



## CT500 Digital Counter Timers

The Tempatron CT500 digital counter timer is a dual display multifunction, multi-time range digital counter and timer with two independent isolated relay output contacts, suitable for controlling operation of equipment or processes in a wide range of industrial applications.

Five timing or counting functions can be selected together with time ranges from 0.01 seconds to 9999 hours or a count range from -999 to 9999 with an optional scale factor. The lower display can show the second set point or batch quantity, or alternatively both displays can operate together as a 6 digit counter.

These timers are housed in a compact DIN48 square panel mounting enclosure and are powered from 24Vac/dc or 85 to 270Vac.

### Models Available

**CT500ML** Digital Count Timer 24Vac/dc

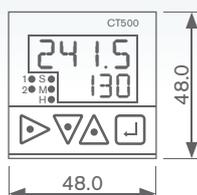
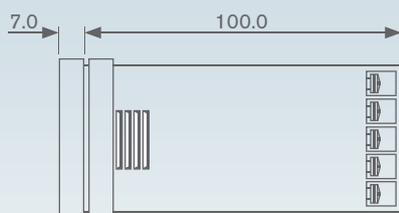
**CT500MH** Digital Count Timer 85-270Vac

### Product Features

- Dual LED display 4 digit counter timer
- 5 programmable timing modes
- 6 time ranges from 0.01 sec to 9999 hrs
- 24Vac/dc or 85 to 270Vac
- 2 N/O relay outputs
- External reset
- Security passcode
- IP65 enclosure code
- Panel mounting 48mm square enclosure
- Selectable up/down counter
- LED status and timing indicators
- Matching temperature controllers

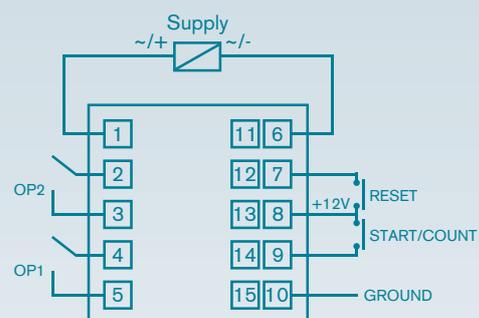
## For timing control of machinery, systems and operational processes

### Dimensions

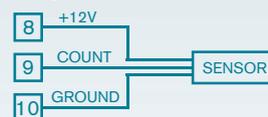


Panel cutout 45mm square (-0.0/+0.5)

### Connections



### Optional Proximity Sensor Connections



[View on rear](#)

**Ordering information**

Model	Code	Description
	CT500ML	Digital Counter Timer 24Vac/dc <b>Timer:</b> (Relay 1: Delay on Energise, Interval, Delayed Cycling, Immediate Cycling) (Relay 2: Delay on Energise, Interval, Delayed Cycling, Immediate Cycling, Batch) <b>Counter:</b> (Relay 1: Delay on Energise, Interval, Auto Reset, Pulse Repeat) (Relay 2: Delay on Energise, Interval, Auto Reset, Pulse Repeat, Batch)
	CT500MH	Dual Digital Timer 85 to 270Vac <b>Timer:</b> (Relay 1: Delay on Energise, Interval, Delayed Cycling, Immediate Cycling) (Relay 2: Delay on Energise, Interval, Delayed Cycling, Immediate Cycling, Batch) <b>Counter:</b> (Relay 1: Delay on Energise, Interval, Auto Reset, Pulse Repeat) (Relay 2: Delay on Energise, Interval, Auto Reset, Pulse Repeat, Batch)
<b>Example</b>	<b>CT500MH</b>	

**Specification****Repeat Accuracy:**

- Timer: +0.05% of set time or 50ms (whichever is greatest)
- Counter:  $\pm 2$  counts

**Power Supply Voltage:**

- CT500ML 24Vac/dc ( $\pm 10\%$ )
- CT500MH 85 to 270Vac

**Burden**

- <5VA

**Frequency:**

- 50/60Hz

**Time Ranges:**

- 99.99sec, 999.9sec, 9999sec
- 99:59min, 999.9min, 9999min
- 99:59hrs, 999.9hrs, 9999hrs

**Start Modes:**

- Pulse start, power up (external link)

**Reset Modes:**

- Power up, front panel or external reset

**Counter Resolution:**

- 0.001, 0.01, 0.1 or 1

**Scale Factor:**

- 0.001 to 9.999 x 10<sup>n</sup>  
(n = -3, -2, -1, 0, 1 or 2)

**Count Direction:**

- Timer: down only
- Counter: up or down (selectable)

**Counter Input:**

- Voltage pulse (3 to 30Vdc) from proximity switch, encoder or other solid state device
- Voltage free contact

**Sensor Supply:**

- 12Vdc 30mA short circuit protected

**Relay Output:**

- Double pole N/O contact

**Contact Rating:**

- 5A at 240Vac/30Vdc (resistive)

**Electrical Contact Life:**

- 200,000 operations at 5A

**Operating Temperature:**

- 0°C to 50°C

**Storage Temperature:**

- -20°C to 75°C

**Enclosure Code:**

- Case IP65

**Weight:**

- 200g

**Markings:**

- CE marked (meets EN61010-1 low voltage and EN50081-1/50082-1 EMC directives)
- UL and CSA approved

Specification subject to change without notice.

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**TEMPATRON**

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