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HEAT COMPUTER 1000

BOILER CONTROL ANNOUNCED BY OAS

Optimum Applied Systems, Inc. announces the availability of the Heat Computer 1000, a remote data logging and dial-out data acquisition system with extensive storage and alarm capabilities designed specifically for small to medium sized residential or commercial building heating systems. Capable of controlling steam (ON/OFF or HI/LO fire) or hydronic (single or multi-stage) boilers, the Heat Computer 1000 records operating temperatures, cycles, setpoints, and alarms for control or archival purposes. When connected to a standard telephone network, the Heat Computer 1000 provides numerous dial-out alarms. Unlike many competitive units, full modem control is built in at a price comparable to units without remote communications capabilities and **without the need for any additional hardware**. Built upon a custom embedded computer, the Heat Computer 1000 comes complete with the following:

- Eight thermistor sensor inputs for 3 locations, outside air, boiler water temperature (aquastat), coil hot water temperature, domestic hot water temperature, supply and return line temperatures (hydronic),
- Two digital inputs for boiler ON/OFF and malfunction,
- One pulse meter input, and
- Six contact closure outputs.

The Heat Computer1000 has been specifically engineered to provide a simple, minimal cost alternative to those building owners and managers that want all the data collection and recording capabilities of the original Heat Computer, but without the need for expansion or the need to control



large buildings. Given the simplicity of installation, for those customers who wish to further reduce costs, the entire system is available as a do-it-yourself (DIY) package, including instructions, setup information, and all sensors to perform a standard installation. As with all OAS Heat Computers, the Master Dialer Windows® based software is provided at no additional charge.

The Heat Computer 1000 can control steam, hydronic, or multi-stage hydronic systems. For steam boilers, control is either ON/OFF or HI/LO fire. When used with HI/LO fire boilers, the Heat Computer adjusts burner run time based on either actual header pressure (requiring an optional pressure transducer) or OAS' proprietary aquastat-to-pressure conversion algorithm. For hydronic systems (either single or multi-stage), control is based on an outdoor reset curve that modulates boiler water temperature based on outside temperature. Aquastat temperature is available only when used with steam boilers.

A local RS232 port is available for access to system functions, configuration and programming. A local keypad and LCD are used to provide on site information and reporting.

For those situations that permit self-installation, the Heat Computer 1000 is available as a do-it-yourself (DIY) kit. This kit includes the controller itself, three apartment sensors, one outside sensor assembly (with housing), three boiler probes, Master software CD, installation and operation manuals. The unit is pre-configured for either steam or hydronic operation. All other parameters may be adjusted on site by the customer using the Master software and detailed setup instructions provided by OAS.

Reports generated via modem include:

- current status and temperatures of all monitored sensors,
- record of all monitored temperatures every hour on the hour for the last 3 days,
- record of every burner on/off cycle (separating heat calls from domestic hot water calls), malfunctions, bypasses or overrides for the last 84 events, and
- history of burner run time, bypass, malfunction, water consumption and corresponding high/low outside temperatures for 14 days



Key to the utility of this system is the dial out function. Signals, such as burner malfunction, aquastat temperature too low, low domestic hot water temperature, system manually bypassed, apartment temperature sensor malfunction, or flood (optional), can be set to trigger a telephone call to a human, modem, answering machine, or beeper to provide notification of an alarm condition.

With over 2000 installations and over 5 years of stored data, the Heat Computer has an extensive track record of uninterrupted service. For further information, contact Ron Vrana at Optimum Applied Systems, Inc., 145 Palisade Street, Dobbs Ferry, NY 10522, or visit our web site at www.oas-inc.com.