Equipment and Devices of Automatic Control Laboratory

Electronic Unit
Model : (33-125)

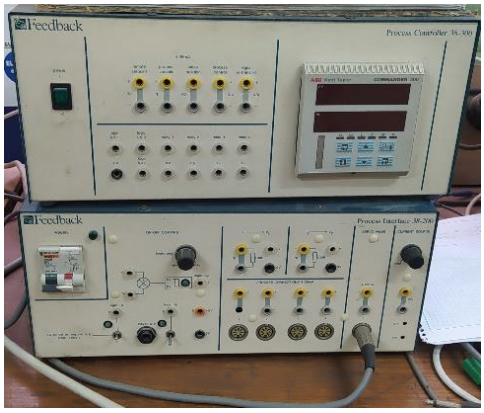
Specification:

• Open printed circuit board with front panel mimic containing:
• Four input error amplifier
• PID analogue controller with independent gain controls
• Dual time-constant integrator
• Led display of encoder signals
• Embedded microprocessor containing multiple control algorithms
• USB2 interface
• 2 channel a/ d input
• 2 channel analogue and pwm d/a output
• 4 channel a/ d instrumentation interface
• Sweep function generator 0.1 Hz – 5 Hz, sine square & triangle
• 2 variable attenuators
• Variable DC signal

Mechanical Plant
Model : (33-100)

Specification:

• Open board format containing a servo mechanism and support electronics
• Permanent magnet motor with armature current signal output
• Tachogenerator 2.5 volts/1000 rpm
• Magnetic eddy current brake
• Input and output potentiometers
• Two-phase incremental shaft encoder Six bit Gray code shaft encoder Power amplifier, linear and pwm
• Switchable three figure LCD meter for speed or voltage
• Dimensions (mm) – 150 (h) x 295 (w) x 220 (d)
• Weight 2.3 kg



Process Controller (top) with Process Interface
Process Controller model : 38-300
Process Interface model : 38-200

Oscilloscope
Model : V-252 & 20 MHZ
EX 6 for frequency response and stability investigation of linear closed loop system

Equipment and Devices of Automatic Control Laboratory

Temperature Process Control Trainer

- Operates from mains water supply using water pressure regulator 38-481
- For operation with 110 V or 120 V 50/60 Hz supplies
- 3 phase supply is required so nominal 220 volts available across 2 phases
- 38-441 Temperature Auxiliary Control
- 38-490 Digital Display Module
- 38-421 Pulse Flow Control