

Model PCPU

PID Control Processing Unit

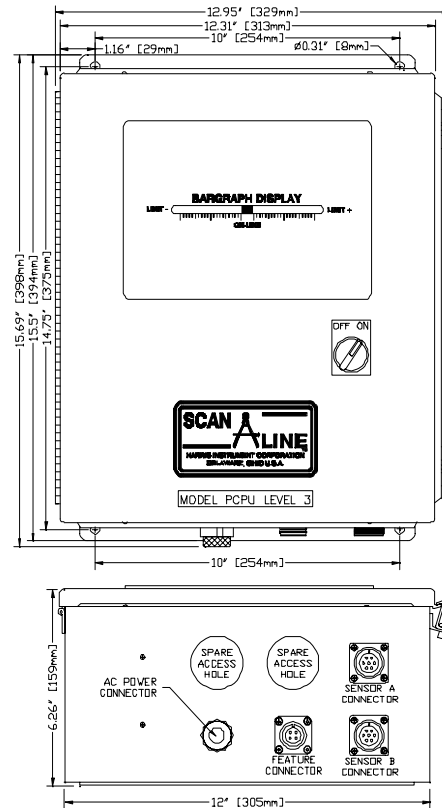
Description

The SCAN-A-LINE™ **PID Module** in the **Model PCPU** provides a fully tunable $\pm 10\text{VDC}$ control signal for driving proportional and servo-valve equipment. Also included is the **Control Offset** function to manually offset the analog control signal (**OP Option** includes potentiometer and precision multi-dial).

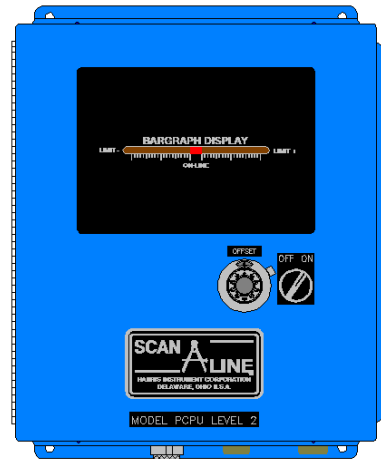
The System Output gain adjustment has sixteen settings via a rocker DIP switch. An adjustable 10kOhm $\frac{1}{2}$ watt potentiometer, located on the **PID Module** board, is supplied for each of the Proportional, Integral and Derivative terms overall output gains. +12VDC/-12VDC diagnostic lamps are available for system power supply diagnostics. The **PID Module** board is protected by a plastic cover panel and is attached to the inside-back panel of the processing unit enclosure.

Input signals from an analog output device (**Model PCPU Level 2 or Level 3**) or analog sensors (EG-Series sensor with **Model PCPU Level 1**) are amplified for controlling proportional or servo-valve controls. The standard power of the analog signal **BEFORE** the **PID Module** is approximately 0.1watts. After the **PID Module** processing, the analog output signals achieves approximately 2.5watts maximum.

The **Control Offset** (**OP Option**) function provides a positive or negative offset to the control analog signal from the **PID Module**. Most SCAN-A-LINE™ control systems operate with one or two sensors. When edge guiding, the system determines the position of the strip from the edge positioned over the sensor. When centerline guiding, the centerline position of the strip is the physical center of the two sensors (or the single sensor with a narrow strip in a single-sensor system). The **OP Option** function allows the operator to offset that centerline to one side or the other. Note that operation of the Control Offset function in conjunction with the **AZ Option** is not recommended.



Model PCPU Level 3 Dimensions
(dimensions typical for all levels of Model PCPU)



Model PCPU Level 2 with Control Offset



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