Control Easy Technology Sdn. Bhd. (924757-A)
Industry Machine Vision, Motion, PLC & PC Control Automation Systems.
Education Control Training Systems.
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E-mail: sales@controlez.com www.control-easy.com

No	Product Description	Product Code
01	Flow Control Trainer	Model EZ – PC001
02	Pressure Control Trainer	Model EZ – PC002
03	Process Control Trainer – Temperature & Computer Controlled (Table Top)	Model EZ – PC003
04	PLC Process Control Simulator – Temperature & Computer Controlled	Model EZ – PC004
05	Process Control unit for the Study of Ph, Flow, Temperature & Level, Computer Controlled UCP	Model EZ – PC005
06	Flow Regulation & Control Unit, Computer Controlled UCP – C	Model EZ – PC006
07	Level Regulation & Control Unit, Computer Controlled UCP – N	Model EZ-PC007
08	Process Control Unit for the Study of Pressure, Computer Controlled UCP – P	Model EZ-PC008
09	Level Control Trainer	Model EZ – PC009
10	Process Control Trainer- Level, Temperature , Flow & Computer Controlled	Model EZ – PC010

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Flow Control Trainer
Model EZ-PC001

ControlEZ Control
Interface Box
PID Setting
PID Parameters

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System Configuration

Items Included In The Supply :

1.Flow Control Trainer .
PID Control System:
2. Control Panel Interface Box.
3. Manuals for: Practices and Exercises Required
Services Assembly and Installation Interface and
Control Software Starting-up Safety Maintenance
Calibration
Interconnection elements and all accessories
Included for normal working operation.

Exercises To Be Done With This Equipment

Flow control loops(Manual)
- Flow control loops(On/Off).
- Flow control loops(Proportional).
- Flow control loops (Proportional+Integral).
- Flow control loops (Proportional+Derivative).
- Flow control loops (Proportional + Derivative + Integral).

Technical Specification Summary

- PID Controller, 1/16 DIN, microcontroller based, PID controller with dual display and Adaptive Tuning. Includes Loop Break Alarm for heater break, detection without additional hardware, Dual 4 digit displays with choice of red/red or red/green displays, Universal sensor input: thermocouple, RTD, mA, mV, or V, Full PID with Pre-Tune and Adaptive Auto-Tuning, Dual outputs, Setpoint ramping and Relay or SSRD first output (mA)
- Prseuure Transmitter, Supply: 11-40V DC (2 wire), Output: 4-20 mA DC, Range: 0 + 25 mbar (approx 250 mm in height) and Rating: IP65
- Pneumatic Control Valve,outlet valve,vessel air inlet line incorporating inlet filter, Control input 4 - 20 Ma and 3 - 6 bar
-Two-channel electronic chart recorder,Input signal 4...20mA,Scales 0...100% linear, Chart width 100mm,Length of chart visible 80mm and Total length of paper 22m
- Feed back control system.
- Sensors connections in interface with different number of pins, for avoiding student mistakes.
- Control panel fabricated c/w internal wiring & accessories
- Exercise Programmes, experiements and manuals

Water flow circuit consisting of a sump tank made from clear acrylic material, orifice plate assembly, pneumatic control valve and a disturbance section comprising manual

NOTE: Complete Technical Specifications and detailed additional information available

Required Services

Electrical supply : 220-240V/ 50-60Hz
-Water supply

Dimensions & Weight

Dimensions approx. :
500 x 1000 x 1000 mm.
-Weight approx. : 30 kg.

**Specification subject to change without prior notice due to continuous improvements of the product*

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Pressure Control Trainer
MODEL EZ-PC002

ControlEZ Control
Interface Box
PID Setting
PID Parameters

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MACHINE VISION & CONTROL AUTOMATION

System Configuration

Items Included In The Supply :

1.Pressure Control Trainer .
PID Control System:
2. Control Panel Interface Box.
3. Manuals for: Practices and Exercises Required
Services Assembly and Installation Interface and
Control Software Starting-up Safety Maintenance
Calibration
Interconnection elements and all accessories
Included for normal working operation.

Exercises To Be Done With This Equipment

Pressure control loops(Manual)
- Pressure control loops(On/Off).
- Pressure control loops(Proportional).
- Pressure control loops (Proportional+Integral).
- Pressure control loops (Proportional+Derivative).
- Pressure control loops (Proportional + Derivative + Integral).

Technical Specification Summary

- PID Controller, 1/16 DIN, microcontroller based, PID controller with dual display and Adaptive Tuning. Includes Loop Break Alarm for heater break, detection without additional hardware, Dual 4 digit displays with choice of red/red or red/green displays, Universal sensor input: thermocouple, RTD, mA, mV, or V, Full PID with Pre-Tune and Adaptive Auto-Tuning, Dual outputs, Setpoint ramping and Relay or SSRD first output (mA)
- Pressure Transmitter, Supply: 11-40V DC (2 wire), Output: 4-20 mA DC, Range: 0 + 25 mbar (approx 250 mm in height) and Rating: IP65
- Pneumatic Control Valve,outlet valve,vessel air inlet line incorporating inlet filter, Control input 4 - 20 Ma and 3 - 6 bar
- Two-channel electronic chart recorder,Input signal 4...20mA,Scales 0...100% linear, Chart width 100mm,Length of chart visible 80mm and Total length of paper 22m
- Feed back control system.
- Sensors connections in interface with different number of pins, for avoiding student mistakes.
- Control panel fabricated c/w internal wiring & accessories
- Exercise Programmes, experiements and manuals

NOTE: Complete Technical Specifications and detailed additional information available

Required Services

-Electrical supply : 220-240V/ 50-60Hz
-Air supply

Dimensions & Weight

Dimensions approx. : 500 x 1000 x 1000 mm.
-Weight approx. : 30 kg.

