

HEAT-MASTER



HEAT-MASTER Features

- Reduces Fuel Cost Up To 50%
- Payback Under 2 years
- Eliminates space under and overheating
- Works with Steam, hot water or hot air
- Extends equipment life
- Works with Oil, Gas or Propane
- Historical Trends
- Password Protected
- Alarms
- LCD Display
- Automatic Summer-Winter change over
- 365 Day Real Time Clock
- Native BACnet

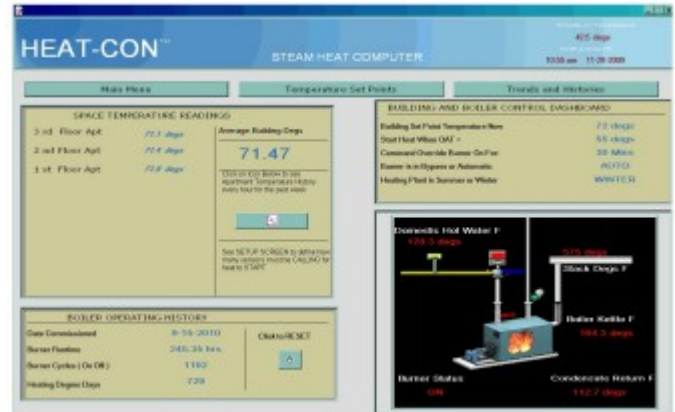
Typical Applications

- Commercial Offices
- Multi-Family Residential
- New Construction
- Warehouses
- Coops and Condos
- Colleges and Universities
- Schools
- Religious Institutions
- Retail Stores
- Nursing Homes
- Hotels and Motels
- Bed & Breakfasts
- Golf Clubs
- Nurseries and Green Houses

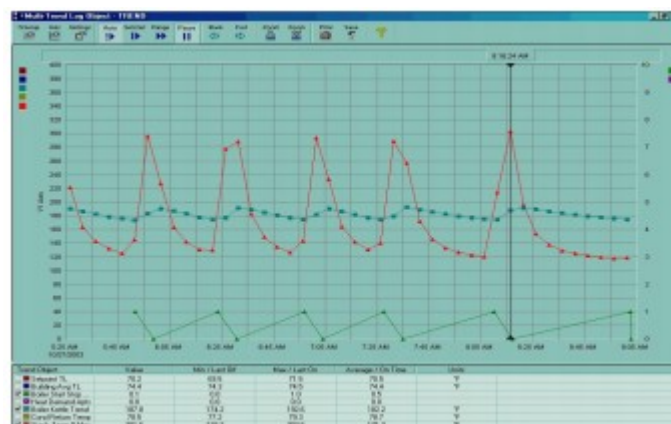
MODEL: HEAT-MASTER-S (Steam) HEAT-MASTER-H (Hot Water)

The HEAT-MASTER is a heating control system designed for commercial office buildings, multi-family residential apartment buildings, nursing homes, etc...

The HEAT-MASTER is pre-programmed to work with steam, hot air or hot water applications. Wireless Space Temperature sensors strategically located in a building provide direct feedback to the HEAT-MASTER which cycles the burners, pumps and fans "On" and "Off" as needed to maintain desired space temperatures.



The HEAT-MASTER provides Burner and Pump Lead-Lag control of single or multiple burners, pumps or fans. The lead burner or pump is rotated (alternately daily, weekly, monthly, etc.) as needed to evenly distribute run-time. If the lead boiler cannot keep pace with the load or fails to operate, the lag burner is commanded to Start.



Remote Log-In and Web Graphics, Single or multiple buildings, heating plants and building temperatures can be monitored and controlled remotely from a single entry point. From any web browser the user can monitor and control multiple buildings from one graphic. Temperature set

points, lead/lag adjustments, heating enable/disable and historical trends can be regulated and adjusted from easy to use screens.

