

**IPT-200** 

Instrumentation and Process Control Trainer



# (EN) IPT-200 Instrumentation and Process Control Trainer

The Instrumentation and Process Control Trainer allows students performing hands-on experiments in Pressure, Flow and Level applications. The systems unique design allows rapid conversion between Pressure, Flow and Level experiments by adjusting the position of valves. All devices are prewired to terminal strips allowing for quick circuit modification. Activities in loop wiring, transmitter setup and loop tuning of PID parameters provide a thorough understanding of Process Control. The system is delivered in a mobile frame version and allows to include several add-ons.

# **TOPICS COVERED**

- Trainer Familiarization
- » System P&ID
- » System Connections
- » Operator Control Panel
- » Single Loop PID Controller
- Trend Viewer
- Introduction to Process Control
- Open Loop Control
- Closed Loop Control
- Level Measurement and Level Control
- Pressure Measurement and Pressure Control
- Flow Measurement and Flow Control
- Temperature Measurement and Temperature Control (Option)

# **IPT-200 INSTRUMENTATION AND PROCESS CONTROL TRAINER**

# **DIFFERENT CONTROLLER OPTIONS**





#### **DIFFERENT HMI**







\* The content of this document may change without prior notification

#### **HOW TO ORDER**



### Select at least one

# Controller options

- **01** AB Micro800
- **04** Siemens S7-1200
- **07** Omron CP1
- **08** Mitsubishi FX-3
- 10 Schneider M340 System
- 00 No PLC

# Select one

# HMI Options

- 01 AB 7" Micro PanelView
- **03** Siemens KTP-700 7"
- **04** Omron NB 7"
- 05 Mitsubishi GS 7"
- 07 Schneider HMIST6400 7"
- **00** No HMI <sup>1</sup>
- <sup>1</sup> If a PLC is purchased, it is recommended to purchase an HMI

# Select one

# Fault Insertion

- 1 Fault Insertion
- **0** Not fault insertion

## Select all required

#### Add-Ons

- A Sensors (On/Off Control)
- **B** Smart (HART) DP Transmitter
- C Paddle Wheel Flow Transmitter
- **D** Venturi Tube Flow Element<sup>2</sup>
- E Orifice Plate Flow Element 2
- F Pneumatic V-Notch Ball Valve
- **G** Pneumatic Diaphragm Valve
- **H** Temperature Add-on (Air)
- I Temperature Add-on (Water)
- J Temperature Transmitter (HART)
- **0** None



<sup>&</sup>lt;sup>2</sup> Required DP Transmitter (B)



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