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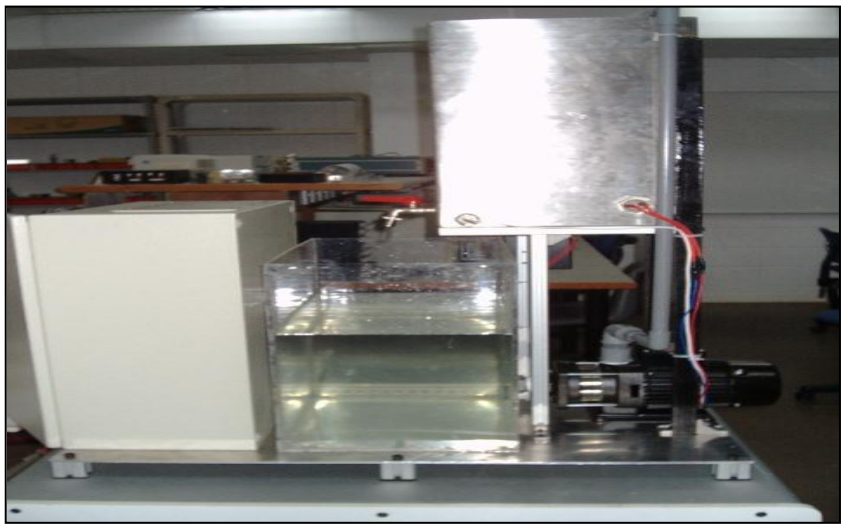
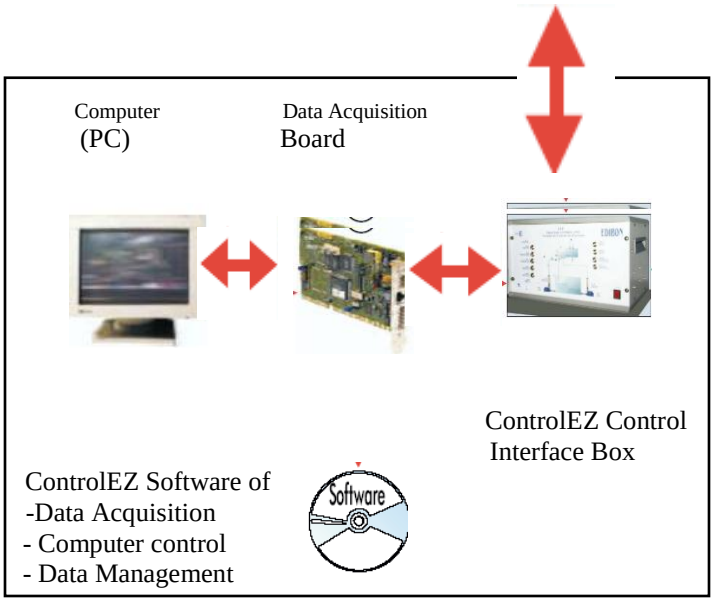
Process Control Trainer - Temperature and Computer Controlled (Table Top)
MODEL EZ-PC003





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System Configuration

Items Included In The Supply :
1.Process Control Trainer Temperature.
Computer Control System:
2. Control Panel Interface Box.
3. Data Acquisition Board.
4. Software of: Data Acquisition+ Computer
Control +Data Management.
Manuals for: Practices and Exercises Required
Services Assembly and Installation Interface and
Control Software Starting-up Safety Maintenance
Calibration
Interconnection elements and all accessories
Included for normal working operation.

Exercises To Be Done With This Equipment

Temperature control loops(Manual)
- Temperature control loops(On/Off).
- Temperature control loops(Proportional).
- Temperature control loops (Proportional+Integral).
- Temperature control loops (Proportional+Derivative).
- Temperature control loops (Proportional + Derivative +Integral).

Technical Specification Summary

- Stainless steel tank(200 mm * 300 mm * 300 mm), centrifugal pump with frequency inverter with remote control using 0-10v or 4-20 mA, isolating valves (2)
-Transparent tank(200 mm * 300 mm * 300 mm)
- Centifugal pump with max flow of 1 m3/hr
- Data Acquisition, Computer Control and Data Management Software. Flexible and open Control Software, compatible with any Windows operating system. PID analog and digital control. Sampling velocity up to 100.000 data per second.
- Control Interface with front panel process diagram. Real Time PID control and with shield and filtered signals. Sensors with signals of 0-5 V, microvolts and Hz, etc, prepared for 0-10 V computer output. 16analog +16digital inlets and 16digital +2 analog outlets.Up to 130 kHz sampling velocity.
- Feed back control system.
- Sensors connections in interface with different number of pins, for avoiding student mistakes.
- 1 heater(1 kw)
- Focus Frequency Drive Inverter to control the pump with 0-10v or 4-20 Ma
- PT100 Temperature sensor(4 - 20 Ma)-(Temperature sensor + signal converter)
- manual isolating valves
- Piping (1/2 " pipe) chrome plated on copper and assembly
- Control panel fabricated c/w internal wiring & accessories
- Exercise Programmes, experiements and manuals
- Computer, Dell Dimension 3000, Intel® Pentium® 4 - 2.8 GHz/400MHz, Microsoft® Windows® XP Professional
- Harddisk 80 Gb, 256MB 266MHz DDR SDRAM, 17" Flat color CRT Monitor with speaker

NOTE: Complete Technical Specifications and detailed additional information available

Required Services

-Electrical supply : 220-240V/ 50-60Hz
-Water supply
-Computer (PC)

Dimensions & Weight

Dimensions approx. : 500 x 1000 x 1000 mm.
-Weight approx. : 30 kg.

