

H-6485-10

Instrumentation and Calibration Console

General

The Hampden **Model H-6485-10** Instrumentation and Calibration Console consists of an instrumentation module and a work center (bench).

Instrumentation Module

This module consists of the following:

Enclosure:

14-gauge furniture stock steel finished in instrument tan textured enamel.

Panel:

11-gauge furniture stock steel finished in instrument white enamel.

Nomenclature and Symbols:

Black silk-screen enamel.

Receptacles:

Hampden HR-1S socket receptacles - color coded (2)

Binding Post:

Hampden HB-3 ground binding post - Dark Green.

Duplex Receptacles:

Specification grade 15A, black (2 external, 1 internal).

Electrical Control:

One main electromagnetic circuit protector power switch and pilot light.

Power Supply:

Hampden 24VDC, 2 amperes
Load Regulation: 0.05% or 10MV Minimum (Full Load Change)
Line Regulation: 0.005% or 2MV Minimum (10 Volt Change)
Ripple: Less than 500 MV
Impedance: 100Hz- 0.001 Ohms
1KHz - 0.005 Ohms
10KHz - 0.01 Ohms
100KHz - 0.1 Ohms
Recovery Time: 25 Microseconds
Overshoot: None on TURN ON or OFF



Dimensions: 52"H x 60"W x 34"D
Shipping Weight: 400lbs.

Temperature: Operating -20 to +71°C
Storage -65 to +85°C
Coefficient 0.01%/°C Max
Current Limiting: Fixed - Foldback Type - Automatic Recovery
Output: Floating
Semiconductors: Silicon
Capacitors: Computer Grade - 10 yr. life
Overvoltage Protection: Fixed Crowbar
Controls: ON/OFF Switch, Pilot Light

Air Supply:

Gauges: 4.5" white 270°ARC, phosphor bronze tube and brass socket and phenol case. Accuracy is ± 0.5 of 1% of scale range

Regulators:

- Die-cast Aluminum Alloy body, vinyl painted and panel mounted.
- Diaphragms are of convoluted Buna-N with polyester fabric reinforcement.
- Knob is of phenolic plastic.
- The sensitivity is 6.3mm (1/4") water.
- Air consumption max. (steady state) from .03 to .35m³/HR (4 SCFM).
- Exhaust capacity (Downstream 35kPa (5 psig) above set: 6.7m³/HR (4 SCFM).

Provided is one 0–30 PSI/0-200kPa and one 0–100 PSI/700kPa regulated air supplies each with a parker 392P bulkhead coupler body.

Test Instruments:

One Digital Multimeter, **Model H-444-1** Digital Multimeter with test cords.
One Digital Process Signal Calibrator, Transmation #23400E with test cords.

Work Center:

Hampden **Model 262-11S** with 72" x 30" x 1 3/4" maple top

Services Required

Electrical: 120VAC 60Hz single-phase via 6 ft. power cord

Air: 100 psi via 292P bulkhead coupler body

Accessories

- Test Cords, PC-4 (2 required))
- Air Insert Plugs, #393-P (6 required)
- Air Tube, 20 ft. Coil
- Manual, Operations & Service Manual

All Hampden units are available for operation at any voltage or frequency

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Instrumentation and Process Control

Educational Training Equipment for the 21st Century

Bulletin 131-204-1A

Option

H-ICS-AV Audio Visual Package:

For use in conjunction with the Hampden **Model H-6485-10** Instrument and Calibration Console, is the **Model H-ICS-AV** Audio Visual Program covering the use and operation of sophisticated instruments and controllers, developed by USA Training Division of I.T.C.

Included with the audio/visual package are Placement Tests for 20 trainees and a Course Manager's Handbook including 3-ring binder to organize supervisor's guides, trainee progress charts, end-of-unit tests and request forms for course completion certificates.

Topics include:

Principles of Calibration;

- The importance of Calibration
- Accuracy and Precision in Calibration
- Recognizing Zero Shift and Span Error
- Other Instrument Errors
- Recognizing Non-Linearity, Implications of Non-Linearity
- Hysteresis
- Deadband
- Set-up and Test Equipment for Calibration
- Calibration Procedure

Calibrating Pressure and Temperature Instruments;

- Analog Electronic Pressure Transmitter Calibration
- Smart Pressure Transmitter Calibration
- Differential Pressure Transmitter Calibration
- Pressure Gauge Calibration
- Thermocouple Calibration Checks
- RTD Calibration Checks
- Thermocouple Transmitter Calibration
- RTD Transmitter Calibration

Calibrating Flow and Level Instruments;

- Differential Pressure Transmitter Calibration
- Magnetic Flowmeter Calibration
- Vortex Shedding Flowmeter Calibration
- Mass Flowmeter Calibration
- Hydrostatic Level Calibration
- Displacement Level Calibration

Specify **Model H-ICS-AV** at time of order.



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