

# TPC-31T TPC-61T

## 3.5"/5.7" QVGA TFT LED LCD TI Cortex-A8 Touch Panel Computer



### Features

- TI Cortex-A8 processor on board
- 3.5"/5.7" QVGA TFT LED LCD
- Super slim and compact design with plastic housing
- Fanless cooling system
- IP65 compliant front panel
- Built-in micro SD card with Windows® CE OS
- 1 x SD card slot
- Automatic data flow control RS-485
- Supports 1Mbit FRAM for data back-up

### Introduction

The TPC-31T/61T model is a compact platform without redundant functions, and has been designed for small-sized operator interface applications. It has a 3.5"/5.7" TFT LCD display which is a cost effective choice for a limited budget. Its RISC kernel, the TI Cortex-A8 processor consumes minimum power without sacrificing performance. The TPC-31T/61T has a 10/100Base-T Ethernet port offering solid communication ability and comes bundled with a Windows® CE OS that supports Thin-Client solutions. The built-in Windows CE OS platform lets the TPC-31T/61T become an Open HMI solution for system integration.

### Specifications

#### General

- **Certification** BSMI, CE, FCC Class A, UL
- **Cooling System** Fanless design
- **Dimensions (W x H x D)**  
TPC-31T: 120.79 x 85.5 x 26.5 mm  
(4.76" x 3.37" x 1.04")  
TPC-61T: 195 x 148 x 44.4 mm  
(7.68" x 5.83" x 1.75")
- **Enclosure** TPC-31T: ABS  
TPC-61T: PC/ABS Resin
- **Mounting** Panel
- **OS Support** Windows CE 6.0
- **Power Consumption** 8 W/12 W (typical)
- **Power Input** 18 ~ 32 V<sub>DC</sub>
- **Watchdog Timer** Programmable as 250 ms, 500 ms, 1 second
- **Weight (Net)** 0.25 kg (0.55 lbs)/0.8 kg (1.76 lb)

#### System Hardware

- **CPU** TI Cortex-A8 600MHz
- **Memory** DDR2 256MB on board
- **LAN** 10/100Base-T x 1
- **Storage** 512MB on board micro SD card  
1 x SD Card slot  
1Mbit FRAM for Data back-up
- **I/O** TPC-31T: RS-232/RS-485 X1 with auto data flow control, USB 2.0(Host) x 1  
TPC-61T: RS-232 x 2 (COM1,2) RS-422/RS-485 x 1 (COM 3) with auto data flow control, USB2.0 (Host) x 1, USB2.0 (Client) x 1

#### LCD Display

- **Display Type** QVGA TFT LED LCD
- **Display Size** 3.5"/5.7"
- **Max. Resolution** 320 x 240
- **Max. Colors** 64 K
- **Luminance cd/m<sup>2</sup>** 450/800
- **Viewing Angle (H/V)** 160/140
- **Backlight Life** 30,000/50,000 hrs
- **Contrast Ratio** 300:1/800:1

#### Touchscreen

- **Lifespan** 1 million times with an 8mm diameter finger of silicone rubber
- **Light** Transmission Above 80%
- **Resolution** Linearity
- **Type** 4-wire, analog resistive

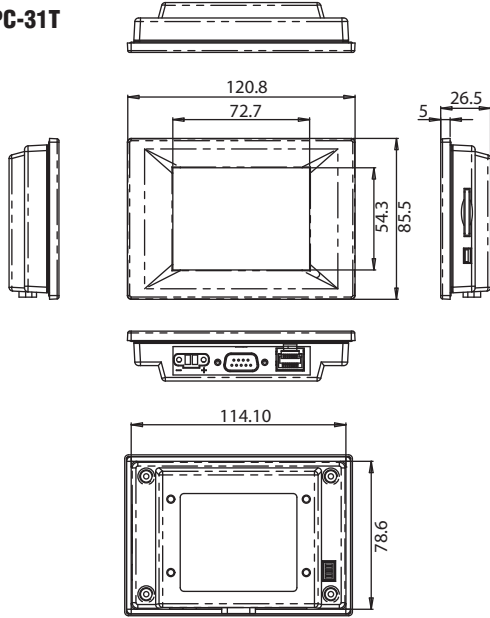
#### Environment

- **Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- **Ingress Protection** Front panel: IP65
- **Operating Temperature** 0 ~ 50°C (32 ~ 122°F)
- **Storage Temperature** -20 ~ 60°C (-4 ~ 140°F)
- **Vibration Protection** 2 Grms (5 ~ 500 Hz) (Operating, random vibration)

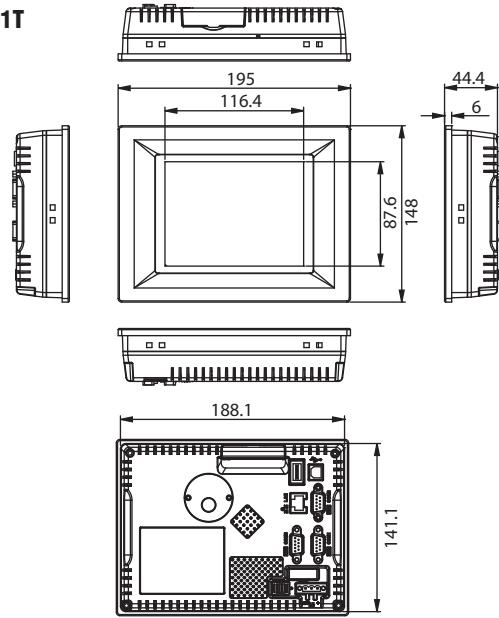
**Dimensions**

Unit: mm

**TPC-31T**



**TPC-61T**



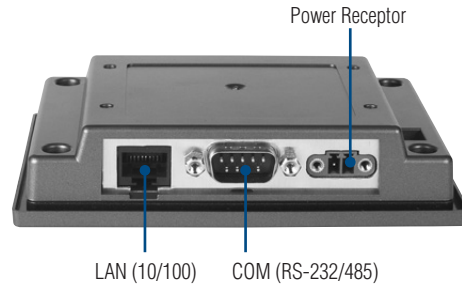
**Panel Cut-out Dimensions: TPC-31T: 115 x 79.5 mm (4.6" x 3.18")  
 TPC-61T: 189 x 142 mm (7.56" x 5.68")**

**Ordering Information**

- **TPC-31T-E3AE** 3.5" QVGA Touch Panel PC, TI AM3517 600 MHz, 256 MB with WinCE 6.0
- **TPC-61T-E3AE** 5.7" QVGA Touch Panel PC TI AM3517 600 MHz, 256 MB with WinCE 6.0
- **PWR-247-AE** 24 V 50 W AC-DC Power Adapter

**Rear View**

**TPC-31T**



**TPC-61T**

