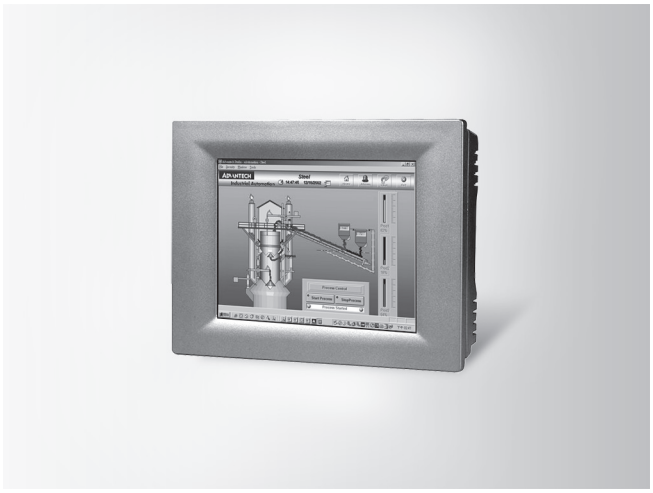
TPC-61T
TPC-31T

5.7"/3.5" 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	CE, BSMI, CCC, UL, FCC Class A
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_{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 Cortex-A8 600MHz
Memory	DDR2 256MB on board
LAN	10/100Base-T x 1
Storage	1 GB 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, CAN 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/m²	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)

Ordering Information

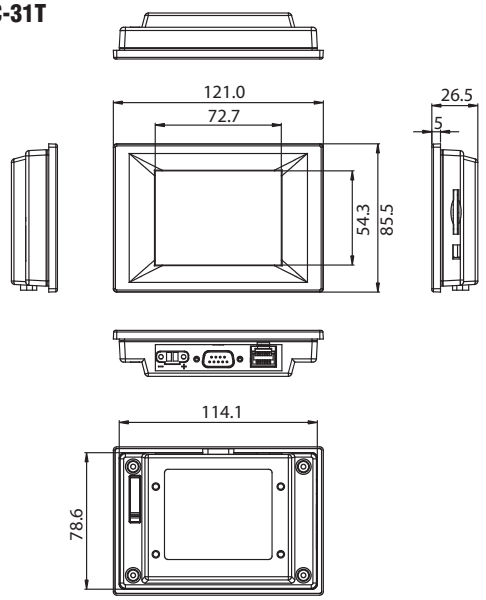
TPC-31T-E3AE	3.5" QVGA Touch Panel PC, TI AM3517 600 MHz, 256 MB with WinCE 6.0
TPC-61T-E3AE	5.7" QVGA Touch Panel PC TI AM3517 600 MHz, 256 MB with WinCE 6.0

All product specifications are subject to change without notice.

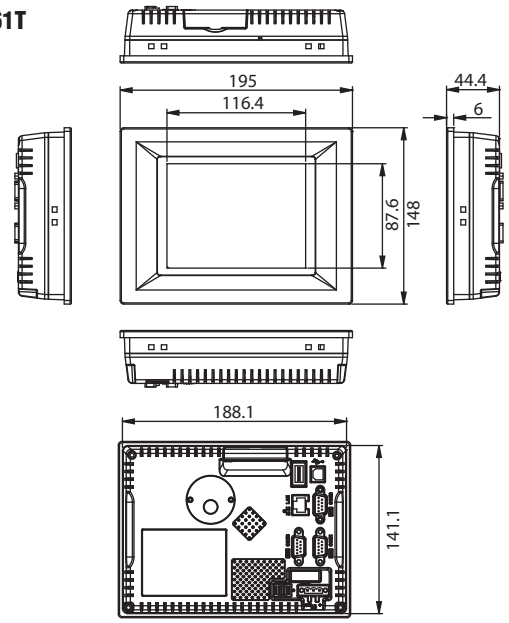
Dimensions

Unit: mm

TPC-31T



TPC-61T



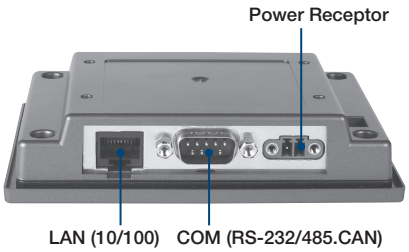
Panel Cutout Dimensions: TPC-31T: 115 x 79.5 mm (4.6 x 3.18")
TPC-61T: 189 x 142 mm (7.56 x 5.68")

Optional Accessories

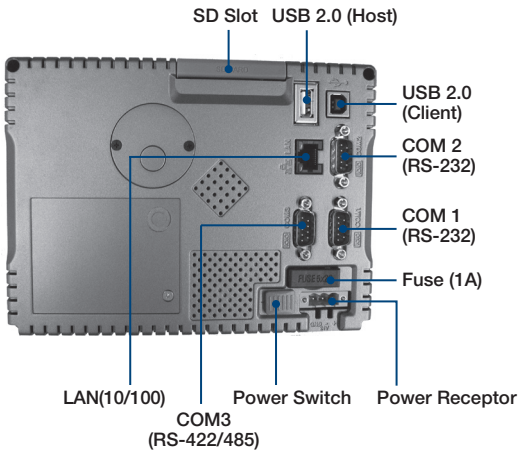
- **PWR-247-CE** 24 V 60 W AC-DC Power Adapter
- **1702002600** Power Cable US Plug 1.8 M
- **1702002605** Power Cable EU Plug 1.8 M
- **1702031801** Power Cable UK Plug 1.8 M
- **1700000596** Power Cable China/Australia Plug 1.8 M

Rear View

TPC-31T



TPC-61T



Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.