



## GEOHERMAL LIQUID TO WATER DC INVERTER HEAT PUMPS



*The Hydro Solar DC inverter Liquid to Water GEO Series is a multi-applications heat pump that can be used for space heating, space cooling, domestic hot water pre-heating, heat recovery and hot tub/swimming pool water heating and cooling.*

### Features of the GEO Series

A liquid to water geothermal heat pump with DC Inverter Panasonic Compressor and Carel Controller that uses Modbus Protocol. The heat pump can be used for open and closed loop geothermal configuration. Other features:

- Use of low Global Warming Potential (GWP) R32 refrigerant
- Hot water supply temperature from 35°C/95°F to 55°C/131°F
- Chilled water supply temperature from 7°C/44.6°F to 12°C/53.6°F
- Capacities 40, 60 and 80 MBH
- Power supply 220-240/1/60
- Space heating and space cooling function
- Dedicated domestic hot water (DHW) pre-heating function (Up to 55°C/131°F) at full heat pump capacity
- Heat recovery function
- 2-pipe or 4-pipe configuration in combination with DHW pre-heating
- Titanium ground loop heat exchanger that can be used for dumping heat into a swimming pool or hot tub
- WIFI adapter for easy monitoring and remote diagnostics



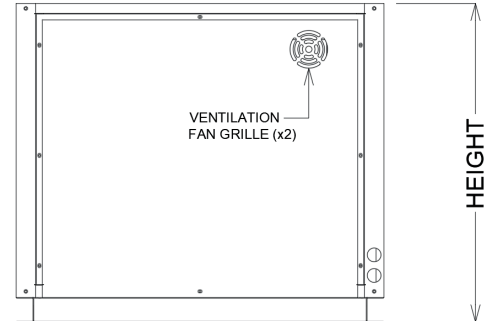
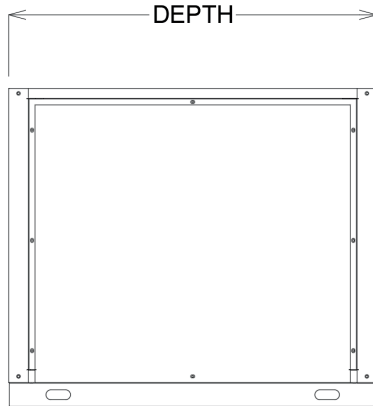
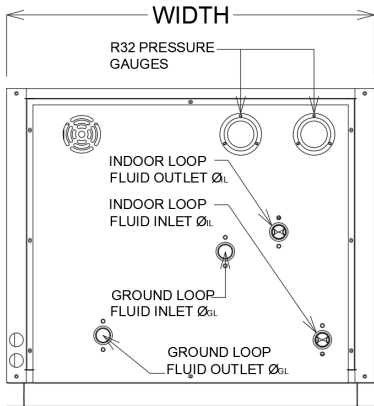
# Heating and Cooling Capacities

GEO040V1LM							
HEATING PERFORMANCE	Outdoor Loop		Electrical		Indoor Loop		
	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature @ Max Flow
	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)
23	18,799	3.79	2.5	104	7.04	113	31,730
30	24,804	3.63	3	104	8.37	112.9	37,189
35	30,877	3.35	3.7	104	9.25	113.1	42,306
45	35,483	3.25	4.2	104	10.13	113.2	46,571
60	40,396	2.94	5	104	10.57	113.5	50,426
23	10,679	4.47	1.7	122	5.72	131	25,930
30	15,490	4.16	2.1	122	6.6	130.9	29,683
35	19,515	4.08	2.4	122	7.48	130.9	33,436
45	23,951	3.68	2.9	122	7.93	131.2	36,506
60	28,830	3.25	3.6	122	8.81	131	39,918
COOLING PERFORMANCE	Outdoor Loop		Electrical		Indoor Loop		
	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature @ Max Flow
	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)
55	41,692	2.58	5.7	53.6	11.01	44.5	50,495
65	38,485	2.62	5.3	53.6	10.57	44.7	47,424
75	34,766	2.61	4.9	53.6	9.69	44.6	43,671
85	31,730	2.9	4.2	53.6	9.25	44.6	41,624
90	30,331	2.96	4	53.6	8.81	44.5	40,430

