## Features

## - Up to 100 kHz Maximum Input

## - 4 or 6 Digits

- Counts Up and Down


## - 12 VDC Output to Power Peripherals Sensors

- 0.430" High LED Digits


## Applications:

Ideal for controlling number of pieces, turns, length or volume in high speed industrial or test applications.

## Description:

The SCPS is a 4 or 6 digit, AC or DC powered, single or 2 stage counter that can reach count speeds of up to 100 kHz . The SCPS counts up to the preset number or down from the preset. Its built-in 110/220-50 to 400 Hz power supply both powers the counter and generates 80 milliamps of 12 Volts to power input devices. Outputs feature 10 Amp relays, 2 Amp triacs or open collector transistor outputs. The SCPS case is rugged aluminum with cast aluminum bezel. Surface, wall and panel mounting together with up to 6 brilliant . 43 " red orange LED's make the SCPS a versatile, rugged and attractive preset counting instrument.

## Specifications:

Display: 4 and 6 digit high efficiency .430 " red orange LED's standard.
Count Inputs: SCPS versions count up to the preset number or down from the preset number. Count down versions permit 2 set points to be entered on the same set of thumbwheel switches (optional). Specify "H" input for switch closure counting. All units add and subtract .
H=High Impedance: 3-30 VDC positive going pulses, switch closures and open collector count inputs. Standard impedance is 10 K ohms. Maximum count speed is 100 kHz . Use with KEP encoder 715-1; 12 VDC.
V=AC Pulses: AC or DC pulses from 5 to 260 Volts. Input load is 2 mA . Maximum speed is 50 counts per second .

Predetermining Counter


S=Up/Down Control Line: Use with KEP encoder model 715-2; 12 VDC. 3-30 VDC positive going count pulses are fed into one input. When the other is held high, the incoming pulses are added to the total. When allowed to go low, the incoming pulses are subtracted from the total. Maximum speed is 20 kHz .
SP=Simultaneous or Overlapping: 3-30 VDC add and subtract pulses accurately registered to 10 kHz .
D= Quadrature: Accepts $3-30$ VDC quadrature signals (pulse signals $90^{\circ}$ out of phase). Maximum count input speed is 10 kHz
Preset: Preset number may be changed without affecting count. Count up counters only. (See Reset "LR" - How To Order)
Reset: Reset voltage follows "Count" voltage selected above. Reset overrides count and triggers on leading edge. Operating Voltage: Built-in 110 VAC 50 to 400 Hz power supply standard. 220/50 to 400 Hz supply optional. 80 milliamps of 12 VDC available to power input devices: 12 and 24 VDC supplies may also be used.
Control Outputs: 10 Amp relays 2 Amp solid state relays or open collector transistors available. See "How To Order". Power Consumption: All 6 digits lit to the number 8,180 milliamps.
Battery Standby: Optional. During power outage display blanks to conserve energy. Current consumption during "standby" is 25 milliamps/8 volts.
Mounting: Rugged metal bracket for panel mounting. Attractive and versatile surface and bench mounts available (see mounting).
Temperature: $+32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ to $+140^{\circ} \mathrm{F}\left(60^{\circ} \mathrm{C}\right)$ standard.
Termination: Screw Terminal block

## Mounting:



Note: BCD Option is no longer available.

Wiring:


How To Order:
EXAMPLE: SCPS 14 P 2 H(12) 5 U 1 B2 100CPS
Series
No. ot Diglts
$14=4$ digits
$16=6$ digits
Mounting
$P=P a n e l$
B $=$ Bench
W $=$ Wall
Reset
I

Add L R. to change preset without affecting count (Available on "U"" Mode only)
Input to Count
(Specify Voltage)
$\mathrm{H}(3-30)$ VDC $=$ High Impedance pulses $\mathrm{V}(5-11)$ or (12-260) VAC or VDC pulses S(3-30) VDC = Up/down control line
SP(3-30) VDC = Simultaneous add/sub. pulses
D (3-30) VDC = Quadrature
DS2 (3-30) VDC = Quadrature $\times 2$
DS4 (3-30) VDC = Quadrature $\times 4$
Power Supply Voltage
$1=12$ VDC $\pm 10 \%$
2 = $24 \mathrm{VDC} \pm 10 \%$
$5=110 \mathrm{VAC} / 50$ to 400 Hz
$6=220 \mathrm{VAC} / 50$ to 400 Hz
Mode of Operation
U = Resets to zero
$\mathrm{D}=$ Resets to preset
Presets
$1=1$ variable preset, standard
$2=$ Fixed presignal (D Mode only) (specify value)
$3=2$ variable presets, count down modes only

## Control Outputs



Auto-reset versions - pot adjustable on time 2 ms to 1 full
second
Relay - 10 Amps
A = Relay latched til reset (specify 1 or 2 form C)
$\mathrm{B}=$ Relay auto-recycling (specify 1 or 2 form C)
Solid State Relays - 2 Amps 120 VAC only
$C=$ Triac latched til reset (specify 1 or 2 relays)
$\mathrm{D}=$ Triac auto-recycling (specify 1 or 2 relays)
Open Collector 300 milliamps 3 to 30 VDC only
$\mathrm{V}=$ Normally off turns on 'til reset
W = Normally off auto-recycling Dual
Outputs - Relays - 10 Amps- (Down Counters Only)
$\mathrm{M}=$ Relay presignal latched 'til reset, relay final signal latched 'til reset
$N=$ Relay presignal latched 'til reset, relay final signal auto-recycling
$\mathrm{H}=$ Relay presignal momentary relay final signal latched 'til reset
$\mathrm{O}=$ Relay presignal momentary relay final signal
Specify Count Speed
Over 10 KHz
Consult Factory

