

The BAT1200 Batch Flow Controller replaces the obsolete IPAC 610 batch flow controller. The BAT1200 is part of a batch flow control system that includes the NUSI 800 Series VTP801 Integrator as part of the replacement system.

The BAT1200 provides a 12 Vdc supply to the integrator output, which is a relay dry contact “pulse train”. When the integrator contact closes, it will energize three relays in the BAT1200.

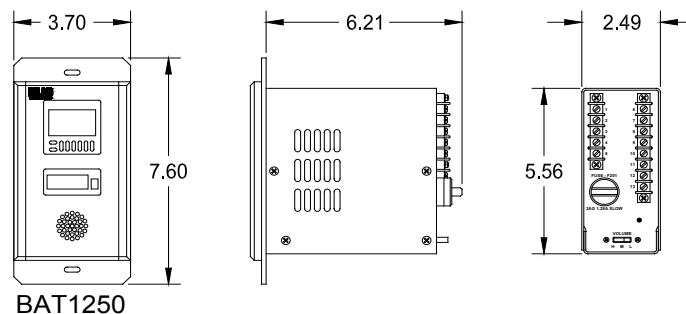
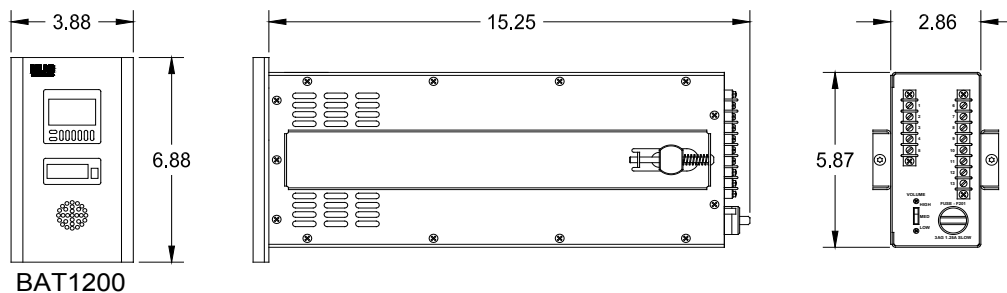
One relay provides the OUT2 (NO) signal output. A second relay provides counting signals to the predetermining counter (present count value) and to the totalizing counter (total count value). The third relay supplies a signal to the audible counter at the bottom of the front panel.

The predetermining counter provides the OUT1 (NC) signal directly. This signal is based on a comparison of the input with a programmed setpoint. The predetermining counter can be reset, but the totalizing counter cannot.

The BAT1250 essentially replaces the external relay dry contact input with an internal contact. Input is provided as a current or voltage pulse, which in turn controls the internal relay associated with the contact. The BAT1250 also differs from the BAT1200 by supplying both outputs (labeled N.O. and N.C.) through a relay, which is controlled by the pre-determining counter. Neither of the two outputs tracks the input; but instead, both outputs are based on a setpoint comparison, acting in opposition to each other.



**BAT1200**



# NUSI 1200 Series

## Batch Flow Controller

### MODULE COMPARISONS

Functions	BAT1200	BAT1250
Predetermining Counter:	Increments by one count each time the input contact closes	Increments by one count each time the input pulse (voltage or current) cycles high
	Controls OUT1, opening the normally-closed contact when a setpoint is reached and closing it when reset	Controls outputs N.O. and N.C., activating both contacts when a setpoint is reached and restoring both when reset
Totalizing Counter:	Increments by one count each time the input contact closes	Increments by one count each time the input pulse (voltage or current) cycles high
Outputs:	OUT1 is controlled by the predetermining counter	N.O. and N.C. are controlled by the predetermining counter
	OUT2 responds directly (and thereby tracks) the raw input signal	
Audible	Beeps each time the input contact closes	Beeps each time the input pulse (voltage or current) cycles high
	Volume control is available	Volume control is available
Setpoint:	Remains constant unless changed by the user	Remains constant unless changed by the user
Interfaces	BAT1200	BAT1250
Input:	Normally-Open relay dry contact	Current or voltage pulse
Output:	OUT1: Contact rating of 3 A at 250 Vac/30 Vdc	SPDT, N.O./N.C. contacts
	OUT2: Contact rating of 0.5 A, 200 Vac, 10 VA	

### DISPLAYS AND CONTROLS

Front Panel Displays:	Present Count Value (6 digits)	Setpoint Value (6 digits)	Total Count Value (6 digits)
	Reset Indicator	Key Protection Indicators (one on each counter)	Control Output Indicator
Front Panel Controls:	UP keys (one for each setpoint digit)	RESET keys (disabled on totalizing counter)	MODE key (disabled)
Rear Panel Controls:	Volume Level (HIGH-MED-LOW) [BAT1200] or (H/M/L) [BAT1250]		

### POWER AND PROTECTION

Fuses:	Power Supply: 1.25 A slow blow, accessible from the rear Input: 0.25 A fast acting, PC board mounted		
	<b>Omron</b>	<b>BAT1200 Tested</b>	<b>BAT1250 Tested</b>
Supply:	100 to 240 Vac (50/60 Hz), 12 to 24 Vdc	117 Vac $\pm 10\%$ at 60 Hz $\pm 10\%$	120 Vac $\pm 10\%$ at 60 Hz
Usage:	Approx. 9.2 VA at 264 Vac, 7.2 VA at 26.4 Vac, and 3.7 W at 12 Vdc	Approx. 2.73 W at 129 Vac, 2.70 W at 117 Vac, and 2.60 W at 105 Vac	Less than 2 W

### ENVIRONMENTAL

Safety Qualification:	Qualified to IEEE 344 1975 for structural integrity only
Totalizing Counter:	14 °F to 131 °F (–10 °C to 55 °C) (normal operation) –13 °F to 149 °F (–25 °C to 65 °C) (storage)
Outputs:	35% RH to 85% RH, non-condensing
Audible	Both counters comply with EN61326:1997 + A1:1998

#### CONTACT INFORMATION:

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