DATA ACQUISITION TRAINER

DAT-1000











Description:

Data acquisition (DAT) is the process of measuring an electrical or physical phenomenon such as voltage, current, temperature, level, flow, pressure or sound with a computer. Data Acquisition Trainer consists of A/D converters and D/A converters to measure the input from different sensors. Data Acquisition Trainer is accompanied with a powerful Graphical Software to represent the values, acquired from sensors, in real time.

Technical Features:

Processor: 8-bit RISC based

Digital In: 16 Channel

Digital Out: 16 Channel

Analog In: 8-Channel Multiplexed

A/D Converter: 10-Bit

Analog Out: 8-Channel

D/A Converter: 8-Bit Serial SPI

Analog Voltage Source: +10V, ±10V Adjustable

Relay: +12V SPDT

 Display: 2X 7-Segment with BCD-7-Segment Decoder/ Driver

Decodel/ Driver

Switches: 2X 8-Bit DIP Switches

PC Interface: USB-UART with Data Acquisition

Software

Power Supply:

ODC Supply: ±12V, ±5V

Variable DC Supply: 1V to 10V.

o 230 V ±10%, 50 Hz

Dimensions: 13.5 x 14 x 6 in

Weight: 3.5Kg



Features:

- A self conatined Trainrer
- Transducers installed on-board
- Control Circuits Installed
- Functional Blocks indicated on
- Protection Circuits Installed
- Built in DC Power Supply
- Devices Installed

Experiments:

- Introduction to Data Acquisition
- Familiarization with Applications Software
- Verification of Digital Input and Digital Output Channels
- Verification of Analog Input and Analog Output Channels

Accesories:

Power Cord, User Manual, 2mm banana Patch Cords.



