8000 Series

## Features

- Accepts AC or DC pulses \& Switch Closure Inputs
- Big \& Bright LED Display
- Built-In Battery Backup
- 110/220 VAC or DC Operating Voltage
- Up to 100 kHz Count Speeds
- Memory - Freezes Display \& Outputs While Accumulating Counts


## - Optional BCD Parallel Output

## - Add \& Subtract Capabilities

## Description:

The 8000 Series is a rugged, handsome, 8 digit electronic totalizing counter for sophisticated applications where high count speeds are required. It features a built-in 110/220 VAC - 50 to 400 Hz power supply which both powers the counter and provides 80 milliamps-of 12 VDC or regulated 5 VDC to power photoelectric and proximity sensors. In addition, the 8000 Series accepts a wide variety of AC/ DC and switch closure inputs at high speeds (up to 100 kHz ) while operating accurately in noisy industrial environments. The 8000 series has a built-in, self- charging, nicad battery which protects the count for 1 week during power failures. Its $.375^{\prime \prime}, .430$ " and $.6^{\prime \prime}$ high LED displays are brightly projected through a glare reducing lens while its optional BCD output is ideal for interfacing with printers, recorders and other data processing equipment. The 8000 Series has no moving parts and, of course, carries a 2 year warranty.

## Specifications:

Number of Digits: Up to eight .375" red LED displays standard. Up to six .430" or up to four . 6 " red LED displays (optional) .
Decimal Point: Decimal point option available (consult factory).
Count Speeds: 0 to 100 kHz standard.
Count Inputs: Three count inputs may be selected-standard. Inputs 3 and 4 are compatible with all open collector sensing devices. Pull-up resistors may be needed for some configurations.
(3) High Impedance: 3 to 30 VDC positive going pulses into 10 kOhms or dry switch closures. Maximum count speed is 100 kHz. (See How To Order) Typically used with 7115 VDC encoders.
(4) Optically Isolated: 5 to 28 VDC positive going pulses into 1 K to 2 K ohms typical. Maximum count speed is 1500 Hz .
(8) AC Pulses: 5 to 260 VAC or DC pulses into 2 mAload. Maximum count speed is 50 Hz .
Reset: Dry switch closure remote reset is standard on all models. Push button panel reset available. Voltage pulse reset circuits follow the specifications chosen under count inputs (above). Reset overrides count, triggers on leading edge.

## Electronic Counter



Operating voltage: Various operating voltages may be selected. 110 VAC 50/400 Hz is standard. 5 VDC or 8 to 28 Volts DC and 220 VAC $50 / 400 \mathrm{~Hz}$ supplies may also be used. AC supplies generate 80 milliamps of 5 or 12 VDC for powering peripherals. (*BCD version, 10 mA maximum).
Power Consumption: AC; 2.75 Watts max. DC; 300 mA max. Standby current consumption 75 microamps from built-in standby battery.
Battery Standby: Built-in. During power failure, display blanks to conserve energy. Count is held for up to 1 week by built-in self charging nicad battery. Counter may be stored for 6 months before 24 hours operation will be needed for battery recharge.
External Battery: If power main fails, display blanks. All data is optionally secured by 6 Volts at 10 milliamps.
Temperature: $+32^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right)$ to $+130^{\circ} \mathrm{F}\left(54^{\circ} \mathrm{C}\right)$ standard.
Mounting: Rugged metal bracket provides for attractive appearance and secure mounting. Wall mount and desk mounts also available.
Termination: Printed circuit board edge connector supplied (standard). 8" wire leads or terminal block also available.
Input Devices: See KEP encoding and sensing products.
BCD Output: Full parallel TTL compatible, tristate levels capable of driving 2 standard TTL loads. These 5 volt levels are fully bus compatible easing interface with a variety of printers and data collection modules. (optional)
Zero Output: Open collector zero output turns off whenever the counter reads zero. This transistor is capable of switching 300 milliamps. (optional) BCD version only.
Memory: When enabled, the memory function "freezes" the display, while the counter continues accepting pulses. When unlatched, the display instantly advances to the actual total. +5 VDC will enable. Not available on wire lead versions.

Hook Up:


## Mounting:



How To Order:


7 = 5 VDC
$1=12 \mathrm{VDC}$
$2=24 \mathrm{VDC}$
$5=110$ VAC $-50-400 \mathrm{~Hz}$
$6=220$ VAC $-50-400 \mathrm{~Hz}$
Size of Digits
$0=.375^{\prime \prime}$ (eight max.)
1 = .430" (six max.)
2 = .600" (four max.)
Input to Count
2 ( ) = Simultaneous pulses (3-30 VDC)
3 ( ) = High impedance pulses (3-30 VDC)
..... (Add/Subtract or Totalizer)
4 () = Optically isolated (5 to 11)
..... or (12 to 28) VDC)
8()$=$ AC pulses, (5-11 VAC or VDC)
8()$=$ AC pulses, (12-260 VAC or VDC)
9 ( ) = Quadrature inputs (3-30 VDC)
9x2 ( ) = Quad X2 (3-30)
9x4 ( ) = Quad X4 (3-30)
Mounting
$\mathrm{P}=\mathrm{Panel}$
W = Wall (wire lead termination only)
B = Base
Termination
connector - supplied
T = Terminal block edge connector (not BCD)
$F=$ Wire leads (STD on wall mount) (not BCD)
Reset
2 = Remote
3 = Panel and remote
Options
$B=$ Parallel BCD output
Z = Zero output
$\mathrm{D}=$ Decimal point (specify decimal place ..... from right e.g. D3=. XXX )
Specify Count Speed
$0-40 \mathrm{~Hz}$
$41-400 \mathrm{~Hz}$
$401 \mathrm{~Hz}-10 \mathrm{KHz}$
Over 10KHz
Over 100KHz $\qquad$

