water temperatures are easily achievable with this new refrigerant technology.

### Compressor

State of the art Scroll Compressor operates at high efficiencies with low noise and vibration. Easy accessible for servicing through lift off panel. All major components are compartmented for in-operation servicing.

### Evaporator Coil

Stainless Steel casing, multi-rows of copper tubes, and condensate drain connection.

### Condensers

Counter-flow tube-in-tube design produces high efficiencies and high water temperatures.

### Enclosure

Entire unit housing is made of Stainless Steel for corrosion resistance. Weatherproof design is excellent for outdoor service.

### Water Pump

The Stainless Steel impeller circulating pump is corrosion resistant, and has high head capability at design flow rates. Compression brass coupling inlet and outlet make removal for service easy.

### Refrigerant Components

Included as standard are filter-dryer receiver and moisture-indicating sight glass.

### Fan

Direct driven propeller fan operates not less than 1100 rpm (50 Hz). Vibration isolating motor mounts minimize noise and vibration. Marine duty motor is corrosion protected.

## HeatFirst Capacity

### HeatFirst Commercial Calorifier Capacity\*

Model	Capacity		Outer Dimensions (mm)	Weight (kg)	
	Litre	Imp. Gal		Empty	Operating
MP-200G	908	200	Ø1000 X 1680	246	1155
MP-300G	1362	300	Ø1000 X 2480	333	1696
MP-400G	1816	400	Ø1400 X 1890	398	2216
MP-500G	2270	500	Ø1400 X 2280	466	2737
MP-600G	2725	600	Ø1400 X 2680	536	3261
MP-700G	3178	700	Ø1700 X 2050	605	3783
MP-800G	3632	800	Ø1700 X 2450	654	4286
MP-900G	4086	900	Ø1700 X 2650	703	4790
MP-1000G	4540	1000	Ø1700 X 2850	755	5301
MP-1250G	5680	1250	Ø1985 X 2550	1150	6870
MP-1500G	6810	1500	Ø1985 X 2980	1275	8092
MP-1750G	7945	1750	Ø1985 X 3360	1605	9559
MP-2000G	9080	2000	Ø1985 X 3750	1960	11050

\* Other specific capacities can be made to order.

Model		HF 15	HF 22	HF 30	HF 45	HF 60
Heating Capacity	kW	15	22.5	30	45	60
	Btu/hr	51195	76750	102390	153585	204780
Cooling Capacity	kW	11.2	16.5	22.8	33.3	43.8
	Tons	3.2	4.7	6.5	9.5	12.4
C.O.P.(heating)		4				
Refrigerant		R134a				
Dimension (LxWxH)	mm	1200 x 1180 x 750		1380 x 1180 x 850		
Weight	kg	225	285	330	370	415

Note: Above C.O.P. (Coefficient of Performance) is based on 30 degrees Celsius inlet air dry bulb @ 80% RH & specifications are subject to change without prior notice.



# Energy Conscious Buildings



E&O, Penang



Swimming Pool, Mon't Kiara



Tropicana Medical Centre



Piccolo, Kuala Lumpur



Crowne Plaza, Kuching



Treasure Resort Sentosa



Hyatt Regency, Kota Kinabalu



Tawakal Hospital, Kuala Lumpur



Novotel, Kuala Lumpur



Premiere, Klang



The Fullerton Bay, Singapore



Studio M, Singapore



True Fitness



Taylor's University



Pantai Hospital, Kuala Lumpur



The Royal Selangor Golf Club



Mandarin Orchard, Singapore



Grand Mercure Roxy, Singapore

OMEGA TRADING LIMITED

25 Still Road South S426934 Singapore

Tel: (65) 62423142, Fax: (65) 63442290 Website: [www.omegatrading.com](http://www.omegatrading.com)

Mobile: (65) 81133468 (65) 96316446 Email: [omegatrading@gmail.com](mailto:omegatrading@gmail.com)