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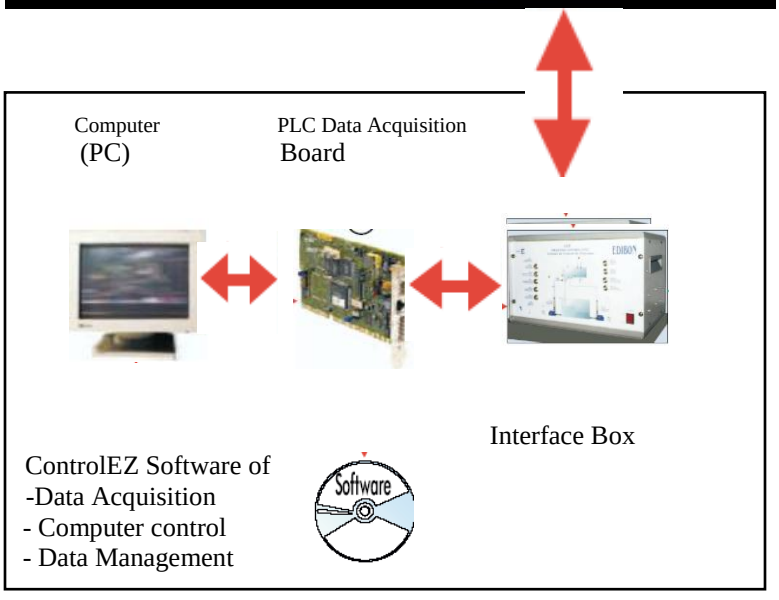
PLC Process Control Simulator - Temperature and Computer Controlled
MODEL EZ-PC004



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System Configuration

Items Included In The Supply :

1.Process Control Trainer Temperature.
Computer Control System:
2. Control Panel Interface Box.
3. PLC Data Acquisition Board.
4. Software of: Data Acquisition+ Computer
Control +Data Management.
Manuals for: Practices and Exercises Required
Services Assembly and Installation Interface and
Control Software Starting-up Safety Maintenance
Calibration
Interconnection elements and all accessories
Included for normal working operation.

Exercises To Be Done With This Equipment
-Temperature control loops(Manual)
- Temperature control loops(On/Off).
- Temperature control loops (Proportional + Derivative + Integral).

Technical Specification Summary

- Data Acquisition, Computer Control and Data Management Software. Flexible and open Control Software, compatible with Windows operating system. PID analog and digital control. Sampling velocity up to 100.000 data per second.
- Control Interface with front panel process diagram. Real Time PID control and with shield and filtered signals.
- Sensors with signals of microvolts.
- PLC CPU Integrated dig.8 inputs/ 6 outputs, Program Memory 4 Kbytes, Integrated 8-bit analog potentiometer. (for commisionning , value charge)
- RS485 Integrated communication interface
- PLC Temperature RTD measurement module, 2 Analog Input point, Input type : Pt 1 00,200,500,1000 ohm, P 0.000, Ni 10,120,1000 ohm, Resolution : 15 bit + sign & Isolation : 500 vac
- PID Feed back control system.
- Sensors connections in interface with different number of pins, for avoiding student mistakes.
- PT100 Temperature sensor & PLC Temperature sensor module
- Control panel fabricated c/w internal wiring & accessories
- Exercise Programmes, experiements and manuals
- Computer, Dell Dimension 3000, Intel® Pentium® 4 - 2.8 GHz/400MHz, Microsoft® Windows® XP Professional
- Harddisk 80 Gb, 256MB 266MHz DDR SDRAM, 17" Flat color CRT Monitor with speaker
- Level Compressor simulation & and analog simulation(c/w LED indicator, push botton & potentiometer)
- ControlEZ, RS232/RS485 commucation cable, ASCII, Freeport
- Software Programming in Windos XP/2000 Programming in the LAD, FBD and STL, Symbolic programming
- Wizards programming in text panel display, PID loop
- ControlEZ PC-Based Software come with MicroComputing software driver for processing and visualizing data from the PLC with the standard windows application Source code given in Mirosoft Visual Basic 6.0 Scada Softwafe show : GUI, Button & Edit Box, Monitoring status like temperature & level, Parameter value for temperature & level, Trending & Parameter
- Training at site (** Only Selangor) 1 day

NOTE: Complete Technical Specifications and detailed additional information available

Required Services

-Electrical supply : 220-240V/ 50-60Hz
-Computer (PC)

Dimensions & Weight

Dimensions approx. : 280 x 350 x 270 mm.
-Weight approx. : 30 kg.

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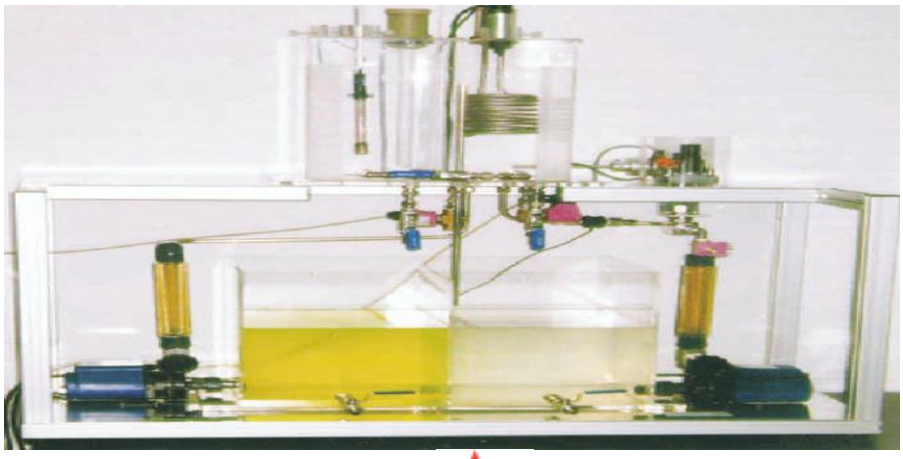
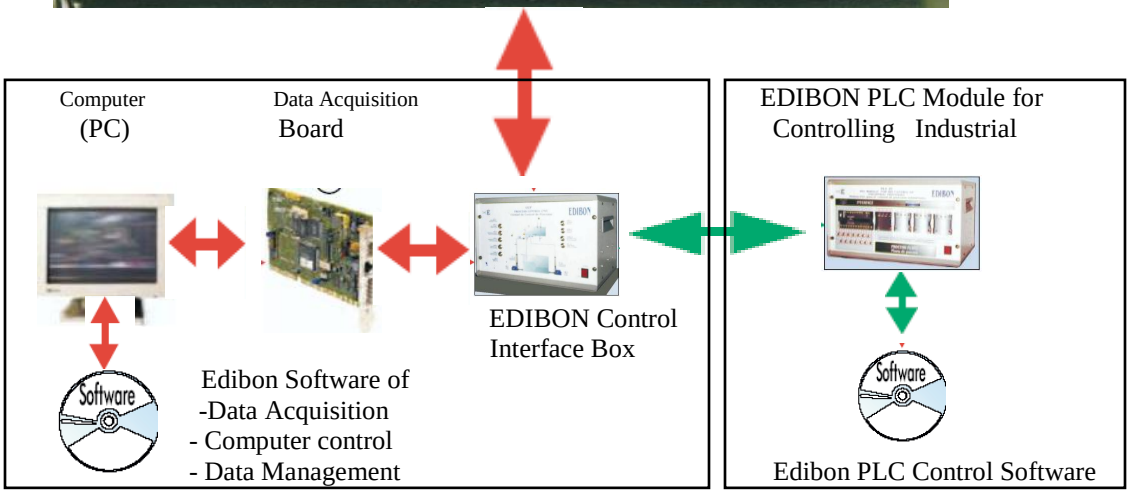
Process Control Unit for the Study of pH, Flow, Temperature and Level, Computer Controlled UCP
MODEL EZ-PC005