HEAT-MASTER



Power Requirements

- 110 VAC 50/60 Hz

Operating Temperature

- 32 F to 122 F

Dimensions

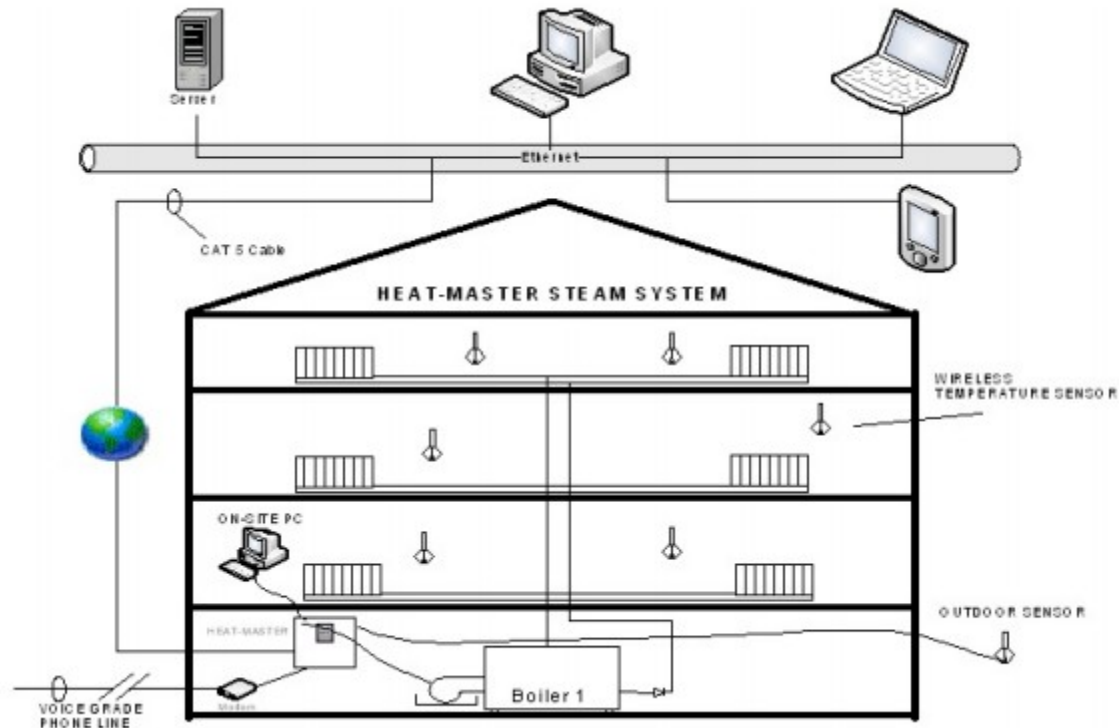
- 12" x 18" x 6" NEMA 4
(Wall Mount)

Sensor Specifications

- Outdoor Air Sensor 10 K w/ Outdoor Weatherhead
Space Sensors and Pipe
Strap-On Sensors 10K

Options

- Up to 100 Wireless
Space Temperature Sen-
sors
- Burner On/Off Status
(Calculates Run Time &
Cycles)
- Pump On/Off Status
(Calculates Run Time &
Cycles)
- Condensate Return Tem-
perature
- Domestic Hot Water Sen-
sor
- Cold Water Temperature
- Stack Temperature Sen-
sor
- Boiler Discharge Water
Temperature from Boiler
- Building return water
temperature sensor
- Make-Up Water Meter
- PC or Web Based Color
Graphics
- Ethernet



Remote Alarm Notification

Critical Alarms such as Boiler Failure or Space Temperatures Out of Range can be sent to a PDA, Blackberry or E-mailed to the Owner or Operations Manager.

BASE ORDERING:

HEAT-MASTER-S (Steam System Package)

- 3 Wireless Space Temperature Sensors
- Outdoor Air Temperature Sensor
- Burner Start/Stop Command

HEAT-MASTER-H (Hot Water System Package)

- 3 Wireless Space Temperature Sensors
- Outdoor Air Temperature Sensor
- Burner Start/Stop Command
- Circulating Pump Start/Stop Command

Sequence of Operation

When the outside air temperature falls below Winter Mode Set Point (adjustable) and call for HEAT as directed by space temperature sensors, the HEAT-MASTER shall command burner to start or open valve. HEAT-MASTER to continue to call for heat until Space Temperature Set Point (adjustable) is satisfied, then Command Burner Off or Valve to Close.