

### PIDA700 Controller

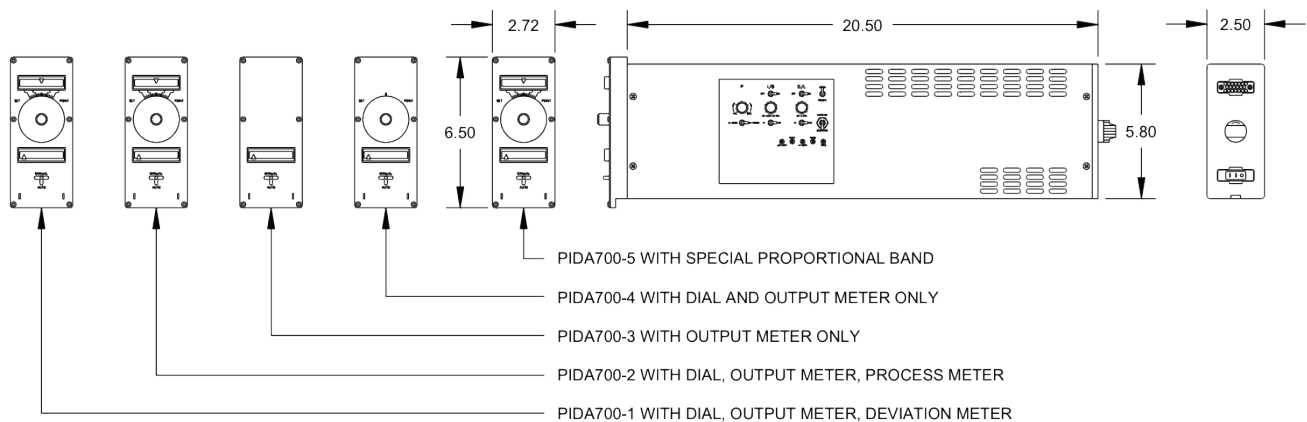
The PIDA700 Controller replaces the obsolete Foxboro 61H and 62H controllers. The PIDA700 output is a configurable function of the difference between the input(s) and a setpoint (dial, internal, or external).

The PIDA700 is a solid-state analog amplifier that provides a selectable combination of proportional, reset (integral), and/or derivative control capabilities. The new Version 5 PIDA700 provides a printed circuit configuration card in place of the earlier wiring array, and has zero drift in Manual Mode. Internal jumpers and the configuration card allow the PIDA700 to match the operation of virtually any of the Foxboro 61H or 62H controllers.



PIDA700 — Version 5

### MODULE ASSEMBLIES



### FEATURES and OPTIONS

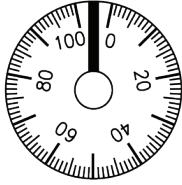
- Configuration card (replaces Version 4 wiring array)
- Fast/slow control in manual with no-drift feature
- Custom setpoint dial markings (see below)
- Balanceless-bumpless AUTO/MANUAL transfers
- Range Switches for improved adjustment sensitivity
- Reset and Derivative On/Off switches for easier tuning
- Output meter, Deviation, or Process meter
- Derivative or Lag action on process changes only
- Mode Panel located on the side of the controller
- Batch control circuitry with adjustable limits
- Configuration can match OEM pinouts and functions
- Input(s): one, two, or three; type; and range
- Output range and filters
- Deviation signal output
- Proportional Only or PRD modes
- Lag function in place of Derivative function
- Tracking (Repeater) mode with remote enable
- External Auto/Manual select, indicating contacts
- Setpoint: dial, internal pot, external pot or voltage
- Standard or custom setpoint range

# NUSI 500 Series

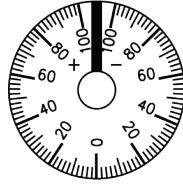
Proportional, Integral, & Derivative Controller

## SETPOINT DIAL MARKING OPTIONS (others available)

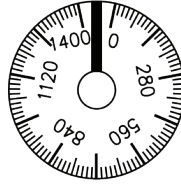
/A02



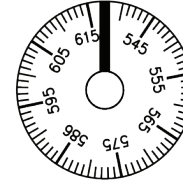
/A03



/A06



/A11



## SPECIFICATIONS

Power Supply Voltage:	85 to 132 Vac, 47 to 63 Hz; or 110 to 170 Vdc
Voltage Effects:	Less than 0.25% within the specified voltage range
Power Consumption:	27 W, 50 VA (maximum)
Accuracy:	Within 0.5% of setpoint dial position
Repeatability:	Better than 0.25% of output span
Time Response:	Less than 20 ms with filters bypassed
Surge Withstand:	No damage when the waveform of IEEE-472-1994 is applied
Electrical Qualification:	Plant protection, qualified to IEEE 323 1974/1983 and IEEE 344 1975/1987
Ambient Temperature:	40 °F to 122 °F (5 °C to 50 °C) (operating) -40 °F to 185 °F (-40 °C to 85 °C) (storage)
Temperature Effects:	Less than 0.5% within the specified temperature range
Relative Humidity:	0% RH to 95% RH, non-condensing
Pressure:	Atmospheric

## HOW TO ORDER

The model number and configuration typically should be specified as follows:

Example: **PIDA700-1/A02**

**700-“x”** selects the module assembly (default: “-1”; see diagrams on the opposite side of this sheet)

Add **“/1”** to include the optional Loop Power Supply (default: no LPS)

Add **“/Ann”** to select the setpoint dial marking (default: “/A02,” = scale of 0 to 100)

Add **“/Cnn”** to select the appropriate configuration card

Specify additional configuration as needed.

## CONTACT INFORMATION:

Curtiss-Wright Nuclear Division / I&C Products  
1350 Whitewater Drive, Idaho Falls, ID, 83402 T: (208) 497.3333