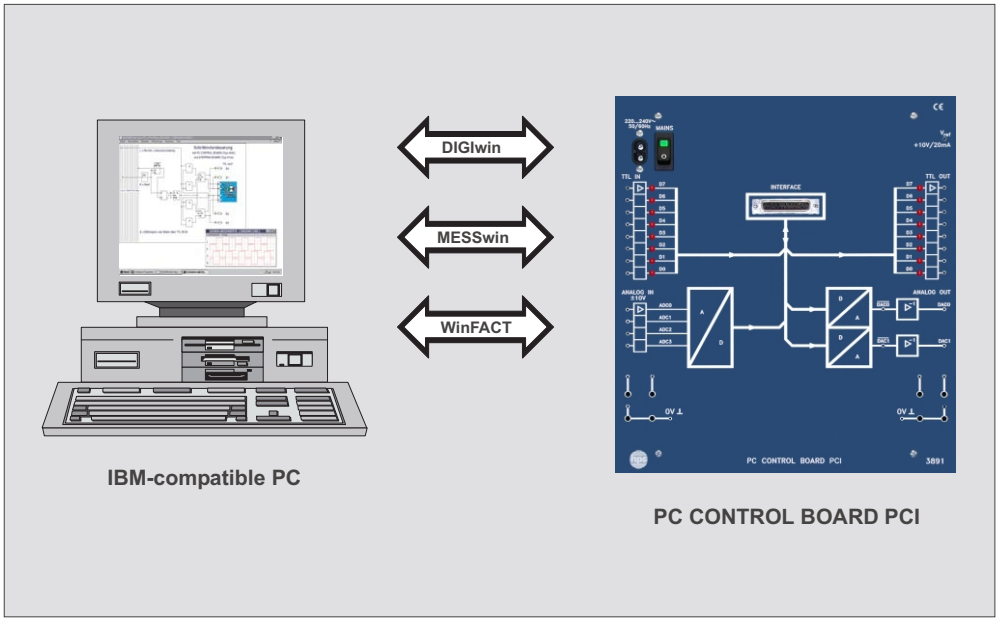
Digital Technology / Control Engineering / Measuring

PC CONTROL BOARD PCI

Type 3891



- **Universal interface for digital technology, control engineering and measuring**
- **Software programs for digital technology, control engineering and measuring**
- **Direct connection of hps Boards possible:**
  DIGI BOARD 2, MOTOR BOARD, SERVO BOARD, STEPPING BOARD, and PID BOARD
- **4 analog inputs, 2 analog outputs / 8 digital inputs and outputs**

The PC CONTROL BOARD PCI serves as an interface between a commercially available PC (IBM-compatible) and the Boards for digital technology, control engineering and measuring contained in the hps program.

Three software programs are offered for the PC CONTROL BOARD PCI:

- **DIGIwin**
- **MESSwin**
- **WinFACT**

DIGIWINcan be used to design, simulate and analyse any digital circuits. The program provides numerous components for this purpose.

External devices such as the hps DIGI BOARD 2 can be included in the simulation in connection with the PC CONTROL BOARD PCI.

MESSwinis an object-oriented programming environment for tasks in the field of measuring, controlling and regulating.

MESSwin can be used for example in connection with the PC CONTROL BOARD PCI for position control with the hps SERVO BOARD or for speed control with the hps MOTOR BOARD.

WinFACT is an innovative modular software program for analysis, synthesis and simulation in control engineering with the simulation system BORIS as its basic module.
It can be expanded by a fuzzy shell for analyzing fuzzy systems. The fuzzy systems generated with FLOP can be integrated in the block oriented simulation of BORIS.

WinFACT was especially designed for use in vocational, technical and academic schools, but is also appropriate for use in industry and research.

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PC CONTROL BOARD PCI

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Mechanical Data

The front panel of the PC CONTROL BOARD PCI is made of 5 mm thick laminate, matt blue in colour with white engraving representing the built-in function groups.

The rear of the Board is protected with a grey plastic cover. Its shape allows the Board to be placed at an ergonomically favourable angle for example on a table.

Accessories Required

- IBM-compatible PC with Windows 95 / 98 / NT 4.0 / 2000 / ME oder XP, free slot for PC Plug-in Card (5 V)
- PCI-I/O Card (hps Type 2736) with Connecting lead

Available Software

- **DIGIwin:**
  Simulation software for digital technology
- **MESSwin:**
  Object-oriented programming environment for tasks in the field of measuring, controlling and regulating.
- **WinFACT:**
  Software for analysis, synthesis und simulation in the control engineering

Technical Data

Mains connection
- 220 V AC ... 240 V AC / 115 V AC (110 V AC); approx. 15 VA; 50 ... 60 Hz

INTERFACE CONNECTION
To the Slot Card in the PC via a 25-pin Sub-D plug

TTL IN
- Inputs: 8 (D0 ... D7)
- Input voltage: TTL level (5 V)
- Display: LED

ANALOG IN
- +/-10 V
- Inputs: 4 (ADC0 ... ADC3); multiplex mode
- Input voltage: -10 V ... +10 V (tolerance: +/-200 mV)
- Input resistance: 1 M

TTL OUT
- Outputs 8 (D0 ... D7)
- Output voltage: TTL level (5 V)
- Display: LED

ANALOG OUT
- 2 Outputs: inverted / not inverted, over digital to analog converters
- Output voltage: -10 V ... +10 V; (tolerance: +/-200 mV)

V_{ref}
- Output voltage: +10 V; 20 mA
  e. g. for SERVO BOARD (Type 5131)

PCI-I/O Card (hps Type 2736)
- PCI slot (5 V)

Adapter fields
The adapter fields serve for change-over from 4 mm to 2 mm plug connections and to plugin adapters (BNC jack 4 mm plugs). Wiring of the inputs and outputs of the PC CONTROL BOARD PCI via 2 mm jacks.

Dimensions and weight
- 266 x 297 x 90 mm (w x h x d); weight: approx. 1.5 kg

To conduct the experiments, the PC CONTROL BOARD PCI is placed on a table or suspended in an hps bench rack for demon-Stration purposes.

Subject to technical modifications.