



PROCESS SIMULATOR (SAP – 83)

The **Process Simulator (SAP – 83)** is useful for understanding the Basic Principles of Data Acquisition System. This Setup gives idea about Data analysis of Different Process Parameters.

Technical Specification-
(A) CONTROL PANEL-

No.	Item Name	Technical Specifications
1	Data Logger-	Input: Universal type, 8 channel. Display: Dual, 3½ digit (for parameter & Channel display) Communication: RS232/USB PC Communication port Dimensions: (92×92) mm, Communication cable
2	Current Source-	Supply 230V AC, O/P: 0-20mA.
3	Control Panel-	MS Powder coated control panel, Dimension: 1.5'X0.75'X1.5'
4	SCADA Application Software-	SCADA Application Software, Data Storage, Offline Data Analysis Online Data Acquisition, Simulation and Printing of Data in Graphical & Tabular Format, Interactive Graphical User Interface (GUI)
5	Computer (Optional)-	PC with color monitor: 15", PC Pentium Dual Core, with serial communication ports, 160/300 GB HDD, 512 MB / 1 GB RAM
6	BS 5 Female Connectors-	Red & Black

(B) HYDRAULIC PUMP-

No.	Item Name	Technical Specifications
1	Hydraulic Pump (Optional)-	Manually Driven with weighing Platform

(C) PRESUURE TRANSDUCER / TRANSMITTER MODULE-

No.	Item Name	Technical Specifications
1	Pressure Transmitter-	Input: 0-2.5 Kg/cm ² / 0-4 Kg/cm ² , Output: 4-20 mA Type: 2-wire Piezoresistive type, Mounting: Top ½" BSP connection
2	Pressure Vessel-	Shape: Cylindrical, Material: CRCC, Diameter: 6 inch, Length: 12 inch Capacity: 15 Kg/cm ² , with ½" BSP connection
3	A.F.R. / F.R.L. Unit-	0-10 Kg/cm ² , with pressure gauge
4	Current Indicator-	Input: 4-20 mA, 3 ½ digit display, 1φ 230 V AC Supply
5	Bellows Gauge-	0-300 mm Hg
6	Diaphragm Gauge-	0-2.5 Kg/cm ² / 0-4 Kg/cm ²
7	Bourdon Tube Pressure Gauge-	Dial size: 4", Range 0-4 Kg/cm ² Bottom connection: ½" BSP Connection.
8	Air Compressor (Optional)-	Tank capacity: 25 Liters, Discharge: 2 CFM Motor: 2 H.P. 230 V AC Operated, Working pressure: 5-6 kg/cm ²

(D) CHARACTERISTICS OF TEMPERATURE SENSOR SETUP-

No.	Technical Specifications
1	Temperature range: 0-500°C.
2	Calibration facility for Thermocouple & RTD.
3	7-segment LED display for temperature Indicator controller.
4	Test point for Thermistors, RTD (Resistance Measurement).
5	Test point for voltage measurement for Thermocouple.
6	3-½-digit display.
7	Muffle furnace with insertion points for RTD, Thermocouple and Thermistors.

Range of Experiments-

- ❖ Study of characteristics of Temperature Sensors
- ❖ Study of Various types of Pressure Sensors & Pressure Transmitter
- ❖ Data analysis using SCADA Application Software
- ❖ Study of Process Simulator Setup

Features: -

- ❖ Compact Ergonomic Design.
- ❖ User Friendly, Self Explanatory Systems.
- ❖ Robust Construction..
- ❖ Enhanced Electrical Safety Considerations.
- ❖ Training Manuals, Mimic Charts for Operation Ease.
- ❖ Inbuilt Safety Measures to avoid improper usage.
- ❖ Computer Interface & SCADA Application software connectivity for analysis

Services Required-

- ❖ Electric Supply of 230 VAC.
- ❖ Clean, dry, Compressed Air Supply: Pressure (5-6 Kg/cm²)

Note-

All descriptive matter and illustrations are intended to give only a general idea of the equipment
Detailed specifications may be altered at the company's discretion without any notice.