System Configuration

Items Included In The Supply :
1. UCP. Process Control Unit for the Study of pH, Flow, Temperature and Level.

Computer Control System:
2. Control Interface Box.
3. Data Acquisition Board.
4. Software of: Data Acquisition+ Computer Control +Data Management.
   Manuals for: Practices and Exercises Required Services Assembly and Installation Interface and Control Software Starting-up Safety Maintenance Calibration
   Interconnection elements and all accessories Included for normal working operation.

Additional PLC Control System: (Optional)
PLC Module for the Control of Industrial Processes with all neccesary accessories.
PLC Control Software
Manual and necessary accessories

Not included:
*Computer (PC)

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Exercises To Be Done With This Equipment

1.- Flow sensor calibration.
2.- Temperature sensor calibration.
3.- Level sensor calibration.
4.- pH sensor calibration.
5.- Flow control loops (Manual).
6.- Flow control loops (On/Off).
7.- Flow control loops (Proportional).
8.- Flow control loops (Proportional+Integral).
9.- Flow control loops (Proportional+Derivative).
10.- Flow control loops (Proportional + Derivative + Integral).
11.- Adjustment of the flow controller constants (Ziegler-Nichols).
12.- Adjustment of the flow controller constants (Reaction Curves).
13.- Level control loops (Manual).
14.- Level control loops (On/Off).
15.- Level control loops (Proportional).
16.- Level control loops (Proportional+Integral).
17.- Level control loops (Proportional+Derivative).
18.- Level control loops(Proportional+Derivative+Integral).
19.- Adjustment of the constants of a flow controller (Ziegler-Nicholas)
20.- Adjustment of the constants of a flow controller (Reaction Curves).
21.- Temperature control loops(Manual).
22.- Temperature control loops(On/Off).
23.- Temperature control loops(Proportional).
24.- Temperature control loops (Proportional+Integral).
25.- Temperature control loops (Proportional+Derivative).
26.- Temperature control loops (Proportional + Derivative + Integral).
27.- Adjustment of the constant of a controller of temperature (Ziegler-Nichols).
28.- Adjustment of the constant of a controller of temperature (Reaction Curves).
29.- pH control loops (Manual).
30.- pH control loops(On/Off).
31.- pHcontrol loops (Proportional).
32.- pHcontrol loops (Proportional+Integral).
33.- pHcontrol loops (Proportional+Derivative).
34.- pHcontrol loops (Proportional+Derivative+Integral).
35.- Adjustment of the constant of a pH controller (Ziegler-Nichols).
36.- Adjustement of the constant of a pH controller (Reaction Curves)

Process Diagram and Elements Allocation

- Anodized aluminium structure and stainless steel metallic elements.
- Data Acquisition, Computer Control and Data Management Software. Flexible and open Control Software, compatible with any Windows operating system. PID analog and digital control. Sampling velocity up to 130.000 data per second. Calibration system for all sensors. Registration of the state of the alarms.
- Control Interface with front panel process diagram. Real Time PID control and with shield and filtered signals. Sensors with signals of 4-20 mA, 0-5 V, microvolts and Hz, etc, prepared for 0-10 V computer output. 16analog +16digital inlets and 16digital +2 analog outlets.Up to 130 kHz sampling velocity. Proportional position and on/off Control, for actuators and control instruments.
  - Feed back control system.
  - Sensors connections in interface with different number of pins, for avoiding student mistakes.
- PLC box for Industrial Control Processes, with front panel process diagram including PLC Control Software.
- The unit contains the following elements: Double Lower Tank. Double Upper Tank. 2 circulation centrifugal pumps. Variable Area Flowmeters. Drainage Valves. Motorised Control Valve. Solenoid valves. Stirrer. Level Sensor. Temperature Sensor. pH Sensor. Flow Sensor. Etc.

NOTE: Complete Technical Specifications and detailed additional information available

Required Services

-Electrical supply : 220-110V/ 50-60Hz
-Water supply
-Computer (PC)

Dimensions & Weight

Dimensions approx. : 500 x 1000 x 1000 mm.
-Weight approx. : 30 kg.

