

DATA ACQUISITION TRAINER-II (MODEL: TMS-DAQ-II) (MATLAB®/Labview®) TRAINER



SALIENT FEATURES

- ◆ Students can develop their own programs in Matlab & Labview. Data acquisition & control using .dll for Matlab, .dll for Lab view, 2 types of SDK provided. Matlab, Labview are trademarks of Mathworks & NI respectively and are not in scope of supply. Optionally Linux .dll and SDK provided.
- ◆ Aesthetically designed injection moulded electronic desk. Master unit carrying useful experiment resources like Power supplies, DPMs, Computer Interface, while the central slot will carry replaceable experiment panel secured in an ABS molded plastic sturdy enclosure.
- ◆ Has colorful screw less overlay showing circuit & its connection tag numbers for easy connectivity.

Technical Specifications of Master Unit-

- ◆ **Built in power supply on topboard:**
 - DC supply +/- 12V@500mA, +5V @1A,
 - Variable 7V to 14V @ 3Amp.
- ◆ **Left side carrier will carry computer interface adaptor (CIA II):**
 - Interfaces through USB IO module (HID class) to 25 pin D(M) connector on CIA panel to PC USB port using Type A to mini B cable.
 - 4 ADC channels: 0 to 2.5V full scale
 - 1 DAC channel: O/P 2.5 V/12 V switch selectable (full scale)
 - 24nos. of TTL Digital I/Os (5V levels)
 - V to I Function block : Input: 0-2.5Vdc, Output: 0 or 4-20mA, upto max. 2Vdc GND compliance
 - V to PWM converter : I/P -0 to 2.5V , O/P -1KHz PWM wave @±9V
- ◆ **Right side carrier will carry Digital output (DO) extension card @TTL level consisting of**
 - 8 nos. of output sockets with LED indicators
 - Optionally thumbwheel module is provided

◆ Top board consists of:

- 4 nos. of relays driven from transistorized buffers provided on Digital output right side carrier
- Extension sockets for digital IOs on CIA II card (8+8 nos) @ TTL level
- Central slot will carry replacable optional experimental panels like MIT3, MIT6, stepper/DC motor experiment panel. (Need to be ordered separately)

◆ Software provided:

- SDK for MATLAB, Lab view.
- DLLs for USB IO module using MATLAB, Lab view.
- Template GUI & its listing for each supporting DIOs 24nos, AIOs - (4+1) provided for student practice.

◆ Mechanical Dimensions:

- a) **Master Unit** : 460mm(W), 160mm (H), 350mm(D)
Net weight : 6Kg, Gross weight : 8Kg.
- b) **Panel** : 215mm(W), 165mm(H), 40mm(D),
Net weight : 700 gm approx.

- ◆ **Operating voltage** : 220V / 230V ±10%, 50Hz, 75VA