

PONDERA™

WEIGHT CONTROLLER

Convenient and effective tool for use in many laboratory and industrial process applications.



- Automated filling of containers to a specific weight without tying up precious manpower
- Maintenance of weight in a cell culture bioreactor in applications such as a continuous perfusion where spent media is removed at a slow and steady rate and fresh media must be added back to the bioreactor
- Any application where liquid is drawn from a source container and the source container must be replenished to maintain its volume



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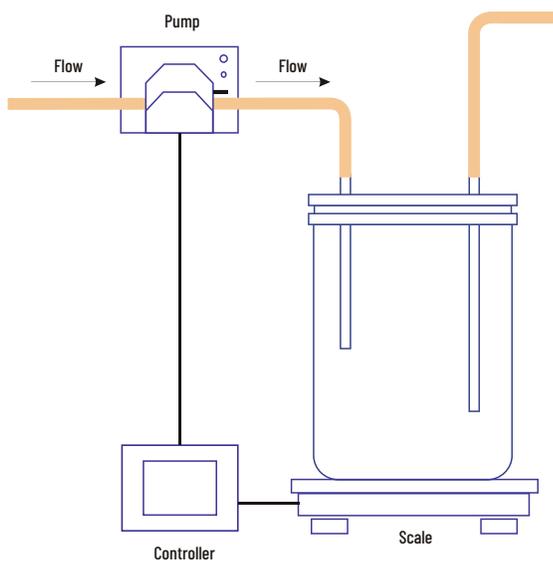
The Pondera Weight Controller from CP Biotools LLC is a convenient and effective tool for use in many laboratory and industrial process applications. It enables a weight to be reached or maintained in a container on a scale by turning a pump on until a set point is reached. Most scales that have an RS232 Serial Port can be connected to the controller and any pump with a dry contact remote start/stop capability can be used.

Applications Include:

- Automated filling of containers to a specific weight without tying up precious manpower
- Maintenance of weight in a cell culture bioreactor in applications such as a continuous perfusion where spent media is removed at a slow and steady rate and fresh media must be added back to the bioreactor
- Any application where liquid is drawn from a source container and the source container must be replenished to maintain its volume



Pondera Weight Controller



Operational Principle

A weight setpoint is entered by user and a relay signal to the pump is activated to turn the pump on when current weight is below the setpoint. Pumps turns off once weight reaches the setpoint.

Set Point

The Set Point is entered on the Home Screen and the Start Control button when pressed, will activate the controller to compare the Current Weight to the Set Point and turning the pump on when the Current Weight is below the Set Point.



Scale Setup

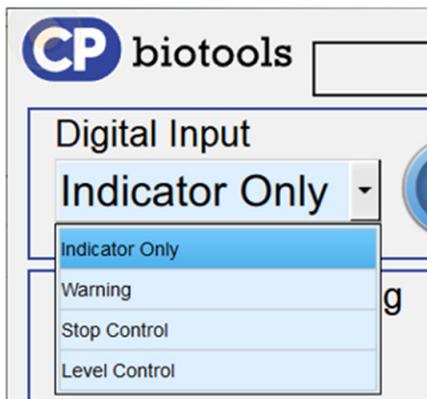
The Scale Setup menu streamlines the communication parameters of the controller to match that the scale settings for proper communication. Popular options for scales and peristaltic pumps to quickly set up a fully automated process are shown below:



Alternate Operation Capability with a Level Sensor

As an alternative to a scale, a level sensor can be connected to the controller to maintain the level in a vessel with a pump. The Pump runs when digital input is low (0) and stops when digital input is high (1) from a variety of different types of point level sensors. Different types are Capacitance, Optical, Conductivity, Ultrasonic, or Float Switch. The controller has a variety of power options available for level sensors that may be connected (5VDC, 12VDC, 24VDC).

The rear panel where the power, pumps, scales, and level sensors are connected, have water-tight and keyed connectors to reduce the risk of misconnection. The controller comes with a universal power supply to plug into a 100 - 250 VAC outlet.



Additional System Benefits

- Intuitive and easy to use software via the HMI
- Pumps can be controlled via either normally open or normally close operation
- With advanced Scale Setup menu, most scales can be interfaced
- 4-wire resistive touchscreen that will activate even when wearing gloves
- Data Output via Ethernet with MODBUS protocol
- Digital Input configurable for level sensing for level control or to conduct other tasks such as a spill sensor that would stop the controller activity and keep the pump stopped.

Technical Specifications

Dimensions (W x D x H): 8.7in x 6.2in x 4.0in

Weight: 2 pounds

Enclosure Material: ABS Plastic

Panel Mount Plate: Powder Coated Aluminum

Power Requirements: 100-240 Volts, 50-60 Hertz, 2.5 amp

Pumps Remote Signals: Dry Contact Relay

Scale Inputs: RS232 communication protocol configurable in software

Pump Connection: M12 Male

Scale Connection: M12 Female

Digital Input: M8 Female (with Power Available of 5VDC, 12VDC, 24VDC)

Ordering Information

Part #	Description
PWC-BA1	Pondera Weight and Level Controller
CPKT-WM120	Cable for Watson Marlow 120 Pump, M12M to D15, 6 feet
CPKT-MF-LS	Cable for Masterflex LS pump, M12M to D25, 6 feet
CPKT-WM-25	Cable for Watson Marlow Series Pumps, M12M to D25, 6 feet
CPKT-WM-BOOT	Cable for Watson Marlow Series Pumps, M12M to M12F, 6 feet
CPKT-WM-BOOT-C	Panel Mount Connector for Boot, M12M to 1 foot flying leads
CPKT-SCALE-ADPT	Scale Adapter Cable, M12 to D9M for RS232, 6 feet
CPKT-RS232-5	Scale Cable, DB9 Plug x DB9 Socket, RS-232-Shielded, 5 feet
CPKT-RS232-10	Scale Cable, DB9 Plug x DB9 Socket, RS-232-Shielded, 10 feet
CPKT-SCALE-SART25	Sartorius YCC05-001M2, 9 pin and 25 pin interface cable, 5 ft.

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Warranty

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