

EUROTHERM FLEXIBLE SOLUTIONS

# PAPER

CHART RECORDERS



*...ensures recorder excellence  
in quality, accuracy, security and service*

# 4000 SERIES SMALL FRAME RECORDERS



**4101 ANALOGUE RECORDER**

- Clear Analogue Display
- High Visibility Pens
- Annotation
- Pre-configured & Ready for Use

Available as either a 4 pen continuous or 6 pen multi-point recorder, the 4101 is ideal for simple, low cost applications. The units are supplied pre-configured, thus reducing commissioning time.



**4102 CONFIGURABLE RECORDER**

- Digital Display
- User Configurable
- Input Adjust
- Remote Chart Control

The 4102 provides all the features of the 4101. The use of a digital display allows for viewing of Process Variables and alarm status. The additional keypad provides access via password to the configuration parameters.



**4103 PROGRAMMABLE RECORDER**

- Digital & Bargraph Display
- Data Archiving
- Communications
- Powerful Maths Pack

The 4103 is a high specification chart recorder, with annotation and basic maths fitted as standard. Optional add on features such as a PCMCIA card slot and Modbus™ communications make this an ideal Data Acquisition unit.

4 1 0 1 C   4 1 0 1 M   4 1 0 2 C   4 1 0 2   4 1 0 3 C   4 1 0 3 M

## SYSTEM RANGE



**4101C**



**4101M**



**4102C**



**4102M**



**4103C**



**4103M**

	4101C	4101M	4102C	4102M	4103C	4103M
Continuous Pen	●		●		●	
Multipoint Dotter		●		●		●
Number of Inputs	1 to 4	6	1 to 4	6	1 to 4	6
Digital Display			●	●	●	●
User Configurable			●	●	●	●
Annotation	●	●	●	●	●	●
Chart Illumination			●	●	●	●
Relay Outputs	●	●	●	●	●	●
Contact Inputs	●	●	●	●	●	●
Communications					●	●
Retransmission					●	●
Data Archiving					●	●
Basic Maths					●	●
Advanced Maths†					●	●
Low Voltage Supply	●	●	●	●	●	●
Portable			●	●	●	●
PC Configuration	●	●	●	●	●	●

†Includes Counters, Timers and Totalisers

# 4000 SERIES LARGE FRAME RECORDERS



**4181M RECORDER**

- 48 I/O Channels
- Data Archiving
- Powerful Maths Pack
- Communications

The 4181 is a versatile, compact 180mm multipoint chart recorder, capable of displaying up to 48 channels, supporting a wide range of powerful options which include maths pack, serial communications and data archiving.



**4250M RECORDER**

- 96 I/O Channels
- User Selectable Inputs
- Data Archiving
- 3 User tables

With multipoint recording on a 250mm wide chart the model 4250 can monitor up to 96 channels. Reporting features allow data such as batch numbers and totaliser values to be printed to the chart at regular intervals. When fitted, this data can be stored on an integral PCMCIA card and transferred for viewing and printing on a PC, using Eurotherm's Review software.

4 1 8 1 M    4 2 5 0 M

Temperature recording scale spacing requirements for category A heat treatments			
Total indicating range	Max. temp. increment per mm of scale	Max. interval between scale divisions	Chart width required
<400°C	4°C	10°C	100mm
<750°C	4°C	10°C	180mm
≥750°C	4°C	10°C	250mm

**Providing temperature and vacuum recording for the most demanding applications**



# CIRCULAR RECORDERS



**392 CIRCULAR RECORDER**

- Choice of up to 4 Pens
- Clear Circular Chart
- User Configurable
- Custom Linearisation

The 392 circular chart recorder is particularly useful if you need to review longer-term trends in a single glance. The choice of 12 hour, 24 hour or 7 day charts assist with this. Another option is the extremely useful maths pack further increasing the recorder's capabilities.










**394 ANNOTATING CIRCULAR RECORDER**

- 4 Colour Printing
- Logging to PC Card
- Annotation
- Modbus Communications

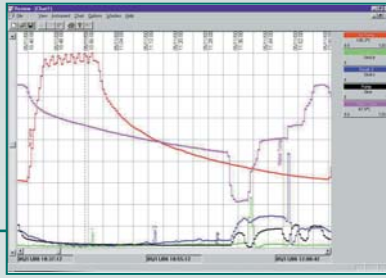
The 394 is a clear step forward in circular trending technology. Four colour printing together with annotation produces a clear and easy to read chart. The unit is fully configurable from the front panel or via the optional PC card reader. Up to two Controllers can be added enabling the 394 to control, as well as record the process.

