CE UL c UL

- *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*

- *5 amp relay outputs*
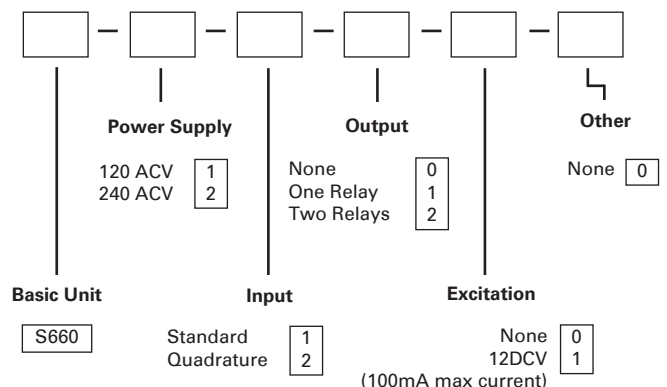
- *Optional 12DCV Excitation*

The S660 is a versatile totalizing counter that can be adapted to a wide variety of counting, measuring and controlling applications. The control inputs offer several counter operation modes: count/direction, add/add, add/subtract, subtract/subtract, quadrature and reverse quadrature. Optional relay outputs enhance the counter from a passive device to an integral control element for your application.
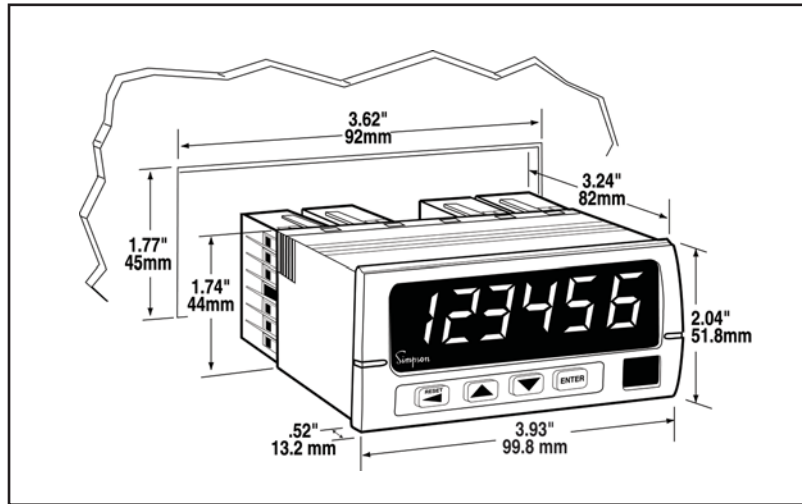
MADE IN THE USA
www.simpsonelectric.com

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, ±10%
Power Consumption	3VA

INPUT RATINGS
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)

INPUT
User Input	(Display Hold) Display is frozen when the User Input is pulled low.
Standard Input	VLT $\leq$ 0.2DCV guaranteed low, VUT = 3.0DCV (max)
Quadrature Input	VLT $\leq$ 0.9DCV 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)	±100ppm/°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)

Ordering Information

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Power Supply

120 ACV	1
240 ACV	2

Output

None	0
One Relay	1
Two Relays	2

Other

None	0

Basic Unit

S660

Input

Standard	1
Quadrature	2

Excitation

None	0
12DCV	1
(100mA max current)	

For more information, visit www.simpsonelectric.com

Counter Accessories

Simpson

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	Catalog No.
Coupling: For connecting an encoder to a 3/8" shaft	46002
Coupling package: For connecting an encoder to 1/4" or 5/16" diameter shaft*	46003

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

Tire Durometer	Catalog No.
80A, black tire; longer service life for plastics, metals	46004
83A, non-marking tire for textiles, medium textures	46005
92A, non-marking tire for plastics, metals, coarse wood	46006
70A, non-marking tire for soft textiles	46007

For more information, visit www.simpsonelectric.com