

# S663 Preset Rate/Totalizer Counter



- **Easily programmed from the front panel**
- **Remote Reset capability**
- **Input variety: Quadrature, Switch, TTL, CMOS, NAMUR, PNP, NPN**
- **Software functions include:**

<i>Password</i>	<i>Display Scaling</i>
<i>Set Point Programming</i>	<i>Decimal Point Selection</i>

The S663 is a multi-function counter that allows the end user to track the rate (speed) of a product and continuously monitor the product quantity for a given process. The count and rate displays have separate programmable decimal point settings and scaling values.

The counter is powered from 120 or 240VAC and has a non-volatile EEPROM to retain all programming and count information when the power source is removed or interrupted. An option 12DCV excitation output module can provide power for external sensors.

Optional field-replaceable single/dual relay modules enhance the counter from a passive display device to an integral control element for your application. This versatile counter has latching, boundary or timed (0.01 to 599.99 seconds) output modes.

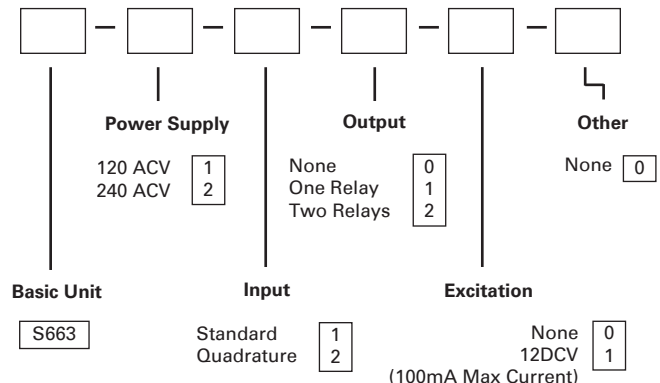
## Mounting Requirements

The S660 series 1/8 DIN counters require a panel cutout of 1.77" (45mm) high by 3.62" (92mm) wide. To install the counter into a panel cutout, remove the clips from the side of the meter. Slide the meter through your panel cutout, then slide the mounting clips back on the meter. Press evenly to ensure a proper fit.

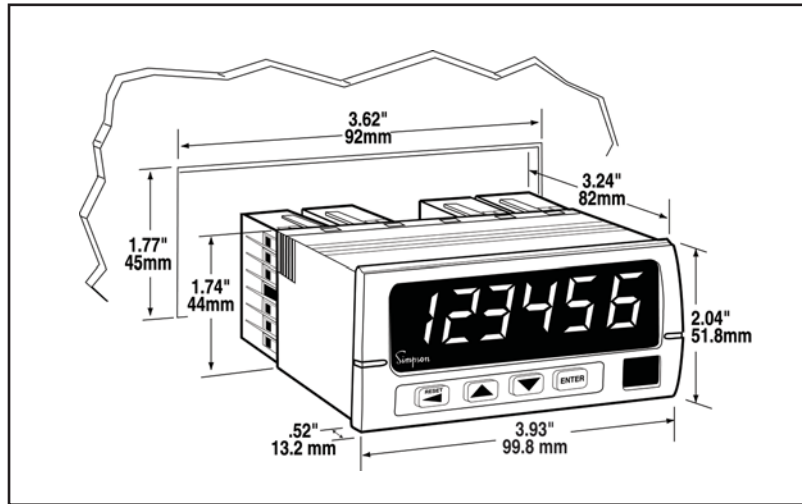
## Specifications

<b>DISPLAY</b>	
Type	6-digit, 7-segment, red LED
Height	0.56" (14.2mm)
Decimal Point	User-programmable
Count Direction	"+" indication implied, "-" indication displayed
Display Range	-99,999 to +999,999
Output Indicators	1 and 2
<b>POWER REQUIREMENTS</b>	
AC Voltages	120, 240VAC, ±10%
Power Consumption	3VA
<b>INPUT RATINGS</b>	
Current Sinking	10KΩ, 5% Resistor pull-up to (9.0 - 16DCV) ±10%
Current Sourcing	5.1KΩ, 5% Resistor pull-down to common
Minimum Pulse Width	~5µs
Low Pass Filter	<200Hz
Low Bias	VLT = 1.6V ±10% VUT = 3.6V ±10%
High Bias	VLT = 5.0V ±10% VUT = 7.0V ±10%
Count Rate	20KHz (Pulse Max) 5KHz (Quadrature X4 Max)
Maximum Voltage Input A, B, and User	30DCV (Max)
<b>INPUT</b>	
User Input	(Rate channel reset) Count on the rate channel is reset when the User Input is pulled low.
Standard Input	VLT ≤0.2 DCV guaranteed low, VUT = 3.0 DCV(max)
Quadrature Input	VLT ≤ 0.9 DCV VUT =3.15 DCV (max)
<b>ENVIRONMENTAL</b>	
Operating Temp.	0°C to +40°C
Storage Temp.	-10 °C to +60°C
Relative Humidity	0-80% non-condensing for temperatures less than 32°C, decreasing linearly to 50% at 40°C
Ambient Temperature	25°C
Temp. Coefficient (per °C)	±100ppm/ °C
Warmup Time	15 minutes
<b>MECHANICAL</b>	
Bezel	3.93" x 2.04" x .52" (99.8mm x 51.8mm x 13.2mm)
Depth	3.24" (82.3mm)
Panel Cutout	3.62" x 1.77" (92mm x 45mm)
Case Material	PBT-ABS
Weight	9oz (255.1g)

## Ordering Information



## Dimensions - S660, S661, S662, S663, S664



## Accessories



### Chariot

The Chariot is used to mount most cube-style quadrature encoders and measuring wheels. Made of anodized aluminum, the chariot includes mounting hardware and selectable pivotal points. Wheels, tires, and flexible shaft couplings are sold separately.

**Catalog No. 46012**



### Flexible Shaft Couplings

The one-piece flexible coupling connects the shaft of a cube-style encoder to an ancillary equipment shaft without worry of misalignment of rotary frequency. The coupling ensures minimum windup, minimum rotary oscillation, and no hysteresis.



A Simpson 12" anodized aluminum measuring wheel is the right choice to complete the setup of a length measurement system. Whether the application requires one or two, Simpson's measuring wheels will perform accurately and reliably throughout the measuring process. Also included on the measuring wheel is a printed alignment scale which assists in the installation and measurement of the length measurement system. Simpson offers four replaceable durometer tires that consist of a black tire that has a longer life span and three non marking tires. The three non marking tires are for delicate materials such as plastics, textiles, wood, metal and paper to prevent tearing, damage or marking of delicate materials.

### Description

Coupling: For connecting an encoder to a 3/8" shaft  
Coupling package: For connecting an encoder to 1/4" or 5/16" diameter shaft\*

\*Package includes: One flexible coupling (1/2" I.D.) and three reducing inserts (1/4", 5/16", 3/8").

### Catalog No.

46002  
46003

### Tire Durometer

80A, black tire; longer service life for plastics, metals  
83A, non-marking tire for textiles, medium textures  
92A, non-marking tire for plastics, metals, coarse wood  
70A, non-marking tire for soft textiles

### Catalog No.

46004  
46005  
46006  
46007