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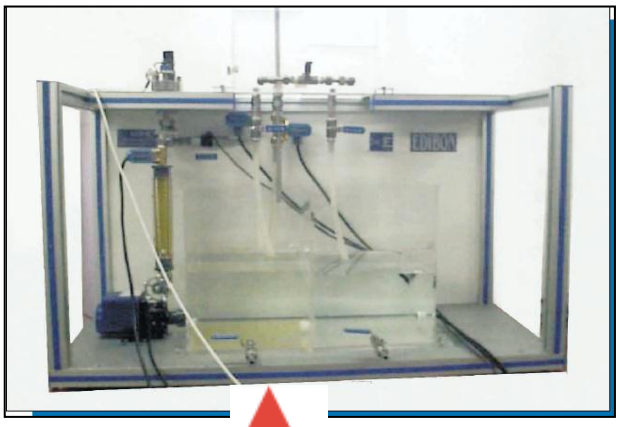
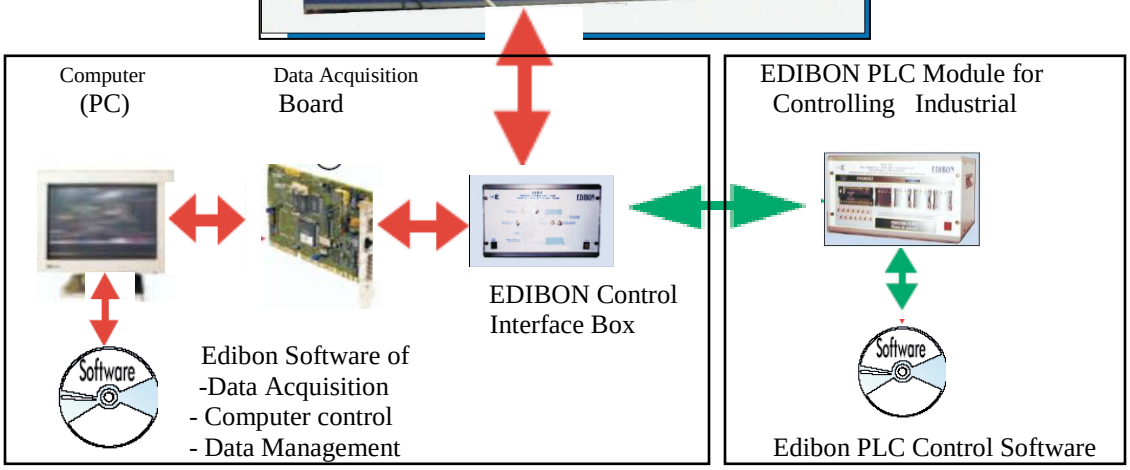
Flow Regulation and Control Unit, Computer Controlled UCP-C
MODEL EZ-PC006





System Configuration

Items Included In The Supply : 1. UCP-C.Flow Regulation and Control Unit. Computer Control System: 2. Control Interface Box. 3. Data Acquisition Board. 4. Software of: Data Acquisition+ Computer Control +Data Management. Manuals for: Practices and Exercises Required Services Assembly and Installation Interface and Control Software Starting-up Safety Maintenance Calibration Interconnection elements and all accessories Included for normal working operation.	Additional PLC Control System: (Optional) PLC Module for the Control of Industrial Processes with all necessary accessories. PLC Control Software Manual and necessary accessories Not included: *Computer (PC)

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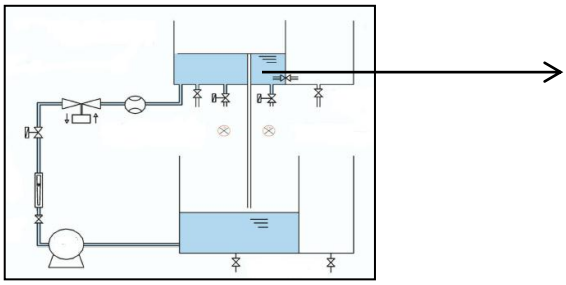
1.- Flow sensor calibration.
2.- Flow control loops (Manual).
3.- Flow control loops (On/Off).
4.- Flow control loops (Proportional).
5.- Flow control loops (Proportional+Integral).
6.- Flow control loops (Proportional+Derivative).
7.- Flow control loops (Proportional + Derivative + Integral).
8.- Adjustment of the constant of a flow controller (Ziegler-Nichols).
9.- Adjustment of the constant of a flow controller (reaction curves).

Process Diagram and Elements Allocation



- Anodized aluminium structure and stainless steel metallic elements.
- Data Acquisition, Computer Control and Data Management Software. Flexible and open Control Software, compatible with any Windows operating system. PID analog and digital control. Sampling velocity up to 130.000 data per second. Calibration system for all sensors. Registration of the state of the alarms.
- Control Interface with front panel process diagram. Real Time PID control and with shield and filtered signals. Sensors with signals of 4-20 mA, 0-5 V, microvolts and Hz, etc, prepared for 0-10 V computer output. 16analog +16digital inlets and 16digital +2 analog outlets.Up to 130 kHz sampling velocity. Proportional position and on/off Control, for actuators and control instruments.
- Feed back control system.
- Sensors connections in interface with different number of pins, for avoiding student mistakes.
- PLC box for Industrial Control Processes, with front panel process diagram including PLC Control Software.
- The unit contains the following elements: Lower Tank. Upper Tank. circulation centrifugal pumps. Flowmeters. 3 Solenoid Valves. Motorised Control Valve.Drainage valves. Flow Sensor. Etc.

NOTE: Complete Technical Specifications and detailed additional information available

Required Services

-Electrical supply : 220-110V/ 50-60Hz
-Water supply
-Computer (PC)

Dimensions & Weight

Dimensions approx. : 500 x 600 x 1000 mm.
-Weight approx. : 15 kg.

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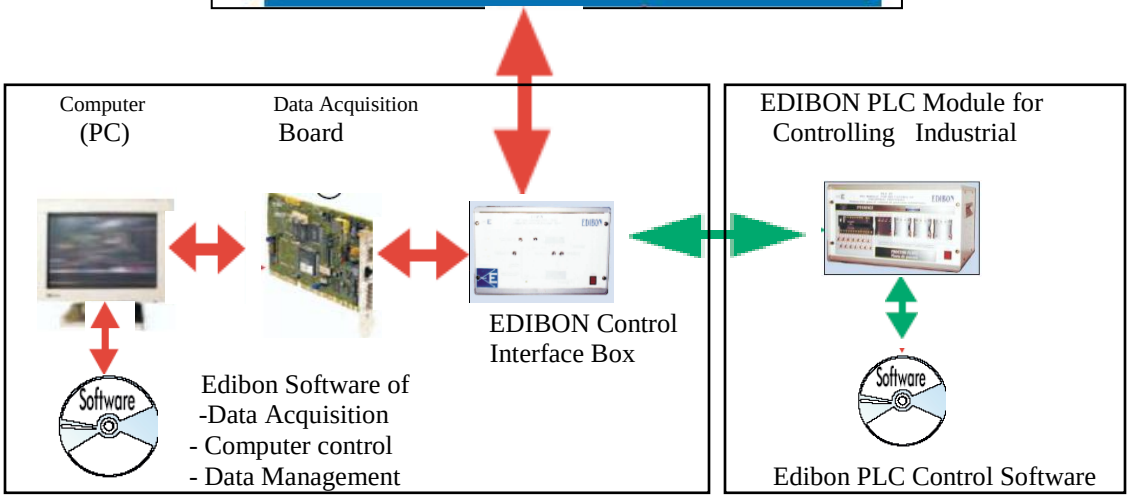
Level Regulation and Control Unit, Computer Controlled UCP-N

