# VEEDER-ROOT brand

Electronic Totalizing Counters



## **A103 Totalizers**

# Cost effective, compact totalizer... large display with backlighting

All in the family - Matching A103 series products in other sections of this catalog:

A103 Preset Counters: Section 2
A103 Tachometers/Rate Indicators: Section 4
A103 Time Indicators: Section 5
A103 Preset Timers: Section 5

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The A103 totalizers provide a range of capabilities unequaled in products of similar size and cost. In addition to the totalizing models shown here, the A103 series also includes matching indicators for timing and rate/speed metering and models with a preset output for control by count or time. 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 selfcontained system not requiring external power.

- Matching predetermining counter, time and rate indicators and controllers available – look great together on a panel
- Bidirectional models with input scale multiplier, polarity sign, decimal point selection and programmable reset value.
- High visibility 8-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
- Option modules provide additional functionality and added convenience fast, easy installation
- NEMA 4X/IP65 rated front panel for use in washdown environments

The A103 totalizers are further enhanced by a series of quick-attach option modules. These can provide a power supply for sensors and display backlighting, and accept high or low voltage AC or DC input signals.

### **SPECIFICATIONS**

High Speed Count Input: PNP or square wave pulse; 10 kHz max (50% duty cycle), 45  $\mu$ sec 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)

Calibration: (Models A103-001 & A103-002) Programmable input scale multiplier. Range: 0.0001 to 99.9999)

Security Input: Allows access to panel reset and programming features
Reset Action: Reset to zero by panel button or remote input. Models A103-001 &
A103-002: Programmabble for reset to a value of -999999 to 999999

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

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

Display: 12mm high, Supertwist LCD, 8 digits; "Low Bat" indicator. A103-001 and A103-002 have polarity sign to indicate counting below zero

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, 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

High Voltage Input: Allows A103 to accept 100 to 260 Volt AC/DC for count input Low Voltage Input: Allows A103 to accept 5 to 30 VAC or VDC for count input AC Power Supply: Provides 10 - 20 VDC @ 50mA for display backlighting and/or sensor. Requires connection to 115 or 230 VAC, 50/60 Hz

Model No.	Descri	ption	
A103-001	A103 Add/Subtract Totalizer		
A103-002	A103 Position Indicator (encoder input only)		
		ing option modules rear of A103 totalize	
Model No.	AC Power Supply	Low Voltage Input	High Voltage Input
A103-A12	Х		
A103-A17		Х	
A103-A19	Х	Х	
A103-A10			Х
	X		Х

