

Energy Management

2704 Boiler Controller

5000 Steam Flow Computer



Eurotherm has long been held as the market leader in providing high performance control and data management solutions to a wide range of process applications. Both the 2704 and 5000 Series of instruments have been designed to provide solutions to meet specific requirements in packaged boiler and steam measurement applications.

Energy management



2704 Boiler Controller

- water level
- boiler pressure
- continuous total dissolved solids (TDS)
- timed bottom blowdown
- main steam warm-up
- open communications
- flexible user interface

Incorporating all the main boiler control elements the 2704 is ideal as an integrated control solution for packaged boilers.

Optimised control performance provides for lower emissions, reducing energy costs and making for a cleaner environment. In particular, boiler efficiency can be vastly improved by continuous control of the boiler TDS. A specialist input module makes it compatible with standard TDS probes making both retrofit and new installations easy to accomplish. The 2704 can also be used to provide combustion fuel/air ratio control or integrated into existing burner management control systems.



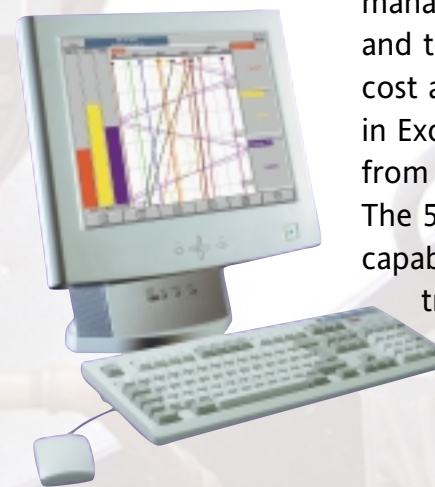
5000 Steam Flow Computer

- saturated steam calculations
- mass flow
- heat flow
- heat consumed
- easy to use touch screen technology
- up to 48 configurable input channels
- Ethernet communications
- remote and mobile access

Eurotherm's 5000 Series options have equations designed particularly for use with saturated steam. Mass Flow, Heat Flow and Heat Consumed can all be calculated and recorded. All of these equations can be set to use either pressure or temperature as the measured input and use look-ups from the 1999 ASME Steam Tables.

The 5000 Flow Computers are ideal for energy and facility management. They can be used to monitor energy performance and to identify problems as they occur as well as for energy cost allocation. Data can be presented and reported as required in Excel™ using Report 5000 software to access information from the secure process data files.

The 5000 Flow Computers have excellent communications capabilities allowing the units to be networked for data transfer to other systems or for remote access by the user, ensuring information is available wherever and whenever it is needed.



2704 Boiler Controller



	Boiler Pressure	Water Level	Total Dissolved Solids
Process inputs	4-20mA	4-20mA	4-20mA TDS Probe (conductivity)
Control outputs	4-20mA Dual relays	4-20mA Dual relays	4-20mA Dual relays
Control functions	PID Valve position	PID Valve position	PID On/off control Valve position
Alarms	High, low	High, low	High, High-High
Standard features	Main steam warm up	Single element	Timed bottom blowdown Temperature compensation Probe diagnostics
Calibration	Factory set	Factory set	User calibration
Advanced features	Maths & Logic blocks timers & real time clock		
Communications	Modbus RTU, Modbus master, Profibus DP, Devicenet		
Power supply	82-264Vac, 24Vdc/ac		

5000 Steam Flow Computer

	5100e-SFC	5100V-SFC	5180V-SFC	5000B-SFC
Display	5" STN Touch	5.5" TFT Touch Screen	12.1" TFT Touch Screen	None
Input channels	6	6 or 12	6 to 48	6 or 12
Calculation Channels	12	36	48	36
Internal memory for Process Data	3Mbyte	5.5Mbyte	13Mbyte	13Mbyte
Ethernet	Standard	Standard	Standard	Standard

Standard calculations:

Saturated Steam Mass Flow:

Saturated Steam Heat Flow:

Saturated Steam Heat Consumed:

Input parameters

Flow; Pressure or Temperature; Dryness

Flow; Pressure or Temperature; Dryness

Inlet Flow; Input Pressure or Temperature; Inlet Dryness;
Return Temperature

Calculations use 1999 ASME steam tables

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