# Instrumentation and Process Control Systems

Educational Training Equipment for the 21st Century

Bulletin 131-111-1B

# H-ICS-320

## **Electronic Instrumentation Modules**

## **Purpose**

The Hampden **Model H-ICS-320** Electronic Instrumentation Modules have been developed to provide student experience in the use, calibration and test of electronic instruments.

## **Description**

The Hampden Electronic Instrumentation Modules are panel mounted units that are compatible with the **Model H-ICS-310** Instrumentation Rack. Mounted on these panels are the instrument, a pair of handles, any pneumatic or electrical jacks and legend plates.

## H-ICS-310 Instrumentation Rack

The Instrumentation Rack is a mobile unit constructed furniture stock steel. Each rack will accept up to eight standard size panels, with unused slots occupied by blank panels. The unit is mounted on two swivel and two locking swivel casters and comes equipped with an air regulator, quick-connect pneumatic lines and two convenience outlets.

# H-ICS-321 Electronic D/P Cell Transmitter

Consists of one electronic differential pressure transmitter which senses the differential pressure and transmits a proportional 4-20mA signal. This unit is provided with two quick connect couples and the 4-20mA signal terminates to two Hampden HR-1S color coded socket receptacles.

## H-ICS-322 Electronic Temperature Transmitter

Consists of one electronic temperature transmitter which, when interfaced with a thermocouple, transmits a proportional 4-20mA signal. This unit includes the thermocouple. The 4-20mA signal terminates to two Hampden HR-1S color coded socket receptacles.



## H-ICS-323 Electronic Pressure Transmitter

Consists of one electronic pressure transmitter which senses the pressure and transmits a proportional 4-20mA signal. This unit is provided with two Hampden HR-1S color coded socket receptacles for signal output.

#### H-ICS-324 Electronic Level Transmitter

Consists of one electronic level transmitter which senses the level and transmits a proportional 4-20mA signal. This unit is provided with two Hampden HR-1S color coded socket receptacles for signal output.

## H-ICS-325 Electronic Square Root Extractor

Consists of one electronic square root extractor with two sets of two Hampden HR-1S socket receptacles for signal input and signal output.

## H-ICS-326 I/P Converter

Consists of one electronic pneumatic converter which converts a 4-20mA input signal to a proportional 3-15 PSIG pneumatic output signal. This unit is provided with two quick-connect couples and two Hampden HR-1A color coded socket receptacles for 4-20mA input signal.



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

