



Eurotherm Nanodac Data Recorder / Controller V4

Product Images



Short Description

High integrity graphical data recording aids statutory compliance across regulated industries.

World class PID control for greater performance and process reliability.

Description

The Nanodac recorder/controller offers the ultimate in graphical recording and combined with PID control for a box of its size. The compact 1/4 DIN panel mount unit offers up to eight high accuracy universal inputs for

data recording and PID control. This secure data recording device with accurate control is enhanced with the addition of a dual-channel set point programmer and a full complement of digital communications options.

The 3.5in TFT display offers incredibly clear visualisation of process parameters with a wide selection of configurable views to best suit the application. Views include: Setpoint Programmer Interface and Programmer Future Trend; Horizontal and vertical trends; Numeric; Alarm panel, Alarm status, and control loops. The unit also provides user wiring from the front of the product for detailed configuration without the need to connect to a PC.

Key Features

- Secure data recording
- 2 PID control loops
- Dual programmer
- High accuracy universal inputs
- USB removable data storage facility
- Compact design
- 50MB flash memory
- Ethernet communications
- ¼ VGA crystal clear display
- 30 virtual channels
- Steriliser Application Block
- Relative Humidity Application Block
- Multiple I/O options
- Cascade with auto-tune
- Multi-language support (French, German, Italian and Spanish)
- PID Control Loops.

Explanation	<p>Data Acquisition and Recording</p> <p>The Nanodac recording functionality utilises the secure strategies and UHH format developed by Eurotherm through years of recording expertise. As well as multiple real-time views and historical review on the product, multiple data archiving strategies are provided utilizing the 50MB onboard Flash memory, removable USB and data transfer via FTP to a specified server. The four universal input channels provide high accuracy (suitable for use in Nadcap applications) and 125ms parallel sampling. An additional 30 virtual channels can be utilized to provide maths, counter, slave communications and totaliser functionality with the instrument.</p>
	<p>The nanodac instrument can also be upgraded to provide two independent control loops or the advanced cascade loop. The two independent control loop utilise the advanced Eurotherm PID algorithm providing high performance and reliability to your process. The standard dual loop selection also includes one of the best auto tune facilities available along with overshoot inhibition (cutbacks); compensation for power fluctuations using power feedforward; linear, fan, oil and water cooling The all-new advanced cascade loop allows ease of setup and tuning when cascade control is needed. This application block allows the operator to set up individual set point ranges and tune the cascade loop, something unique to the Nanodac.</p> <p>Heat Treatment is one of the many processes that often need to vary the set point of the control process over a set period of time; this is achieved by using a set-point program. The Nanodac offers an optional Dual Programmer option supporting up to 100 programs locally, each program supporting 25 segments. The Nanodac also provides remote access to a further 100 programs that can be easily retrieved via FTP and 100 programs using the USB memory stick.</p>
Brand	Eurotherm
Total Sample Rate	125ms
Display Colour	Multi
Display Digits	Graphic / Text
Input Type	Vdc, mV, mA, Linear, Thermocouple, RTD, Digital
Channel(s)	30
Typical applications	Industrial, Sterilisation, Thermal Processing
Measurements	CO2, Humidity, Oxygen Level, Temperature, Universal

Additional Options

Supply Voltage	90-264V ac 110-370V dc 45-65Hz
	20-42V ac RMS 20-54V dc
Controller	None (default)
	2 Control Loops
Programmer	Advance Control Loop (Includes 2 Control Loops)
	None (default)
Output Options 1/2/3	Dual Programmer
	Logic/Relay/Relay
	Logic/Relay/IsoDC Output
	Logic/Logic/Relay
	Relay/IsoDC/IsoDC
Communications Protocols	Modbus TCP/IP Slave (default)
	Modbus TCP/IP Master
Operating Language	English (Default)
	French
	German
	Italian
	Spanish
OEM Security	OEM Security Enabled
Toolkit Blocks	Basic Toolkit Blocks