MODEL EZ-PC007



Items Included In The Supply : 1. UCP-N level Regulation and Control Unit. Computer Control System: 2. Control Interface Box. 3. Data Acquisition Board. 4. Software of: Data Acquisition+ Computer Control +Data Management. Manuals for: Practices and Exercises Required Services Assembly and Installation Interface and Control Software Starting-up Safety Maintenance Calibration Interconnection elements and all accessories Included for normal working operation.	Additional PLC Control System: (Optional) PLC Module for the Control of Industrial Processes with all necessary accessories. PLC Control Software Manual and necessary accessories Not included: *Computer (PC)

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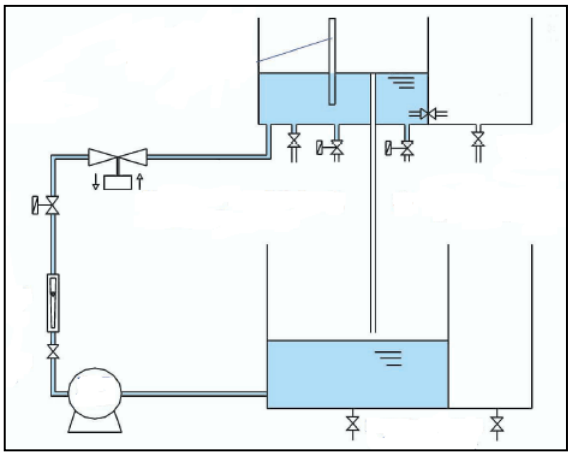
Exercises To Be Done With This Equipment

1.- Flow sensor calibration.
2.- Flow control loops (Manual).
3.- Flow control loops (On/Off).
4.- Flow control loops (Proportional).
5.- Flow control loops (Proportional+Integral).
6.- Flow control loops (Proportional+Derivative).
7.- Flow control loops (Proportional + Derivative + Integral).
8.- Adjustment of the constant of a flow controller (Ziegler-Nichols).
9.- Adjustment of the constant of a flow controller (reaction curves).

Process Diagram And Elements Allocation



Technical Specifications Summary

- Anodized aluminium structure and stainless steel metallic elements.
- Data Acquisition, Computer Control and Data Management Software. Flexible and open Control Software, compatible with any Windows operating system. PID analog and digital control. Sampling velocity up to 130.000 data per second. Calibration system for all sensors. Registration of the state of the alarms.
- Control Interface with front panel process diagram. Real Time PID control and with shield and filtered signals. Sensors with signals of 4-20 mA, 0-5 V, microvolts and Hz, etc, prepared for 0-10 V computer output. 16analog +16digital inlets and 16digital +2 analog outlets.Up to 130 kHz sampling velocity. Proportional position and on/off Control, for actuators and control instruments.
- Feed back control system.
- Sensors connections in interface with different number of pins, for avoiding student mistakes.
- PLC box for Industrial Control Processes, with front panel process diagram including PLC Control Software.
- The unit contains the following elements: Lower Tank. Upper Tank. 2 circulation centrifugal pumps. Flowmeters. 3 Solenoid Valves. Motorised Control Valve. Level Sensor. Etc.

NOTE: Complete Technical Specifications and detailed additional information available

Required Services

-Electrical supply : 220-110V/ 50-60Hz
-Water supply
-Computer (PC)

Dimensions & Weight

Dimensions approx. : 500 x 600 x 1000 mm.
-Weight approx. : 15 kg.

**Specification subject to change without prior notice due to continuous improvements of the product*

Control Easy Technology Sdn. Bhd. (924757-A)
Industry Machine Vision, Motion, PLC & PC Control Automation Systems.
Education Control Training Systems.
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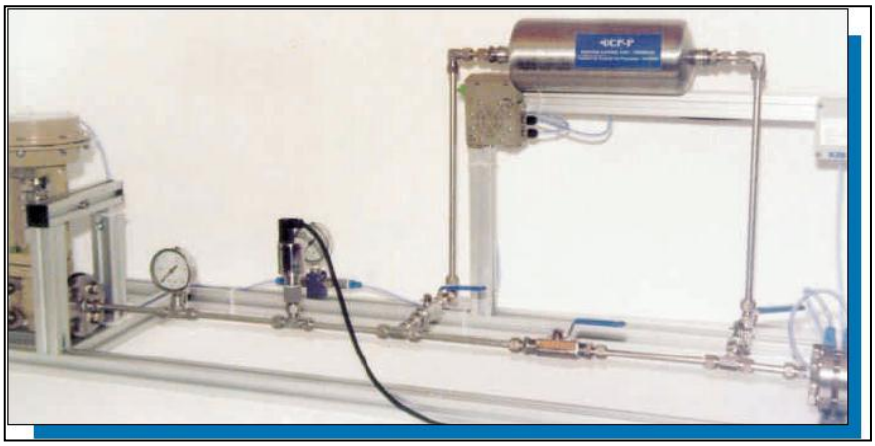
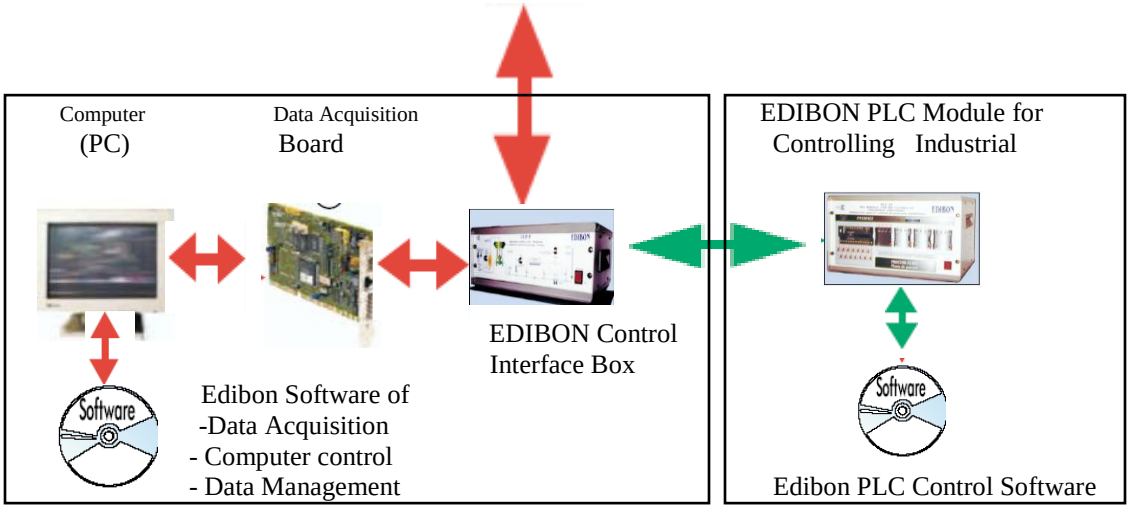
Process Control Unit for the study of Pressure, Computer Controlled
UCP-P
MODEL EZ-PC008