GEO060V1LM							
HEATING PERFORMANCE	Outdoor Loop		Electrical		Indoor Loop		
	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature @ Max Flow
	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)
23	28,659	5.6	2.5	104	10.6	113	47,765
30	35,380	5.23	3	104	11.9	112.9	53,224
35	46,128	4.98	3.7	104	14.1	112.9	63,118
45	53,702	4.86	4.2	104	15.4	113.1	70,283
60	60,014	4.21	5.2	104	15.9	113.3	74,377
23	14,739	6.18	1.7	122	7.9	131	35,824
30	22,723	6.04	2.1	122	9.7	130.9	43,330
35	26,885	5.62	2.4	122	10.1	131.1	46,059
45	32,344	5.12	2.9	122	11	131	49,812
60	39,202	4.41	3.6	122	11.9	131.1	54,248
COOLING PERFORMANCE	Outdoor Loop		Electrical		Indoor Loop		
	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature @ Max Flow
	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)
55	91,675	4.02	5.7	53.6	17.2	44.6	77,960
65	87,240	4.12	5.2	53.6	16.3	44.7	73,183
75	84,203	4.18	4.9	53.6	15.4	44.6	69,942
85	76,731	4.29	4.2	53.6	13.6	44.5	62,095
90	75,162	4.38	4	53.6	13.2	44.5	60,218

GEO080V1LM							
HEATING PERFORMANCE	Outdoor Loop		Electrical		Indoor Loop		
	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature @ Max Flow
	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)
23	38,076	7.44	2.5	104	14.1	113	63,459
30	49,881	7.28	3	104	16.7	112.9	74,718
35	61,276	6.64	3.7	104	18.5	113	83,930
45	69,669	6.38	4.2	104	20.7	112.8	91,436
60	79,666	5.55	5.2	104	21.1	113.3	98,601
23	27,704	8.68	1.9	122	12.8	130.9	57,318
30	34,084	8.41	2.2	122	13.6	131.2	62,777
35	41,658	7.89	2.5	122	15	131.1	68,577
45	49,130	7.2	3	122	16.3	131	73,695
60	57,318	6.4	3.6	122	17.6	130.9	79,154
COOLING PERFORMANCE	Outdoor Loop		Electrical		Indoor Loop		
	Entering Liquid Temperature	Heat Absorbed	Power Input	Coefficient of Performance	Entering Liquid Temperature	Flow (USGPM)	Leaving Liquid Temperature @ Max Flow
	(°F)	Btu/Hr	KW	COP	(°F)	Nominal	(°F)
55	113,442	5.05	5.6	53.6	21.1	44.5	96,213
65	108,871	5.11	5.2	53.6	20.3	44.6	91,436
75	104,606	5.16	4.9	53.6	19.4	44.7	87,001
85	101,706	5.71	4.2	53.6	18.5	44.7	82,224
90	101,501	5.95	4	53.6	18.1	44.6	81,201

## Dimensions



### OPERATING DIMENSIONS AND WEIGHTS

MODEL	WIDTH	DEPTH	HEIGHT	WEIGHT
GEO040V1LM	750mm / 30"	750mm / 30"	650mm / 26"	105 Kg / 231 Lb
GEO060V1LM	750mm / 30"	750mm / 30"	710mm / 28"	113 Kg / 249 Lb
GEO080V1LM	750mm / 30"	750mm / 30"	830mm / 33"	142 Kg / 313 Lb

### SHIPPING DIMENSIONS AND WEIGHTS

MODEL	WIDTH	DEPTH	HEIGHT	WEIGHT
GEO040V1LM	780mm / 31"	780mm / 31"	780mm / 31"	113 Kg / 249 Lb
GEO060V1LM	780mm / 31"	780mm / 31"	840mm / 33"	122 Kg / 269 Lb
GEO080V1LM	780mm / 31"	780mm / 31"	960mm / 38"	150 Kg / 330 Lb

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