

**DUAL COUNTER TIMER**  
**TYPE : CT 542A**

**Technical Data**

**Dual Counter Timer** Type **CT542A** manufactured by NUCLEONIX is designed around a microcontroller chip and has 16x2 LCD dot-matrix display.

This unit can be used in three modes PRESET TIMER, CPS and CPM modes. It has on board memory to acquire readings upto 1000. The stored data readings can be recalled onto display or can be printed onto a printer. It can count two inputs simultaneously.

This unit has a built-in parallel port (centronics) and a serial port RS 232 for connecting to a PC.

It is built as a two bit module. It can count both positive and negative pulses in the range of 100 mV to 10V and upto a maximum frequency of 1MHz. LCD display indicates preset and elapsed time and counts of any selected channel.

Programmability of ONE, TWO and FOUR iterations for any particular counting.

**FEATURES :**

- Microcontroller based state- of-art counter/timer
- Modes : Counting for preset time, CPS & CPM
- Display on dot-matrix LCD for counts, elapsed time / preset time
- Store/recall facility for 1000 readings
- Built-in parallel port for printing data
- Built-in serial port for PC communication
- Counts two inputs simultaneously

**SPECIFICATIONS**

**Count Input(s) IN1 & IN2 :**  
 100mV to 10V, unipolar or positive bipolar semi-gaussian pulse

**Pulse Width:** 0.5 micro sec (min)

**Polarity :** Positive or Negative

**Input Impedance :** 5.0 K ohms

**Input Counts Capacity :**  
 999999 counts

**Input Frequency (max) :** 1 MHz

**Pulse Height Discrimination :**  
 100mV - 10V by a trimpot provided (inside) on PCB

**Counts Indication :**  
 16x2 dotmatrix LCD display

**Modes of Data Acquisition :**  
 a. Counts for a preset time  
 b. CPS  
 c. CPM

**TIMER: Preset Time Setting :**  
 Programmable through tactile switch control buttons

**Control Buttons :**  
 START, STOP, PROG, STORE, INC, DEC

**Preset Time/Elapsed Time Indication:** On 16x2 LCD Dot matrix display

**Preset Time Range :** 1 to 9999

**Printer Port :** Built-in

**Serial Port :** RS 232C built-in

**Additional Options:(at extra cost) :**  
 a. Data communication Software for down loading of data can be given at extra cost.  
 b. Printer.

**Module connector :**  
 Amphenol Connector Type : 26-159-24P-H (24 Pin Type) by default or NIM Standard as per AEC specifications TID 20893 (Rev) Type : AMP 204186-5