Items Included In The Supply : 1. UCP-N level Regulation and Control Unit. Computer Control System: 2. Control Interface Box. 3. Data Acquisition Board. 4. Software of: Data Acquisition+ Computer Control +Data Management. Manuals for: Practices and Exercises Required Services Assembly and Installation Interface and Control Software Starting-up Safety Maintenance Calibration Interconnection elements and all accessories Included for normal working operation.	Additional PLC Control System: (Optional) PLC Module for the Control of Industrial Processes with all necessary accessories. PLC Control Software Manual and necessary accessories Not included: *Computer (PC)

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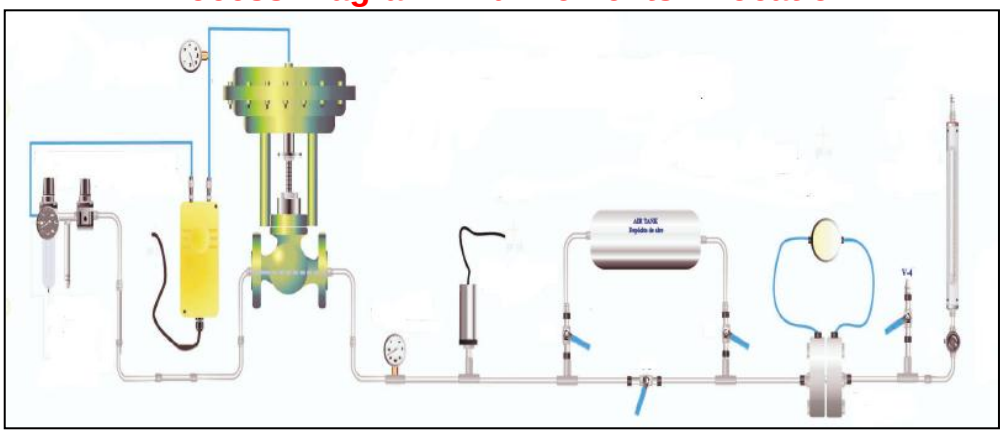
Exercises To Be Done With This Equipment

1.- Software calibration.
2.- Piezoelectric pressure sensor calibration.
3.- I/P converter gauging.
4.- Identification of the pneumatic valve type and verification of the possible hysteresis in an air conduction process.
5.- Determination of the influence of the flow rate of the conduction.
6.- Pressure control in conduction using a PID controller.
7.- Proportional control (P) characteristics.
8.- Characteristics of a proportional and integral control (P+I).
9.- Characteristics of a proportional and derivative control (P+D).
10.- Optimization of the variables of a PID controller.
11.- Optimization of the variables of the PID controller, when the flow rate in the conduction changes.
12.- Flow rate control in a conduction with a PID controller.

Process Diagram And Elements Allocation



Technical Specifications Summary

- Anodized aluminium structure and stainless steel metallic elements.
- Data Acquisition, Computer Control and Data Management Software. Flexible and open Control Software, compatible with any Windows operating system. PID analog and digital control. Sampling velocity up to 130.000 data per second. Calibration system for all sensors. Registration of the state of the alarms.
- Control Interface with front panel process diagram. Real Time PID control and with shield and filtered signals. Sensors with signals of 4-20 mA, 0-5 V, microvolts and Hz, etc, prepared for 0-10 V computer output. 16analog +16digital inlets and 16digital +2 analog outlets.Up to 130 kHz sampling velocity. Proportional position and on/off Control, for actuators and control instruments.
  - Feed back control system.
  - Sensors connections in interface with different number of pins, for avoiding student mistakes.
- PLC box for Industrial Control Processes, with front panel process diagram including PLC Control Software.
- The unit contains the following elements: Pressure Sensor. Differential Pressure Sensor. Pneumatically Operated Control Valve.Pressure Regulators. Air Tank. Manometers .Etc.

NOTE: Complete Technical Specifications and detailed additional information available

Required Services

-Electrical supply : 220-110V/ 50-60Hz
-Water supply
-Computer (PC)

Dimensions & Weight

Dimensions approx. : 600 x 500 x 1000 mm.
-Weight approx. : 15 kg.

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Level Control Trainer
MODEL EZ-PC009

ControlEZ Control
Interface Box
PID Setting
PID Parameters

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System Configuration

Items Included In The Supply :

1.Level Control Trainer .
PID Control System:
2. Control Panel Interface Box.
3. Manuals for: Practices and Exercises Required
Services Assembly and Installation Interface and
Control Software Starting-up Safety Maintenance
Calibration
Interconnection elements and all accessories
Included for normal working operation.

