

OMNI

Preset Counter

Features

- AC or DC Powered
- Low Cost
- 2, 4 or 6 Digits
- 10 kHz Maximum Input
- Relay or Solid State Outputs
- AC or DC Pulsing

Applications:

For use in OEM Machinery when only control is needed without display and where size is limited.

Description:

The OMNI is an AC or DC powered electronic preset counter. This instrument is designed for applications where visual display is not required and low cost/small size is important. The Omni features one or two sets of Form C relay contacts at 7 Amps or less. Solid-state outputs are also available. All outputs are field programmable to auto reset at the set point, latch and remain on, alternate on and off or output once momentarily. Auto reset and momentary versions feature field adjustable on times. For inputs, the Omni accepts virtually any AC or DC signal for counting. An optional built-in, self-charging battery insures that no data is lost during power outage. For panel mounting, the Omni is packaged in a rugged, handsome aluminum case with cast aluminum bezel. All versions feature either screw terminal block or PCB edge connector termination. Presetting is accomplished with crisp snap action thumbwheel switches for frequent setting.

Specifications:

Number of Digits: 2, 4, 6.

Types of Preset: Thumbwheel switches, white on black digits .190" high.

Input to Count: 3-30 VDC pulses or dry switch closures. Impedance 10K Ohms typical. 100 kHz maximum count. Maximum input count speed field adjustable.

Pull Up Resistor: (1 K Ohms) for open collector input option.

AC/DC Pulsing: AC and DC pulses between 12 and 260V to a maximum count speed of 50 Hz for AC signals or 100 kHz for DC voltages.

Preset Operation: Preset number may be adjusted upward without affecting operation.

Control Outputs:

RELAYS: One SPDT 10 Amp 30 VDC or 250 VAC

OPEN COLLECTOR: Open collector transistor turns on at the preset point. Transistor capable of switching up to 28 VDC @ 300 mA.



Reset: Switch closures or 3-30 VDC pulses. Two millisecond minimum pulse width. 10K Ohm impedance. AC pulses over the range of 12-260 Volts or high voltage DC pulses from 5 to 260 VDC accepted. Reset clears all registers and resets the outputs. Remote reset is standard on all models. Push-button panel reset available on cased units. Voltage pulse reset circuits follow the specifications chosen under the count in-outs (above). Reset overrides count, triggers on leading edge, and resets the output.

Power Up Reset: Power up reset insures that all registers are cleared and outputs reset at the start of a new operation period. "Power up reset" requires 150 milliseconds delay after power up before counting can begin again. Power down intervals of 6 seconds or greater needed to activate this feature. Power interruptions of less than 6 seconds will not affect any of the data stored in the counter's registers and therefore reset will not be required. During power down periods, the outputs will return to their "resting" state. (NOT INCLUDED IF BATTERY STANDBY OPTION IS SELECTED).

Operating Voltage: 115 VAC or 220 VAC (50/60 Hz). 12 VDC. Panel mounted versions may also be powered with 24 VDC. Current draw for DC models, 20 milliamps typical; 75 milliamps, relay outputs energized. AC power, 1.5 watts. AC powered units generate 80 milliamps of 12 Volts DC for powering peripherals.

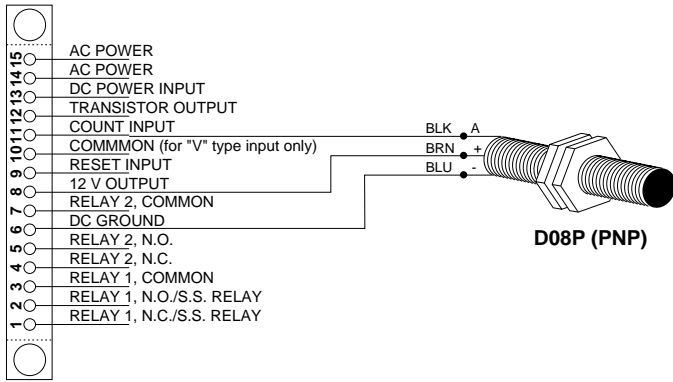
Battery Standby: Optional built-in self charging nicad battery supports all data for a minimum of three days. Three days of power down requires 48 hours operation for second full three day standby period. Shorter operating times will still support data during momentary outages. Relays inoperative during battery standby.

Temperature: +32°F (0°C) to 140°F (60°C) standard.

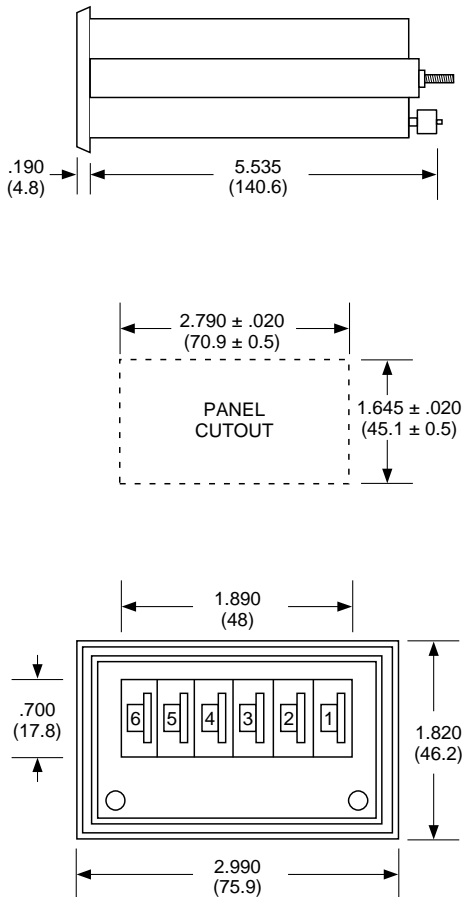
Shock/Vibration: Meets all commercially accepted standards for shock and vibration.

Humidity: Conformal coating available for very high humidity/high mildew potential applications. See options.

Hookup:



Mounting:



How To Order:

EXAMPLE: OMNI 6 P 2 H(12) R4 5 B 2 B 40CPS

Series	_____
Number of Digits	2, 4 or 6
Mounting	P = Panel mounting
Preset Switch Type	2 = Thumbwheel switches 4 = Push-button
Count Input	(specify voltage) CC = Dry switch closure H = () Voltage pulses 3-30 VDC logic levels V = () 12-260 VAC or VDC
Outputs	Relays - SPDT 10 Amp; at 30 VDC or 250 VAC R1 = Latch til reset R2 = Momentary, No Auto-reset. Adjustable on time R3 = Alternate action R4 = Auto-reset, adjustable on time Solid State - up to 2 Amps at 120 VAC S1 = Latch til reset S2 = Momentary, No Auto-reset. Adjustable on time S3 = Alternate action S4 = Auto-reset, adjustable on time Open Collector - up to 28 VDC at 300 mA max. T1 = Latch til reset T2 = Momentary, No Auto-reset. Adjustable on time T3 = Alternate action T4 = Auto-reset, adjustable on time
Output Pulse Duration -	S = Standard -100m sec - 2 sec X = Short Pulse - 5msec -100msec
Power Supply	1 = 12 VDC 2 = 24 VDC 5 = 110VAC, 50/60Hz 6 = 220 VAC, 50/60 Hz
Termination	E = PC board edge connector (connector supplied) B = Screw terminal block
Reset	1 = Panel 2 = Remote (standard on all) 3 = Both
Options	B = Battery Standby C = Conformal Coating (high humidity)
Count Speed	Specify - Example: 40 cps

PRESET COUNTERS