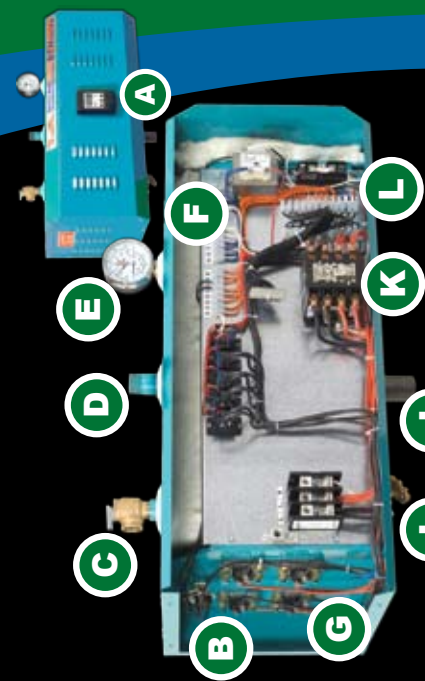


# SIZING GUIDE for BTH ULTRA

1. Choose your Application & Temp	• Garage • Post Frame	• Whole House • Sun Room • Garage • Post Frame	• Basement
2. Choose your Square Footage	50° F Operation	70° F Operation	70° F Operation
300	BTH ULTRA 6 SKU# 665-2100	BTH ULTRA 6 SKU# 665-2100	BTH ULTRA 6 SKU# 665-2100
600	BTH ULTRA 6 SKU# 665-2100	BTH ULTRA 8 SKU# 665-2101	BTH ULTRA 6 SKU# 665-2100
900	BTH ULTRA 8 SKU# 665-2101	BTH ULTRA 10 SKU# 665-2102	BTH ULTRA 8 SKU# 665-2101
1200	BTH ULTRA 10 SKU# 665-2102	BTH ULTRA 12 SKU# 665-2103	BTH ULTRA 10 SKU# 665-2102
1500	BTH ULTRA 10 SKU# 665-2102	BTH ULTRA 15 SKU# 665-2104	BTH ULTRA 12 SKU# 665-2103
1800	BTH ULTRA 12 SKU# 665-2103	BTH ULTRA 18 SKU# 665-2105	BTH ULTRA 15 SKU# 665-2104
2100	BTH ULTRA 15 SKU# 665-2104	BTH ULTRA 20 SKU# 665-2106	BTH ULTRA 18 SKU# 665-2105
2400	BTH ULTRA 18 SKU# 665-2105	BTH ULTRA 24 SKU# 665-2107	BTH ULTRA 18 SKU# 665-2105
2700	BTH ULTRA 20 SKU# 665-2106	BTH ULTRA 27 SKU# 665-2108	BTH ULTRA 20 SKU# 665-2106
3000	BTH ULTRA 24 SKU# 665-2107	BTH ULTRA 30 SKU# 665-2109	BTH ULTRA 20 SKU# 665-2106
3300	BTH ULTRA 24 SKU# 665-2107	BTH ULTRA 30 SKU# 665-2109	BTH ULTRA 24 SKU# 665-2107
3600	BTH ULTRA 27 SKU# 665-2108	BTH ULTRA 33 SKU# 665-2110	BTH ULTRA 27 SKU# 665-2108
3900	BTH ULTRA 30 SKU# 665-2109	N/A	BTH ULTRA 27 SKU# 665-2108
4200	BTH ULTRA 33 SKU# 665-2110	N/A	BTH ULTRA 30 SKU# 665-2109
4500	BTH ULTRA 33 SKU# 665-2110	N/A	BTH ULTRA 33 SKU# 665-2110

Boilers & Hydro Smart Integrator Panels sold separately. Guide is based on insulating to a R19 in walls, R38 in ceilings, maximum 12 ft sidewalls, with 2" of extruded styrene insulation around perimeter & under slab emitter and/or 3-1/2" of fiberglass insulation for staple up emitter. For more accurate sizing, a BTU heat loss of the heated space should be considered.