Exercises To Be Done With This Equipment

Level control loops(Manual)
- Level control loops(On/Off).
- Level control loops(Proportional).
- Level control loops (Proportional+Integral).
- Level control loops (Proportional+Derivative).
- Level control loops (Proportional + Derivative + Integral).

Technical Specification Summary

- PID Controller, 1/16 DIN, microcontroller based, PID controller with dual display and Adaptive Tuning. Includes Loop Break Alarm for heater break, detection without additional hardware, Dual 4 digit displays with choice of red/red or red/green displays, Universal sensor input: thermocouple, RTD, mA, mV, or V, Full PID with Pre-Tune and Adaptive Auto-Tuning, Dual outputs, Setpoint ramping and Relay or SSRD first output (mA)
- Level Transmitter, Supply: 11-40V DC (2 wire), Output: 4-20 mA DC, Range: 0 + 25 mbar (approx 250 mm in height) and Rating: IP65
- Pneumatic Control Valve,outlet valve,vessel air inlet line incorporating inlet filter, Control input 4 - 20 Ma and 3 - 6 bar
-Two-channel electronic chart recorder,Input signal 4...20mA,Scales 0...100% linear, Chart width 100mm,Length of chart visible 80mm and Total length of paper 22m
- Feed back control system.
- Sensors connections in interface with different number of pins, for avoiding student mistakes.
- Control panel fabricated c/w internal wiring & accessories
- Exercise Programmes, experiements and manuals

NOTE: Complete Technical Specifications and detailed additional information available

Required Services

-Electrical supply : 220-240V/ 50-60Hz
-Water supply

Dimensions & Weight

Dimensions approx. : 500 x 1000 x 1000 mm.
-Weight approx. : 30 kg.

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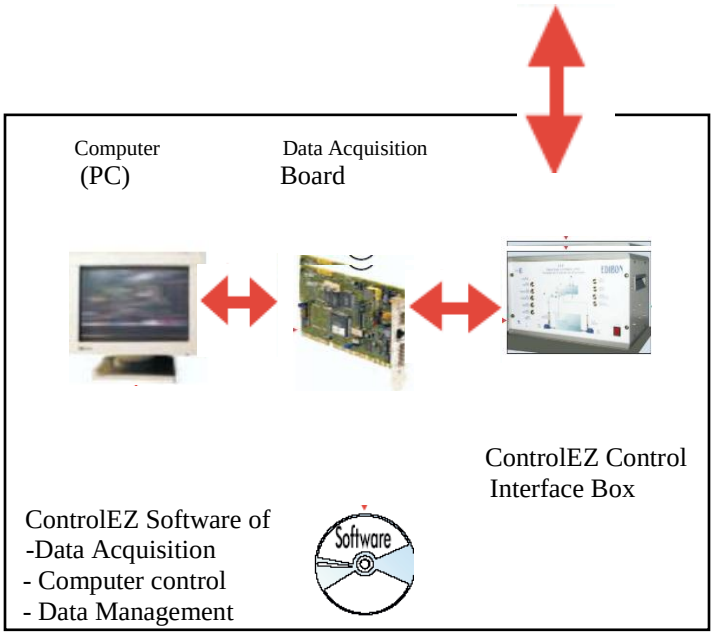
Process Control Trainer – Level,Temperature,Flow and Computer Controlled
MODEL EZ-PC010



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MACHINE VISION & CONTROL AUTOMATION

System Configuration

Items Included In The Supply :

1.Process Control Trainer Level, Flow and Temperature.
Computer Control System:
2. Control Panel Interface Box.
3. Data Acquisition Board.
4. Software of: Data Acquisition+ Computer
Control +Data Management.
Manuals for: Practices and Exercises Required
Services Assembly and Installation Interface and
Control Software Starting-up Safety Maintenance
Calibration
Interconnection elements and all accessories
Included for normal working operation.

Exercises To Be Done With This Equipment

- Level,Flow,Temperature control loops(Manual)
- Level,Flow,Temperature control loops(On/Off).
- Level,Flow,Temperature control loops(Proportional).
- Level,Flow,Temperature control loops (Proportional+Integral).
- Level,Flow,Temperature control loops (Proportional+Derivative).
- Level,Flow,Temperature control loops (Proportional + Derivative +Integral).

Technical Specification Summary

- Stainless steel tank(200 mm * 300 mm * 300 mm), centrifugal pump with frequency inverter with remote control using 0-10v or 4-20 mA, isolating valves (2)
-Transparent tank(200 mm * 300 mm * 300 mm)
- Centifugal pump with max flow of 1 m3/hr
- Data Acquisition, Computer Control and Data Management Software. Flexible and open Control Software, compatible with any Windows operating system. PID analog and digital control. Sampling velocity up to 100.000 data per second.
- Control Interface with front panel process diagram. Real Time PID control and with shield and filtered signals. Sensors with signals of 0-5 V, microvolts and Hz, etc, prepared for 0-10 V computer output. 16analog +16digital inlets and 16digital +2 analog outlets.Up to 130 kHz sampling velocity.
- Feed back control system.
- Sensors connections in interface with different number of pins, for avoiding student mistakes.
- 1 heater(1 kw)
- Focus Frequency Drive Inverter to control the pump with 0-10v or 4-20 Ma
- PT100 Temperature sensor(4 - 20 Ma)-(Temperature sensor + signal converter)
- manual isolating valves
- Piping (1/2 " pipe) chrome plated on copper and assembly
- Control panel fabricated c/w internal wiring & accessories
- Exercise Programmes, experiements and manuals
- Computer, Dell Dimension 3000, Intel® Pentium® 4 - 2.8 GHz/400MHz, Microsoft® Windows® XP Professional
- Harddisk 80 Gb, 256MB 266MHz DDR SDRAM, 17" Flat color CRT Monitor with speaker
- Boudon Haenni Flow meter
- Level Transmitter

NOTE: Complete Technical Specifications and detailed additional information available

Required Services

-Electrical supply : 220-240V/ 50-60Hz
-Water supply
-Computer (PC)

Dimensions & Weight

Dimensions approx. : 2500 x 2000 x 2000 mm.
-Weight approx. : 30 kg.

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