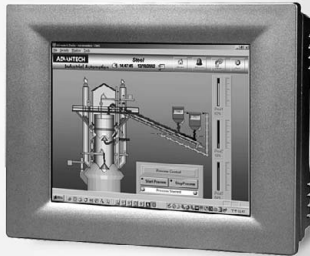# TPC-31T
TPC-61T

3.5"/5.7" QVGA TFT LCD TI AM3517 Touch Panel Computer

NEW

Features

- TI AM3517 processor on board
- 3.5"/5.7" QVGA TFT LCD
- Super slim and compact design with plastic housing
- Fanless cooling system
- NEMA4/IP65 compliant front panel
- Built-in micro SD card with Windows® CE OS
- 1 x SD card slot
- Automatic data flow control RS-485

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 AM3517 processor consumes minimum power without sacrificing performance. The TPC-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-61T become an Open HMI solution for system integration.

Specifications

General

- **Certifications**: BSMI, CCC, CE, FCC, 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**: ABS
- **Mounting**: Panel
- **OS Support**: Windows CE 6.0 (English Version)
- **Power Consumption**: 8 W/12 W (typical)
- **Power Input**: 18 ~ 32 V_{DC}
- **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 AM3517
- **Memory**: DDR2 256MB on board
- **LAN**: 10/100Base-T x 1
- **Storage**: 512MB on board micro SD card
  1 x SD Card slot
  1MB FRAM for Data back-up (optional)
- **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 LCD
- **Display Size**: 3.5"/5.7"
- **Max. Resolution**: 320 x 240
- **Max. Colors**: 64 K
- **Luminance cd/m²**: 200/800
- **Viewing Angle (H/V)**: 120/110; 160/140
- **Backlight Life**: 30000/50000 hrs
- **Contrast Ratio**: 300:1/800:1
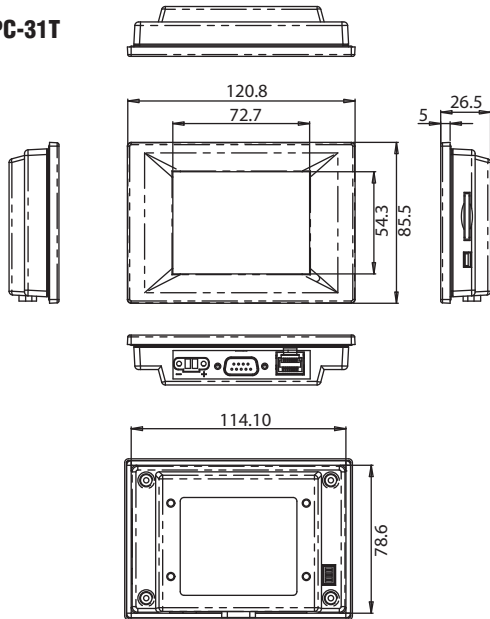
Touchscreen

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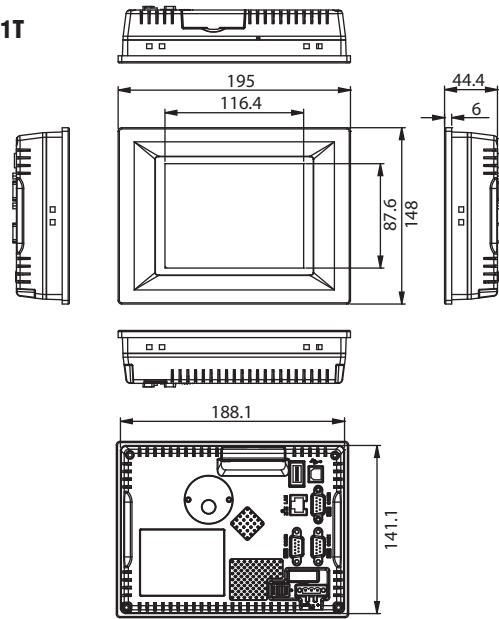- **Type**: 4-wire, analog resistive

Environment

- **Humidity**: 10 ~ 95% RH @ 40°C, non-condensing
- **Ingress Protection**: Front panel: NEMA4, IP65
- **Operating Temperature**: 0 ~ 50°C (32 ~ 122°F)
- **Storage Temperature**: -20 ~ 60°C (-4 ~ 140°F)
- **Vibration Protection**: 1 Grms (5 ~ 500 Hz)

ADVANTECH | **Automation Panel PCs**
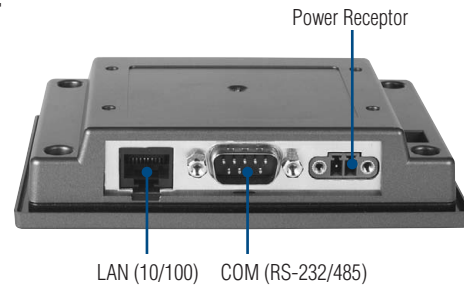
Dimensions

Unit: mm

TPC-31T

120.8
72.7
26.5
5
54.3
85.5
114.10
78.6

TPC-61T

195
116.4
44.4
6
87.6
148
188.1
141.1

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")

1 Motion Control

2 Hazardous Location

3 Energy Automation

4 Building Automation Systems

5 Automation Software

6 Operator Panels

7 Automation Panel PCs

8 Industrial Monitors

9 Industrial Ethernet

10 Device Servers & Gateways

11 Serial Communication Cards

12 Embedded Auto. Computers

13 PACs

14 M2M I/O

15 Distributed Nano Controllers

16 RS-485 I/O

17 Ethernet I/O
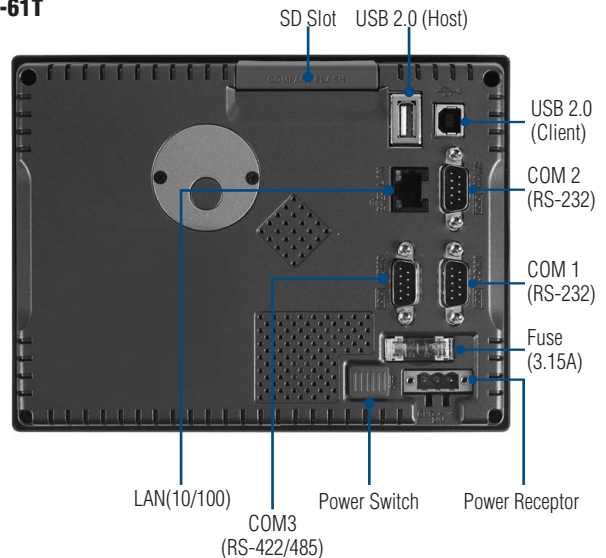
18 DAQ Boards

Ordering Information

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

Rear View

TPC-31T

Power Receptor

LAN (10/100)   COM (RS-232/485)

TPC-61T

SD Slot   USB 2.0 (Host)

USB 2.0 (Client)

COM 2 (RS-232)

COM 1 (RS-232)

Fuse (3.15A)

LAN(10/100)   Power Switch   Power Receptor

COM3 (RS-422/485)