ALWAYS CHECK WITH & FOLLOW LOCAL CODES



- A - Master Controller (Fluid Temp Control)
- B - High Limit Safety
- C - 30 PSI Relief Valve
- D - 1" Hot Fluid Supply
- E - Temperature/Pressure Gauge
- F - Wiring Terminal: Pump, Thermostat, Outdoor Sensor
- G - Electrical Heating Elements
- H - High Voltage Terminal Block
- I - Drain Valve
- J - 1" Cold Fluid Return
- K - Main Circuit Contactor
- L - Protection Fuse

BTH ULTRA		BTU	WATER DELIVERY TEMP. RANGE	COPPER WIRE SIZE	
BTH ULTRA 6	665-2100	20,478	70°-200° F	8	
BTH ULTRA 8	665-2101	27,296		8	
BTH ULTRA 10	665-2102	34,120		6	
BTH ULTRA 12	665-2103	40,944		6	
BTH ULTRA 15	665-2104	51,180		4	
BTH ULTRA 18	665-2105	61,416		3	
BTH ULTRA 20	665-2106	68,240		3	
BTH ULTRA 24	665-2107	81,888		2	
BTH ULTRA 27	665-2108	92,124		1	
BTH ULTRA 30	665-2109	102,360		1/0	
BTH ULTRA 33	665-2110	112,596		2/0	
		BOILER SIZE - 28.5" Wide x 12.5" High x 16.5" Deep - 99lbs			



Each BTH Ultra unit when installed and operated per the installation instructions has a 10 year warranty covering the heat exchanger and 90 days on all other parts. See manufacturer warranty for full details. Each Hydro Smart Integrator Panel, when installed and operated per the installation instructions, has a 1 year warranty covering all parts. See manufacturer warranty for full details.

# BTH Ultra

Modulating Electric High-Temp High-Flow Space Heating Boiler (Not For Potable Water)



The High temperature, high flow BTH ULTRA electric boiler produces energy required for high demand hydronic systems in residential applications. The BTH Ultra utilizes an injection system that propels water around electric elements in the boiler to achieve maximum energy exchange.

## Emitter Types

- Baseboard
- Radiators
- Fan/Coils
- Ice Melting
- Tubing: Staple Up, Staple Down, Embedded Concrete

## Features

- Requires No Venting
- Wall Hung 29"W x 12-1/2"H x 16"D (99 lbs)
- ASME "H" Stamp: Residential/Commercial
- Thermostat Activated
- Pump Relay
- Element Modulation
- 100% Efficiency
- Temperature Settings: 70° -200° F
- Steel Heating Vessel



## ONE ZONE INTEGRATOR PANEL

High Temperature

Primary Panel

Model # HSPS120HT (shown below)

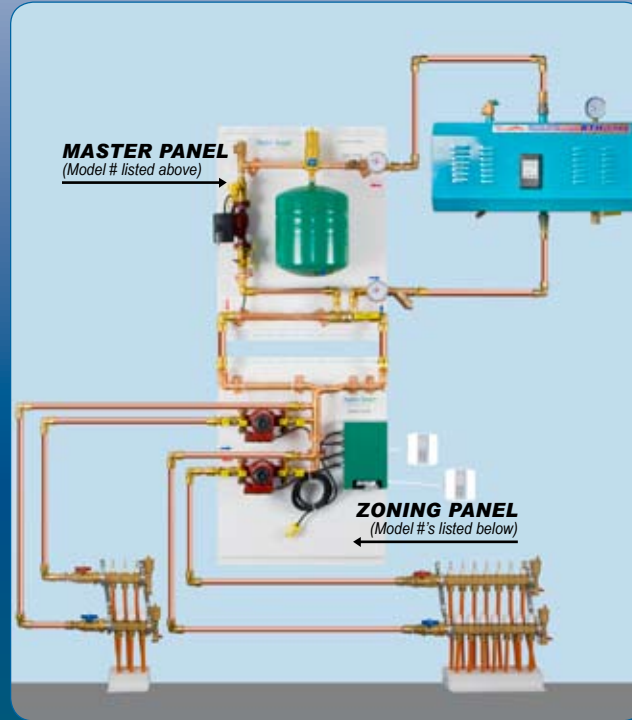


## ZONING BY PUMP

High Temperature

Zone by Pump Master Panel

Model # HSPS120MPH (shown below)

