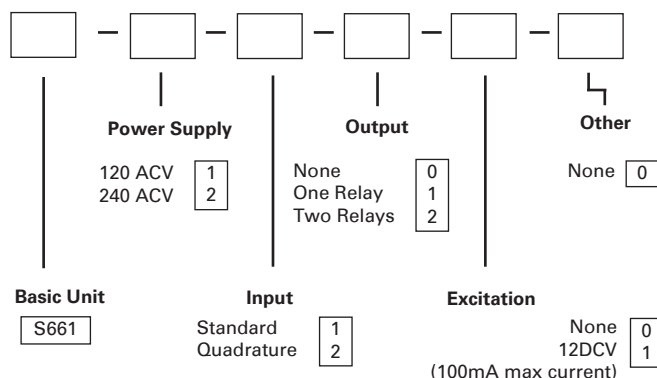


# S661 Preset Rate Counter



- Easily programmed from the front panel
- Remote reset capability
- Input variety: Quadrature, Switch, TTL, CMOS, NAMUR, PNP, NPN
- Software functions include:  
 Password                      Display Scaling  
 Set Point Programming      Decimal Point Selection
- Optional 12DCV Excitation

## Ordering Information



## Specifications

### DISPLAY

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

### POWER REQUIREMENTS

AC Voltages	120, 240VAC, $\pm 10\%$
Power Consumption	3VA

### INPUT RATINGS

Current Sinking	10K $\Omega$ 5% Resistor pull-up to (9.0 - 16DCV) $\pm 10\%$
Current Sourcing	5.1K $\Omega$ 5% Resistor pull-down to common
Minimum Pulse Width	$\sim 5\mu s$

### Low Pass Filter

Low Bias	VLT = 1.6V $\pm 10\%$ VUT = 3.6V $\pm 10\%$
High Bias	VLT = 5.0V $\pm 10\%$ VUT = 7.0V $\pm 10\%$
Count Rate	20KHz (Pulse Max) 5KHz (Quadrature X4 Max)
Maximum Voltage Input A, B, and User	30DCV (Max)

### INPUT

User Input	(Display Hold) Display is frozen when the User Input is pulled low.
Standard Input	VLT $\leq 0.2$ DCV guaranteed low, VUT = 3.0DCV (max)
Quadrature Input	VLT $\leq 0.9$ DCV VUT = 3.15DCV (max)

### ENVIRONMENTAL

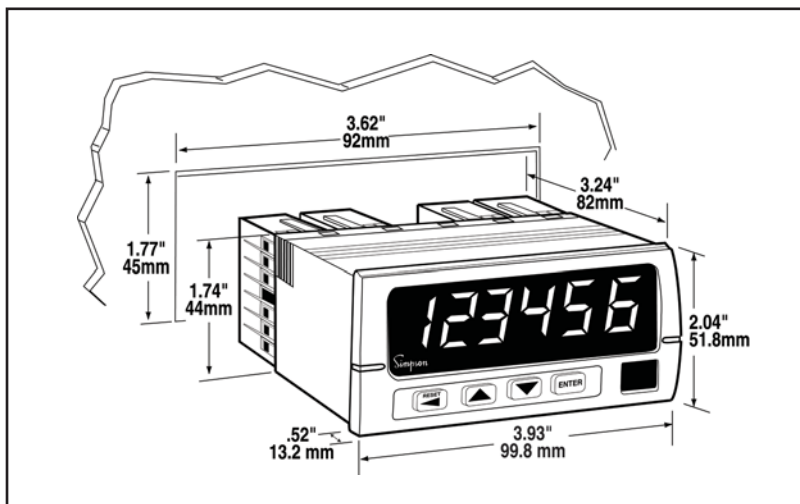
Operating Temp.	0°C to +40°C
Storage Temp.	-10 °C to +60°C
Relative Humidity	0-80% non-condensing for temperatures less than 32°C, decreasing linearly to 50% at 40°C
Ambient Temperature	25°C
Temp. Coefficient (per °C)	$\pm 100$ ppm/ °C
Warmup Time	15 minutes

### MECHANICAL

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)

Mode	Range (implied scale)	Typical Update Period	Min. Input Frequency	Max. Input Frequency	Display Resolution
0	MSec (Hz x 1000)	1.0 sec	1Hz	30KHz	0.001Hz
1	Sec (Hz)	0.5 sec	2Hz	30KHz	1Hz
2	Min (Hz x 60)	3 sec	20 Counts/Min	1.2 Million Counts/Min	1 Pulse per Minute
3	Hr (Hz x 3600)	90 sec	40 Counts/Hr	3.0 Million Counts/Hr	1 Pulse per Hour

## 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

# Mouser Electronics

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