



Les Mesures 16th Measurement Technology Awards

These take place every year in June. This is an opportunity for editorial staff to review all the products that have been presented or discovered during the past year and reward the instruments and the most innovative solutions in ten categories. Ten winners and ten honorable mentions are on the honor roll.

This 16th edition of our Technology Awards will introduce you to striking innovations in instrumentation and industrial automation. Our roll of honour includes ten award winners and ten special commendations. *Full List at the end of this article*

Category: AUTOMATION EQUIPMENT

Winner: Invensys Eurotherm nanodac™ recorder/controller



The 18 variables are recorded in an internal 50MB flash memory. The data can also be transferred to a USB key or an FTP server via the Ethernet interface.

Invensys Eurotherm's nanodac recorder/controller brings together video recording and PID control in a single unit. Its compact size and high-quality full-colour display set it apart from the rest.

The nanodac device brings two worlds together: recording and control. Designed by *Invensys Eurotherm*, it effectively combines control capabilities and signal acquisition, display and recording functions within the same this combination of features is not

box. And achieved to the detriment of the equipment's size: this unit deserves its 'nano' prefix. Its front panel of 96 x 96 mm (1/4 DIN) and depth of 90 mm meet the demands of industrial equipment manufacturers who want compact hardware in order to reduce the size of their cabinets or machines. The opportunity to use a single device, rather than two, also reduces engineering and integration costs. There is only one product to be installed and one wiring diagram to be drawn up. What's more, to simplify stock control and maintenance, the nanodac instrument is not available in numerous different models and does not offer a multitude of optional features. There is one recorder version and another recorder/controller version. It is also possible to buy the recorder and add the control functionality at a later stage. The device can provide two independent control loops (on/off, PID or PV), and has four universal input channels (thermocouple, resistance temperature detector, current and voltage).

Multiple options for displaying parameters

The input signals are sampled at 16 bits per sample and recorded in parallel at a maximum interval of 125 ms. The accuracy of these inputs is better than 0.1% of the measurement taken. But beyond these 4 input values, it is also possible to process this data and carry out calculations in various ways, thus obtaining 14 virtual channels. The user chooses which values to display and in what format: trend lines running horizontally or vertically, horizontal or vertical bar graphs, numerical values, alarm statuses or control loops. This allows the user to monitor trends in a group of six chosen variables on the 3.5" (8.89 cm) TFT colour display with a resolution of 320 x 240 pixels. Given the compact nature of the unit, it would hardly be possible to fit it with a larger

screen, but it must be recognised that this screen offers excellent display quality and the possibility of monitoring process parameters in several different ways.

Youssef Belgnaoui

Editor in Chief



Full list of all 10 categories and winners. for Mesures online [click here](#) (French only)

p.28 Electronic instruments: Lecroy, Fluke

p.29 Industrial networks: Moxa, Inventia

p.30 Automation equipment: Invensys Eurotherm

p.31 Industrial IT: Digi International, Motion Computing

p.32 Process instruments: Endress + Hauser, Siemens

p.33 Automatic identification: Cognex, Prooftag

p.34 Contactless control: Keyence, Stemmer Imaging

p.35 Mechanical measurement: Renishaw, Mahr

p.36 Physical measurement: Mettler-Toledo, Alpha Mos

p.37 Industrial analysis: Aerovia, Neo Monitors

16th Edition