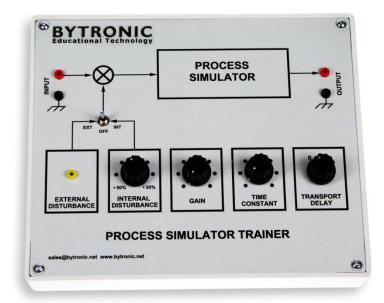


Process Simulator Module PSM



Key Features:

- Simulates process plant dynamics
- Ideal for teaching fundamental control
- Cost effective addition to Process Control Laboratory
- USB interface for easy set up and
- Can be used in conjunction with WINVIC Software

The Process Simulator Module (PSM) is an electronic device that simulates the behaviour of typical process plants. The advantages of employing a simulator are that equipment or computer programs can be tested on a system that can be easily and simply interfaced, and whose dynamic behaviour is not too fast or too slow and whose characteristics can be modified easily in a repeatable manner. A USB interface is fitted for easy set up and use.

The simulator can be used in many different situations such as in a teaching laboratory for experiments in instrumentation and control, or can be used as a target system in project work. The Process Simulator Module includes analogue circuitry required for a simulator that models practical situations. The Process Simulator Module also has the facility for adding disturbances. The facility allows users to test out factors such as the regulation performance of control loops and allow random fluctuations (noise) to be introduced into the process simulation.

The dynamics of many industrial processes can be described adequately by a pure transport delay and a dominant exponential lag. The transport delay is an essential feature of any realistic process simulation. The Process Simulator Module incorporates two transport delays together with an exponential lag and variable load disturbance. All process parameters are adjustable allowing the user to freely examine the effect of process changes on the controller's performance.

Students can use the Process Simulator Module and WINVIC combination to perform controller tuning and evaluate the resulting performance.

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Specification

Connectors • USE

• Input / Output and External Disturbance; 2mm Jack Connectors

Variable Controls

• Disturbance

Gain

Time Constant

• Transport Delay

Power Supply Unit • 12v d.c. @ 1 Amp

Required

A suitable PC with Minimum; Pentium processor, 1GB RAM, 20GB HDD, CDROM Drive, USB 2 interface and Windows XP or above

Ordering Information

Model Number: PSM
Consists of: 1 x PSM Unit

1 x PSU and Mains Cord

Weights and Dimensions

Un-Packed Packed

Approximate Dimensions (mm) 240W x 90H x 200D Approximate Dimensions (mm) 300W x 200H x 300D

Approximate Weights 0.8Kg Approximate Weights 2.0Kg

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