

**Product Information BC110****CONTROLS**

# BC110 - Batch Controller

**Introduction**

The BC110 is a flow computer designed to take the pulse from a flow meter and provide a variety of functions based on it. The unit offers two configuration modes, one provides batch process control and the second is to function as a rate/totalizer. As a batch controller the BC110 offers 2 relay outputs for pump and valve control along with a sophisticated batch over-run correction to optimize the batch control accuracy. Utilizing the standard print capability the BC110 can not only control a batch, but also can be coupled to a printer to automatically provide documentation of the batch. When configured as a rate totalizer, the BC110 offers rate and total information for the measurement coupled with programmable function to the relay outputs to function as flow rate alarms or totalizer limits. Again, the print capability completes the typical totalizer operation by offering the ability to document the total. Other key features include three soft programmable inputs that can be used for remote operation of the reset, print, start, or stop functions. The bright OLED alphanumeric display shows measured and calculated parameters in easy to understand format. Single key direct access to measurements and display scrolling is supported. An EZ Setup feature rapidly guides the user through the basic setup typically required for most applications. In addition to the control functionality the BC110 has a scaled pulse output and configurable 4-20 mA flow rate output. Beyond printing, the standard RS-232 Serial Port can be used for data logging, or for connection to a modem for remote meter reading.

**Features**

- EZ Setup Feature Speeds Instrument Setup
- Advanced Batching Features, Including Quick Batching Sequence
- Two Line OLED Display
- 4-20 mA Analog Output
- Isolated Pulse Output
- RS-232 Port Standard
- Advanced Printing Capabilities
- Data Logging

**Applications**

- Ingredient batch process control
- Rate/Totalization monitoring of product flow
- Totalizer with Print output for quantity tracking

**Options**

- NEMA 4X stainless steel enclosure
- Pre-wired pneumatic solenoid for direct air valve control

**BC110****Back View**

Specification		
<b>Housing</b>	Panel mount	5.67"W x 2.83"H x 6.15"D
<b>Panel Cutout</b>	(WxH)	5.43"W x 2.68"H
<b>Protection class</b>	Front	NEMA4X / IP65 (when used with included bezel)
<b>Ambient</b>	Operating temperature Storage Temperature Humidity	32 °F to 122 °F -40 °F to +185 °F 0-95 % Non-condensing
<b>Inputs</b>	Pulse Inputs	One (single or quadrature) Input Impedance: 10 KΩ nominal Trigger Level: (menu selectable) High Level Input 3 to 30 VDC Low Level Input (mag pickup) Maximum Count Speed: Selectable: 40 Hz, 3000 Hz or 20kHz Scaling: Average K or 16 Point linearization with separate forward and reverse tables
	Control inputs	(3) Switch Inputs are menu selectable for Start, Stop, Reset, Lock, Inhibit, Alarm Acknowledge, Print or Not Used. 4 - 30 VDC
<b>Display</b>	Type OLED	2 lines of 20 characters Character Size: 0.2" nominal
	Keypad	Type: Membrane Keypad with 16 keys
<b>Supply Voltage</b>	Line Power	110 VAC Power: 85 to 127 Vrms, 50/60 Hz 6.5 W
<b>Outputs</b>	Pulse	Assigned to Volume Total. Pulse Output Form: PhotoMos Relay Pulse Duration: 10 mSec or 100 mSec (user selectable)
	Analog	Assignable to either Rate or Total. Type: Isolated Current Sourcing Available Ranges: 4-20 mA, 0-20 mA Maximum Load: 1000 ohms (at nominal line voltage)
	Relay	Assignable to (Individually for each relay) Low Rate Alarm, Hi Rate Alarm, Prewarn Alarm, Preset Alarm or General purpose warning Number of relays: 2 Contact Style: Form C contacts Contact Ratings: 5 amp, 240 VAC or 30 VDC
<b>Communication</b>	Serial Port	Can be used for printing, data logging, modem connection and communication with a computer. RS-232: Baud Rates: 300, 600, 1200, 2400, 4800, 9600, 19200
<b>Materials</b>	Housing-panel mount	Plastic, UL94V-0, Flame retardant
<b>Approvals</b>	Electrical	UL/C-UL Listed (File No. E192404), CE Compliant

Order Code	
<b>BC110</b>	
	<b>Mounting Options</b>
	<b>P</b> (Panel mount)
	<b>E</b> (Mounted in SS enclosure)
	<b>S</b> (Mounted in SS enclosure with prewired pneumatic solenoid)
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<b>BC110 / P</b>	