



**Ultra-compact, cost effective control by count... large display with backlighting**

**All in the family - Other matching A103 series products in this catalog:**

<b>A103 Totalizing Counters:</b>	<b>Section 1</b>
<b>A103 Tachometers/Rate Indicators:</b>	<b>Section 4</b>
<b>A103 Time Indicators:</b>	<b>Section 5</b>
<b>A103 Preset Timers:</b>	<b>Section 5</b>

The A103 Preset Counters are amazingly compact in size and low in cost, with a full complement of popular features. In addition to the preset counter models shown here, the A103 series also includes matching indicators for count-totalizing, timing, and rate/speed metering, as well as preset-timer models. All are in a uniform 36 x 72 millimeters bezel size package, enhancing your control panel with a family of devices that look and program alike.

A supertwist LCD display with thick 12mm (.47") high digits allows for easy viewing at a glance and feature display-backlight capability by simply connecting an external 12VDC supply.

Powered by an internal 3 volt battery, the A103's unique design has two battery slots; this allows battery changeover without loss of memory.

Numerous types of inputs can be accepted giving you a totally self-contained system not requiring external power.

- Matching totalizing counter, time and rate indicators and controllers available – look great together on a panel
- SSR relay output – selectable normally-open or normally-closed operation
- High visibility 7-digit LCD display with backlighting capability standard
- Long life 3 Volt lithium battery eliminates the need for external power
- Accepts input signals from a variety of sources: Dry Contact, PNP or NPN Sensors, Encoders
- High speed and low speed count inputs
- Resettable remotely or from the front panel
- Programmable security of front panel reset button and preset entry
- Option modules provide additional functionality and added convenience – fast, easy installation
- NEMA 4X/IP65 rated front panel for use in washdown environments

The A103 Preset Counters are further enhanced by a series of quick attach option modules. These can provide a power supply for sensors and display backlighting, provision for high or low voltage AC or DC count signals, and mechanical relay output.

## SPECIFICATIONS

**High Speed Count Input:** PNP or square wave pulse; 10 kHz max (50% duty cycle), 45 µsec min pulse width; Low State: < 1.0 VDC, High State: > 2.0 VDC (28VDC max)

**Low Speed Count Input:** NPN, Contact Closure; 30 Hz max (50% duty cycle), 12 ms min pulse width; Low State: < 1.0 VDC, High State: > 2.0 VDC (28VDC max)

**Security Input:** Allows access to panel reset and programming features

**Remote Reset Input:** NPN or Contact Closure to common; edge sensitive

**Control Output:** Isolated Photomos relay; 0.1 amp @ 30 VAC/DC, >50Ω on resistance. Programmable normally-open or normally-closed operation

**Power Source:** Single or dual 3V Lithium battery; typical 5 years life w/single battery, 10 years w/dual batteries

**Display:** 12mm high, Supertwist LCD; 7 digits; "Low Bat" indicator.

**Backlighting:** Green Illumination over whole viewable area. Requires 10 to 28 VDC power source

**Dimensions & Mounting:** See dimensions figure. Panel Mount with supplied mounting bracket and gasket

**Connections:** Screw terminals

**Operating Temperature:** +32° to +131 °F (0° to +55°C)

**Weight:** Approximately 64 grams (2.25 ounces)

## OPTION MODULE SPECIFICATIONS

Option modules accessories provide a convenient integrated solution to applications that require count signal voltage conditioning, a mechanical relay output, and/or a voltage source for use with external sensors or the A103's display backlight feature. Specifications for each option module feature follow, while specific combinations of features are listed in the "Models" table, below.

**AC Power Supply:** Provides 10 - 20 VDC @ 50mA for display backlighting and/or sensor. Requires connection to 115 or 230 VAC, 50/60 Hz

**Low Voltage Input:** Allows A103 to accept 5 to 30 VAC or VDC for count input

**High Voltage Input:** Allows A103 to accept 100 to 260 Volt AC/DC for count input

**Mechanical Relay Output:** SPDT (Form C); 120/240 VAC, 30 VDC contacts, 5 A

Model No.	Description			
<b>A103-007</b>	A103 Preset Counter			
<b>Replacement Battery:</b> 605472-0001				
<b>Panel Hole Punch:</b> A103-A40				
<b>The following option modules attach to the rear of A103 Preset Counters:</b>				
Model No.	AC Power Supply	Low Voltage Input	High Voltage Input	Relay Output
<b>A103-A12</b>	X			
<b>A103-A17</b>		X		
<b>A103-A19</b>	X	X		
<b>A103-A10</b>			X	
<b>A103-A14</b>	X		X	
<b>A103-A11</b>				X
<b>A103-A13</b>			X	X
<b>A103-A15</b>	X			X
<b>A103-A16</b>	X		X	X
<b>A103-A18</b>		X		X
<b>A103-A20</b>	X	X		X

## Dimensions:

