

# CTR54U

## Multipurpose Device Counter, Rate Meter and Timer

### Features

- Universal, with dual functions, also suitable as maintenance counter
- 2 pulse or time counters for measuring daily and total values
- Count frequency 60 kHz
- Four dual functions in one device, saves on inventory costs
- Separate multiplication and scaling factor for pulse & frequency counter

### Specifications:

**Supply:** 10 ... 30 V DC, with reverse polarity protection

**voltage:** 90 ... 260 V AC

**Current consumption:**  
max. 50 mA, 6 VA

**Display:** 6 digit red 7 segment LED display; 14 mm high

**Data backup:**  
EEPROM

**Housing:** Dimensions 96 x 48 mm according to DIN 43 700;  
RAL 7021, grey

**Polarity of Inputs:**  
programmable, npn or pnp for all inputs

**Input resistance:**  
appr. 5 k $\Omega$

**Counting frequency\*:**  
60 kHz, can be damped to 30 Hz depending on operating mode

**Reset time:** 5 ms

**Input switching level**

**DC-version:** (standard version):  
Low: 0 ... 0.2 x UB [V DC]  
High: 0.6 x UB ... 30 V DC

**AC-version:**  
Low 0 ... 4 V DC  
High 12 ... 30 V DC

**Input switching level (5 V version):**  
Low 0 ... 2 V DC  
High 4 ... 30 V DC

**Voltage supply for sensors:**  
24 V DC  $\pm$ 15 %/100 mA at AC versions

**Accuracy:** <0.1 % (Frequency display/Rate meter)

**Ambient temperature:**  
-20 ... +65 °C, non-condensing

**Storage temperature:**  
-25 ... +70 °C

**EMC:** according to EC EMC directive 89/36/EWG

**Immunity to interference:**  
EN 61000-6-4/EN 55 011 class B

**Emitted interference:**  
EN 61000-6-2

**Protection:** IP65 (from front)

**Weight:** appr. 150 g



### Applications:

Preset batch counting, length measuring, simple positioning, time control, speed control, rate control.

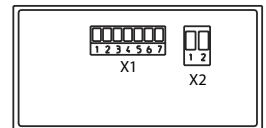
### Operating modes:

Adding counter and frequency meter, counter with 2 totalizing ranges, totalizer and time meter, time meter with 2 time ranges.

### Wiring:

Connection X2

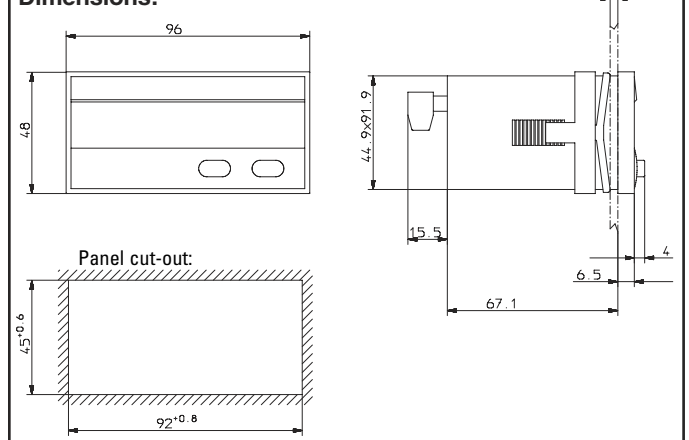
Pin	AC-Version	DC-Version
1	90 ... 260 V AC	0 V DC (GND)
2	90 ... 260 V AC	10 ... 30 V DC



Connection X1

Pin	AC-Version	DC-Version
1	n.c.	
2	n.c.	
3	Reset	
4	INP B	
5	INP A	
6	GNDout	n.c.
7	+24 Vout	n.c.

### Dimensions:



### Ordering Information

Example CTR54U 0 0

Series: \_\_\_\_\_

Input Level: \_\_\_\_\_

0= Standard  
A= 5V level

Power Supply: \_\_\_\_\_

0= 90 to 260 VAC  
3= 10 to 30 VDC