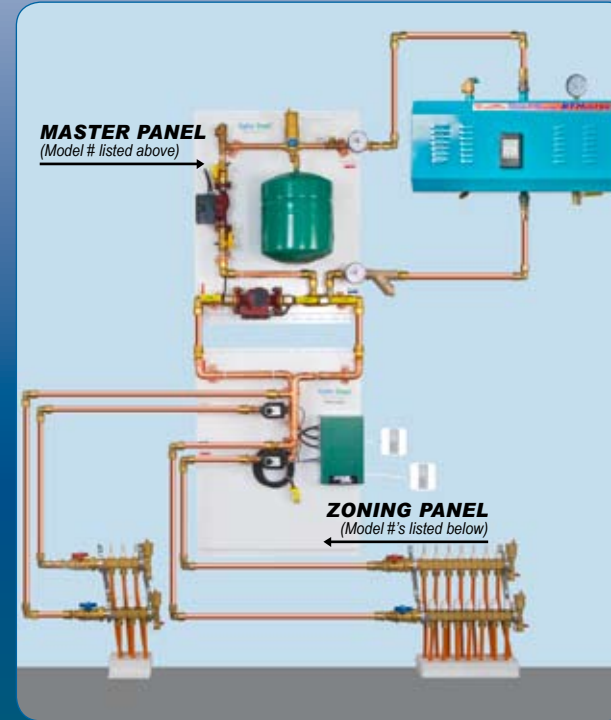


## ZONING BY ZONE VALVE

High Temperature

Zone by Zone Valve Master Panel

Model # HSPS120MZH (shown below)



## ZONING BY TELESTAT

High Temperature

Zone by Telestat Zoning Panel 1 to 4 Zones

Model # HSPS120MTH (shown below)



### INTEGRATOR PANELS HELP MAKE RADIANT HEAT *easy & reliable*

- Constructed with top quality materials, including heavy duty type L copper pipe and a powder coated panel.
- Engineered and proven panel design uses professional hydronic practices.
- By working smarter not harder, a pre-assembled panel saves job site labor expense and time.
- With nothing extra and nothing spared on each panel, every component is there to help ensure your system provides years of trouble free operation.

### 1 TEMPERATURE ZONE BY PUMP PANEL

2 Zone Model # HS1T2ZPMP (shown above)

3 Zone Model # HS1T3ZPMP

4 Zone Model # HS1T4ZPMP

### 2 TEMPERATURE ZONE BY PUMP PANEL

2 Temperature panels have a mixing valve

2 Zone Model # HS2T2ZPMP

3 Zone Model # HS2T3ZPMP

4 Zone Model # HS2T4ZPMP

### 1 TEMPERATURE ZONE VALVE PANEL

2 Zone Model # HS1T2ZZV (shown above)

3 Zone Model # HS1T3ZZV

4 Zone Model # HS1T4ZZV

### 2 TEMPERATURE ZONE VALVE PANEL

2 Temperature panels have a mixing valve

2 Zone Model # HS2T2ZZV

3 Zone Model # HS2T3ZZV

4 Zone Model # HS2T4ZZV

**Note:** Boilers, Integrator Panels, thermostats, manifolds, pipe and accessories are all sold separately.



**BTH ULTRA** boilers are efficient and a great value.

Some boiler locations simply do not have access to a gas line or the ability to be vented. Electric boilers do not require venting or a gas line making electric a great option.