SPACE HEATING SIZING GUIDE for Hydro Smart 120 Condensing Micro-Boiler







- Garage
- Post Frame



70° F Operation

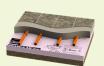
- Whole House
 Post Frame
- Sun Room
- Basement
- Garage



MODEL	SKU	MODEL	SKU
HS120-NG	665-1008	HS120-NG	665-1008
HS120-LP	665-1009	HS120-LP	665-1009
900-3,500 Sq Ft.		900-3,500 Sq Ft.	

EMITTERS TYPES

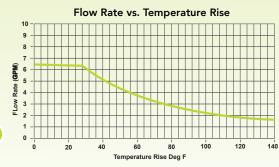
Tubing In Concrete



HS120CON OPTIONAL VENTING ACCESSORIES						
MODEL	SKU	DESCRIPTION	VENTING TYPE	ITEM		
HS-2ZVB04	665-1003	Back Flow Preventer on Exhaust Vent	Category III 4" Stainless Steel	L		
HS-2ZVWB04	Special Order	Vent Kit with Back Flow Preventer-Wall Thimble-Hood-90°Elbow-Pipe	Category III 4" Stainless Steel	М		
HS-CVENT-3		3" PVC - Concentric Vent	3" Schedule 40 PVC	N		
HS-2SVSNA04.5	Universal Adapter on Air Intake	Category III 4" Stainless Steel	0			







*For zones under 900 Sq. Ft., Use a Buff Max Tank to prevent short cycling.



BUFFMAX 30 SKU: 665-1413

Micro-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. For more accurate sizing, a BTU heat loss of the heated space should be considered. ALWAYS CHECK WITH & FOLLOW LOCAL CODES

A - Boiler Control/Code G - Fluid Over Heating

- B 3/4" Hot Fluid Supply
- C 3/4' Cold Fluid Return
- D 120 Volt Power Supply E - 1/2" Gas Supply
- F Condensate Drain
- H High Altitude Heating Adjustment
- I Fuse Protection
- J Power Switch
- K Intake/Exhaust

THIS IS A CONDENSING BOILER AND REQUIRES A FLOOR DRAIN.

HYDRO SMART 120 CONDENSING BOILER

Natural Gas Model: HS120ConNG SKU: 665-1008 Liquid Propane Model: HS120ConLP SKU: 665-1009

120

13.950 - 111.600

*99° - 140° F

1/2" MPT

SPECS

- VOLTS
- AMPS
- BTU OUTPUT
- WATER TEMP RANGE
- GAS LINE MIN. SIZE
- VENTING
 - 2"-4" CAT III SS/PVC Schedule 40
 - (Solid Core) 93%
- ENERGY FACTOR • IGNITION TYPE **Electronic Spark**
- INLET GAS PRESSURE
 - NG: Min 5.0" WC Max 10.5 " WC LP: Min 8.0" WC Max 14.0 " WC

MICRO-BOILER SIZE 24" H x 13.8" W x 10.8" D - 44lbs

HYDRO **HYDRONIC SYSTEMS**

With Condensing Technology



The HS120 Condensing Gas Micro-Boiler is a compact and powerful residential unit with a versatile BTU modulating range.

Install your system easily with our Hydro-Smart panels that are pre-wired, pre-plumbed and pressure tested.

EMITTER TYPES

• Tubing In Concrete

FEATURES

- Copper Heat Exchanger
- Flow Activated -.75 GPM
- 3" Schedule 40 PVC (Solid Core)
- Temperature Range 99° 140°F
- BTU Modulation Output 13,950-111,600
- Power Vent
- Wall Hung
- Freeze Protection
- No Pilot Light
- Energy Factor: 93%

(Combi Panel option for potable water and space heating)







SPACE HEATING PANEL SYSTEMS

ONE ZONE INTEGRATOR PANEL

Primary Secondary Panel - (One Zone) Model # HSPS120LT - SKU: 665-0900 (shown)

Shown: HS120 Gas Micro Boiler with Master 1 Zone Panel (HSPS120LT) and a Thermostat (TH135) heating tubing in-floor emitter.



ZONING BY PUMP

Zone by Master Pump Panel - 1- 4 Zones Model # HSPS120MPL - SKU: 665-1150 (shown)

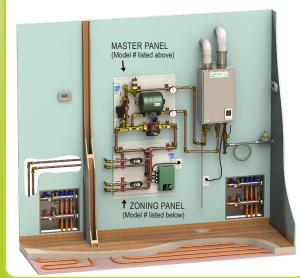
Shown: HS120 Gas Micro-Boiler with Master Pump Panel (HSPS120MPL) and a Zoning by Pump Panel (HS1T2ZPMP) with 2 Thermostats (TH135) heating tubing in-floor emitters.



ZONING BY ZONE VALVE

Zone by Master Zone Valve Panel 1- 4 Zones Model # HSPS120MZL - SKU: 665-1160 (shown)

Shown: HS120 Gas Micro-Boiler with Master Zone Valve Panel (HSPS120MZL) and a Zoning by Zone Valve Panel (HS1T2ZZV) with 2 Thermostats (TH135) heating tubing in-floor emitters.



ZONING BY TELESTAT



Zone by Master Telestat Panel - 1- 4 Zones Model # HSPS120MTL - SKU: 665-1170 (shown)

Shown: HS120 Gas Micro-Boiler with Master Telestat Panel (HSPS120MTL) with 1 - 4 Thermostats (TH135) heating tubing in-floor emitters.



HYDRO-SMART 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

1 TEMPERATURE ZONE BY VALVE PANEL

(1 Temperature panels are for systems with one emitter type)

2 Zone Model # HS1T2ZPMP - SKU: 665-1240

3 Zone Model # HS1T3ZPMP - SKU: 665-1241

4 Zone Model # HS1T4ZPMP - SKU: 665-1242

2 Zone Model # HS1T2ZZV - SKU: 665-1260

3 Zone Model # HS1T3ZZV - SKU: 665-1261

4 Zone Model # HS1T4ZZV - SKU: 665-1262

THERMOSTAT Model # TH135 - SKU: 665-5650





Other boilers, water heaters and accessories available on Menards.com

Hydro Smart 120 Condensing Micro-Boilers are compact, efficient, and a great value. **Condensing Gas Micro-Boilers** don't require large electrical needs yet they

produce a tremendous amount of BTUs. When venting and piping of a gas supply is an option, gas may be a great choice.

Each Hydro Smart 120 unit when installed and operated per the installation instructions has a 2-year warranty covering all parts and the heat exchanger. 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. No labor allowances. See manufacturer warranty for full details