

TPC-642S

StrongARM touch panel computer
with 5.7" QVGA STN display



Features

- 5.7" QVGA STN LCD
- Intel® StrongARM 1110 processor
- Fan-less cooling system
- Built-in flash memory and Windows CE OS inside
- NEMA4/IP65 compliant AI-Mg front panel
- Supports Advantech HMI Software Package
- One CompactFlash™ slot

Introduction

The TPC-642 is a miniature and compact platform that has no redundant functions. It is designed for small-sized operator interface market. It has 5.7" STN LCD display which is a good cost effective choice for limited budget. Its RISC kernel, the Intel StrongARM 1110 processor, is of low power consumption without sacrificing performance. The TPC-642 has 10Base-T Ethernet port offering good communication ability as the world is web-ized. Advantech is offering this OI solution in the way that the TPC-642 is bundled with Windows CE OS and/or Advantech HMI software package. The built-in Windows CE OS platform forms a bridge that lets TPC-642 be an open HMI solution for system integration.

Specifications

- **Construction:** plastic molding housing
- **Display:** 5.7" QVGA STN LCD
- **CPU and core logic:** Intel® StrongARM 1110
- **VGA:** MediaQ® MQ-200 VGA controller
- **DRAM:** 32 MB on board
- **Storage:** 16 MB flash memory on board, 1 CompactFlash™ card (optional)
- **I/O:** 2 serial ports (one configurable to RS-422/485), 1 Ethernet port (10Base-T), 2 PS/2 port
- **Watchdog timer:** selectable as 250ms, 500ms and 1 second
- **Power input:** 24 V_{DC}, 2.2A maximal
- **Dimension (WxHxD):** 195 x 148 x 40 mm (7.68" x 5.83" x 1.57")
- **Weight:** 0.8 kg (1.57 lbs)

LCD Display

Display type	STN color LCD
Display size (diagonal)	5.7"
Max colors	256
Resolution	320 x 240
Pixel pitch (HxV, mm)	0.36 x 0.36
Viewing angle (°)	100
Luminance (cd/m ²)	110
Storage temperature (°C)	-20~60
Operating temperature (°C)	0~50
Backlight	1 CCFL
Contrast ratio	25

Touchscreen

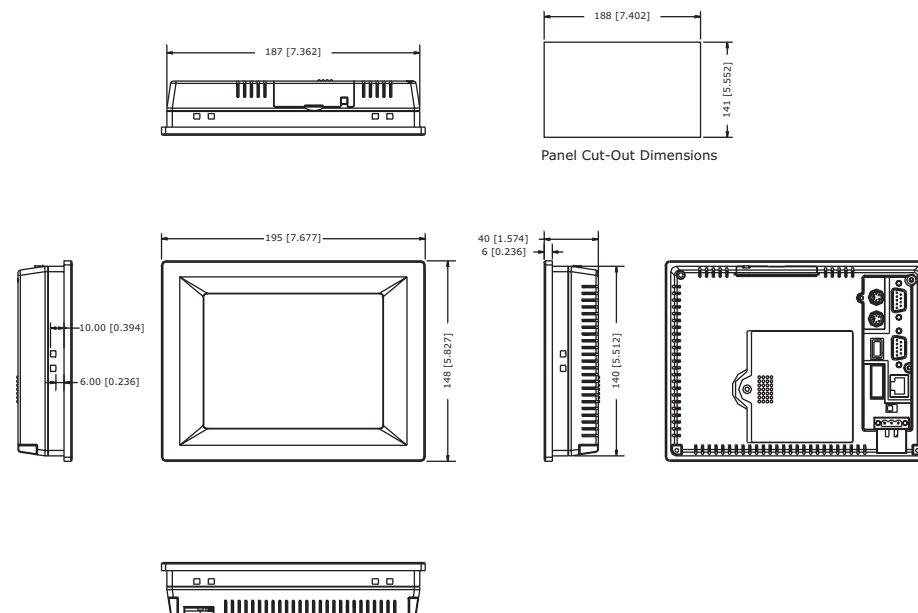
- **Type:** 4-wire, analog resistive
- **Resolution:** continuous
- **Light transmission:** above 68%
- **Life:** 1 million activation minimal
- **Controller:** PS/2 interface

Environmental Specifications

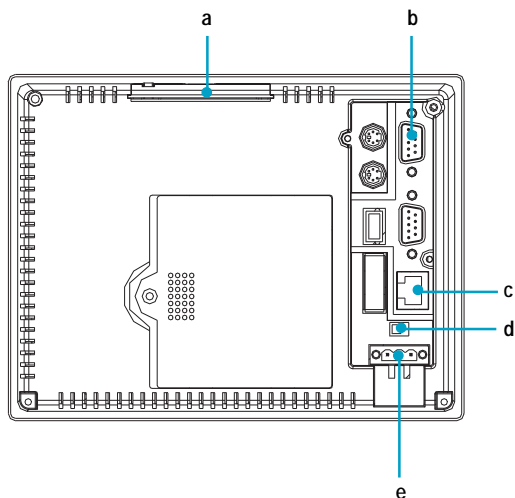
- **Operating temperature:** 0° ~ 45°C (32° ~ 113°F)
- **Relative humidity:** 10% ~ 95% @ 40°C, non-condensing
- **Shock (operation):** 10 G peak acceleration (11ms duration)
- **EMI:** FCC class B certificated
- **CE certificated**
- **BSMI:** certificated
- **Front panel meets NEMA4 / IP65**



Dimensions Drawing



Rear View



a. CompactFlash™ slot
b. Serial ports
c. Ethernet port (RJ-45)

d. Power switch
e. Power connector

Ordering Information

- TPC-642S-CE:**
 5.7" STN LCD display touch panel computer with StrongARM 1110 CPU 32MB DRAM/16MB flash memory on board and Windows CE 3.0 OS

Optional Peripherals

- PS-DC24-50:**
 110V_{AC} to 24V_{DC}, 50 watts power adapter