

M.A.T. Lab Electronic/Data Aquisition Equipment

Located in 1360 Hoover Hall

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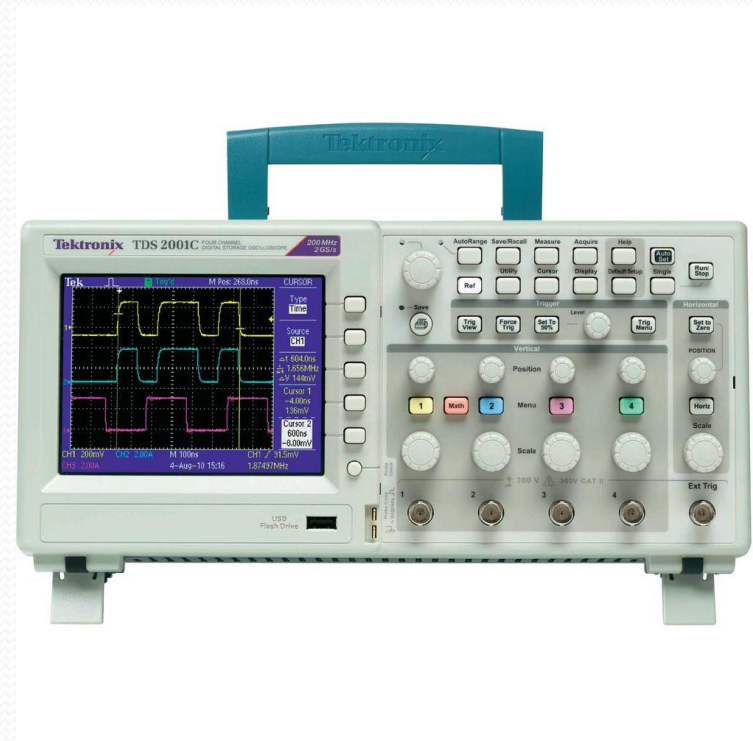
Mastech DC Power Supply

- Triple output:
 - 2 Variable 0-30 V at 0-5 A
 - 1 Fixed 5 V at 3 A



Tektronix Oscilloscope

- 2 Channels
- 1 GS/s Sample Rate
- USB port for data storage



Magtrol Power Supply

- Voltage Range: 0-25 VDC
- Current Ranges
 - Low: 0-200 mA
 - Medium: 0-500 mA
 - High: 0-1000 mA



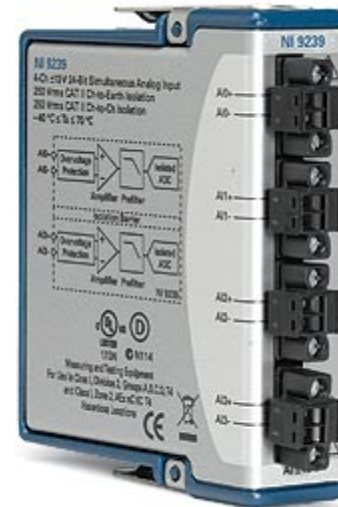
NI CompactDAQ 8-Slot Chassis

- USB interface
- Swappable I/O modules
- Stream continuous waveform measurements



NI 9269 Module

- 250 Vrms channel-to-channel isolation
- 16-bit resolution
- 100 kS/s/ch simultaneous update rate



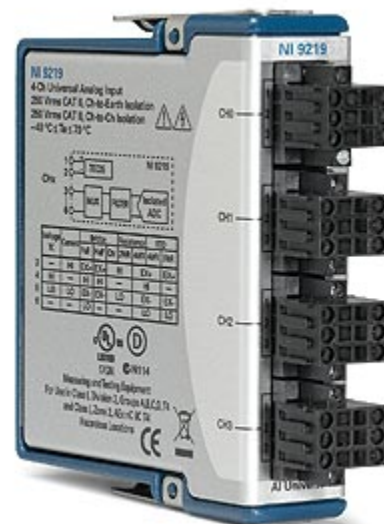
NI 9474 Module

- 8-channel, 1 μ s high-speed digital output
- 30 V V_{sup} -to-COM



NI 9219 Module

- 4-Ch Universal Analog Input
- Built-in quarter, half, and full-bridge support
- Thermocouple, RTD, resistance, voltage, and current measurements
- 250 Vrms channel-to-channel isolation



Topward Function Generator

Waveforms	Sine, square, triangle, ramp, pulse
Amplitude	20Vp-p, Open [Output protected up to 30V (DC+AC)]
Output Impedance	50Ohms 10% for main and sync
DC Offset	+10V ~ -10V
Duty Control	20:80 (frequency unchanged) continuously variable with 50:50 calibrated switch
V.C.F.	0 to +5V control frequency to 1000:1
Frequency Range	0.1Hz to 2MHz in 7 ranges
Frequency Accuracy	5% of full scale
Distortion	< 1%, 10Hz ~ 100KHz
Rise/Fall Time	< 100nS
Rise Time for Sync Output	< 20nS
Sync Output Level	< 20nS
Power Requirement	115/230 Vac; 50/60Hz single phase
Accessories Supplied	Power cord, hook-up leads, instruction manual
Dimension	10.2"(W) x 3.3"(H) x 10.1"(D)
Weight	3.5 Pounds





M9803R Digital Multimeter

- Digital and analog display, 3999 counts and 42 segments bar graph
- Data hold, MAX/MIN relative measurement
- Storage data display/recall
- Autorange and manual range



4-Channel TEDS Piezotron® coupler

- USB interface for monitoring and remote control
- Fault detection
- Non Voltage memory for parameters
- Adjustable gain 0.5 to 150 by .01
- four selectable 4-pole low-pass filters and bypass settings



Model 169 Multimeter

- AC and DC voltage range:
 - 200mV to 1000V
- AC and DC current range:
 - 200 μ A to 2000mA
- Resistance
 - 200 Ω to 20M Ω



X-Tronic 4040 Soldering stationv

- Celsius & Fahrenheit toggle switch
- 700 Watt iron
- Hot air gun: 212°F ~ 896°F
- Soldering iron : 392°F ~ 896°F



Weller® 40-Watt Soldering Station

- 5 to 40 watts