3 9 2    3 9 4

## SELECTION GUIDE

	 <b>4101</b>	 <b>4102</b>	 <b>4103</b>	 <b>4181M</b>	 <b>4250M</b>	 <b>392</b>	 <b>394</b>
Continuous	1 to 4	1 to 4	1 to 4			1 to 4	
Multipoint	6	6	6	48	96		6
Display Type	Analogue	Digital	Digital	Digital	Digital	Digital	Digital
Chart Width	100mm	100mm	100mm	180mm	250mm	10"	10"
Annotation	●	●	●	●	●		●
Relay Outputs	●	●	●	●	●	●	●
Retransmission Outputs			●	●	●	●	●
Contact Inputs	●	●	●	●	●	●	●
Modbus Communications			●	●	●		●
Memory Card			●	●	●		●
Mathematics			●	●	●	●	●
Counters, Timers & Totalisers			●	●	●	●	●
PC Configuration	●	●	●	●	●		●

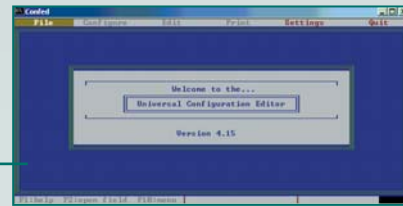
## 4000 SERIES SOFTWARE PACKAGES



### REVIEW

- Off-line Package
- Secure Database
- Chart Display & Printing
- Remote File Transfer

Eurotherm Review software allows archived data to be viewed off-line on a PC. Packed data files from the recorders local media are transferred into the Review database. Charts can then be created for viewing and printing or exported as a CSV file to standard office packages.



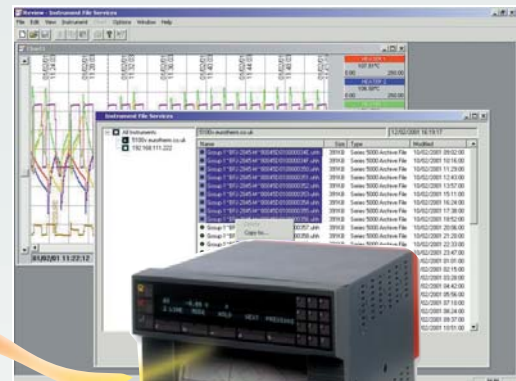
### 4000 CONFIGURATION EDITOR

- Easy to Use
- Off-line Configuration
- Channel Copy Function
- Configuration Transfer

Allows configurations to be created, or modified off-line and transferred directly to a recorder via an integral connector or optional communications port. Alternatively configuration files can be saved to a PCMCIA data card.

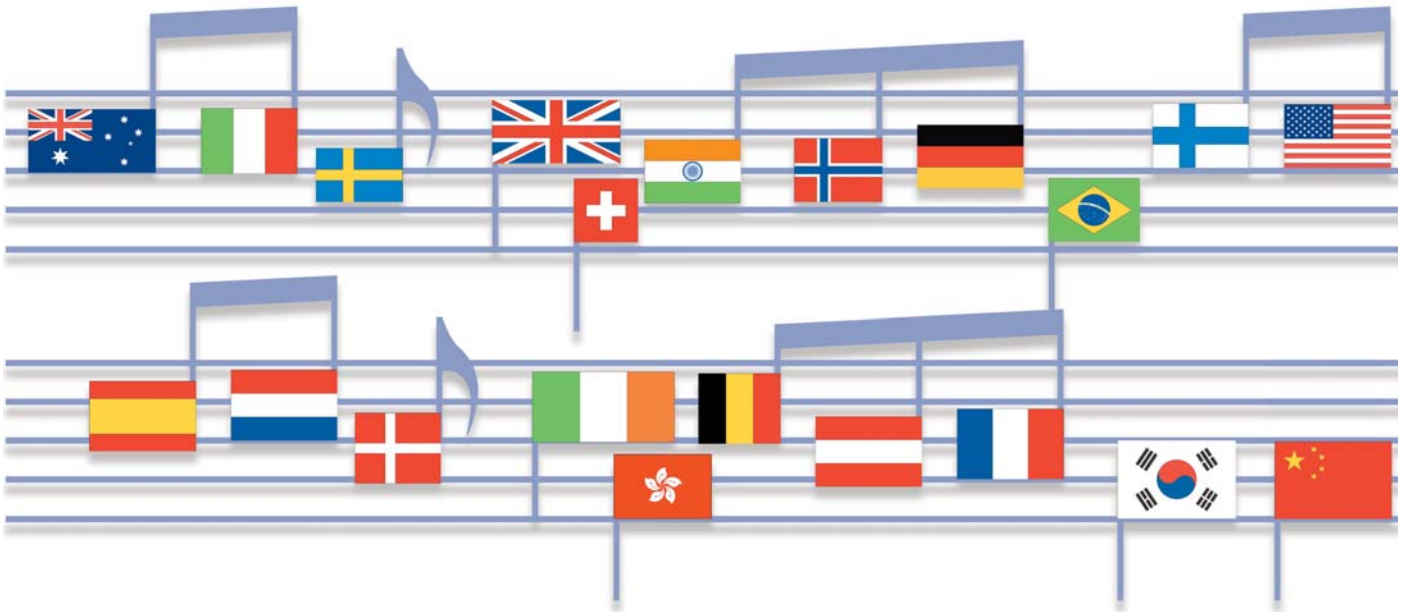
## REVIEW AND CONFIGURATION SOFTWARE

- Off-line Software
- Modem Support
- Secure Data
- Data Export



# Eurotherm: International sales and service

Understanding and providing local support is a key part of Eurotherm's business. Complementing worldwide Eurotherm offices are a whole range of partners and a comprehensive technical support team... a soothing melody to ensure you get a service you will want to go back to.



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