<table>
<thead>
<tr>
<th>Specifications</th>
<th>TPC-1780H/TPC-1770H</th>
<th>TPC-1571H</th>
<th>TPC-1271H</th>
<th>TPC-1071H</th>
<th>TPC-071H</th>
<th>TPC-851H/1251H/1551H</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Core™ 2 Duo L7400 1.5GHz/Intel® Atom™ D525 1.8 GHz</td>
<td>Intel® Atom™ D525 1.8 GHz</td>
<td>Intel® Atom™ D525 1.8 GHz</td>
<td>Intel® Atom™ Z510 1.1 GHz</td>
<td>Intel® Atom™ Z520 1.33 GHz</td>
<td></td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>2 GB DDR2 SDRAM (up to 4 GB DDR2 SDRAM)</td>
<td>1 GB DDR2 SDRAM</td>
<td>4 GB DDR3 SDRAM</td>
<td>4 GB DDR3 SDRAM</td>
<td>1 GB DDR2 SDRAM</td>
<td>1 GB DDR2 SDRAM</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>SXGA TFT LCD</td>
<td>SXGA TFT LCD</td>
<td>SXGA TFT LCD</td>
<td>SXGA TFT LCD</td>
<td>SXGA TFT LCD</td>
<td>SXGA TFT LCD</td>
</tr>
<tr>
<td><strong>Power Input Voltage</strong></td>
<td>18 ~ 28 V</td>
<td>8 ~ 28 V</td>
<td>8 ~ 28 V</td>
<td>8 ~ 28 V</td>
<td>8 ~ 28 V</td>
<td>8 ~ 28 V</td>
</tr>
<tr>
<td><strong>Weight (Net)</strong></td>
<td>8 kg (17.64 lbs)</td>
<td>5.5 kg (12.13 lbs)</td>
<td>4.57 kg (10.07 lbs)</td>
<td>3.5 kg (7.72 lbs)</td>
<td>0.95 kg (2.1 lbs)</td>
<td>1.43 kg (3.15 lb)</td>
</tr>
<tr>
<td><strong>Touchscreen</strong></td>
<td>8-wire Resistive</td>
<td>5-wire Resistive</td>
<td>5-wire Resistive</td>
<td>5-wire Resistive</td>
<td>5-wire Resistive</td>
<td>5-wire Resistive</td>
</tr>
<tr>
<td><strong>Flash Memory</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>HDD</strong></td>
<td>1 x Internal 2.5&quot; SATA (optional)</td>
<td>1 x Internal 2.5&quot; SATA (optional)</td>
<td>1 x Internal 2.5&quot; SATA (optional)</td>
<td>1 x Internal 2.5&quot; SATA (optional)</td>
<td>1 x Internal 2.5&quot; SATA (optional)</td>
<td>1 x 2.5&quot; SATA Bundled with Expansion HDD Kit (Optional)</td>
</tr>
<tr>
<td><strong>Network (LAN)</strong></td>
<td>10/100/1000Base-T x 2</td>
<td>10/100/1000Base-T x 2</td>
<td>10/100/1000Base-T x 2</td>
<td>10/100/1000Base-T x 2</td>
<td>10/100/1000Base-T x 2</td>
<td>10/100/1000Base-T x 2</td>
</tr>
<tr>
<td><strong>I/O Ports</strong></td>
<td>RS-232 x 2, USB x 4 (Host)</td>
<td>Serial Port x 3 (RS-232 x 2 and RS-422/485 x 1)</td>
<td>USB x 2</td>
<td>Serial Port x 3 (RS-232 x 2 and RS-422/485 x 1)</td>
<td>USB x 2</td>
<td>Serial Port x 3 (RS-232 x 1 and RS-422/485 x 1)</td>
</tr>
<tr>
<td><strong>Flash Memory</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>HDD</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Weight (Net)</strong></td>
<td>8 kg (17.64 lbs)</td>
<td>5.5 kg (12.13 lbs)</td>
<td>4.57 kg (10.07 lbs)</td>
<td>3.5 kg (7.72 lbs)</td>
<td>0.95 kg (2.1 lbs)</td>
<td>1.43 kg (3.15 lb)</td>
</tr>
<tr>
<td><strong>Front Cover</strong></td>
<td>Die-Cast Aluminum Alloy</td>
<td>Die-Cast Aluminum Alloy</td>
<td>Die-Cast Aluminum Alloy</td>
<td>Die-Cast Aluminum Alloy</td>
<td>Die-Cast Aluminum Alloy</td>
<td>ABS + PC</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>0 ~ 45°C (32 ~ 113°F)</td>
<td>0 ~ 50°C (32 ~ 122°F)</td>
<td>0 ~ 50°C (32 ~ 122°F)</td>
<td>0 ~ 50°C (32 ~ 122°F)</td>
<td>0 ~ 50°C (32 ~ 122°F)</td>
<td>-20 ~ 60°C (-4 ~ 140°F)</td>
</tr>
<tr>
<td><strong>Certification</strong></td>
<td>BSMI, CCE, FCC, UL</td>
<td>BSMI, CCE, FCC, UL</td>
<td>BSMI, CCE, FCC, UL</td>
<td>BSMI, CCE, FCC, UL</td>
<td>BSMI, CCE, FCC, UL</td>
<td>BSMI, CCE, FCC, UL</td>
</tr>
<tr>
<td><strong>Model</strong></td>
<td>TPC-1780H/TPC-1770H</td>
<td>TPC-1571H</td>
<td>TPC-1271H</td>
<td>TPC-1071H</td>
<td>TPC-071H</td>
<td>TPC-851H/1251H/1551H</td>
</tr>
</tbody>
</table>
### SPECIFICATIONS

#### Display
- **Power Input Voltage:** 10 ~ 29 V
- **Operating System:**
  - Linux
  - Windows CE 5.0/6.0/
  - Windows CE 5.0/6.0/

#### Input/Output (I/O)
- **Network (LAN):**
  - (Front Panel)
  - (Optional)
- **Audio:** 1 x
- **Serial Port:** 1 x
- **IEEE 1394:**
  - (Optional)
- **Controller:**
  - Distribute Nano
  - M2M I/O
  - Embedded Auto.
  - Device Servers &
  - Industrial Monitors
  - Automation Software
  - Hazardous Location
  - Building Automation
  - Automation Panel PC
  - Industrial Motion
  - Device Drivers &
  - Communication
  - Embedded Multi-Com
  - FOCs
  - USB
  - USB
  - USB
  - USB

### NEW

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Atom D525 1.8 GHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 GB DDR2 SDRAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 GB DDR2 SDRAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>262 K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>700</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>160/140, 160/140, 170/160</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-wire Resistive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDRAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 x 2.5&quot; SATA Bundled with Extension HDD Kit (Optional)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/100/1000Base-T x 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serial Port x 2 (RS-232 x 1, RS-422/485 x 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>USB x 2 (Host)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RS-232/485 x 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cfast x 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 ~ 28 Vcc:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 ~ 32 Vcc:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>311 x 237 x 54mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>383 x 307 x 58.1mm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>413.7 x 347.2 x 63.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.5 lb/ (5.5 lb)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5 lb/ (7.7 lb)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Die-Cast Aluminum Alloy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEMA4/Ip66</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSMI, CCC, CE, FCC, UL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows XP/CE 5.0.0/0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Online Download
- www.advantech.com/products
TPC-1780H
TPC-1770H

17” SXGA TFT LCD Core™ 2 Duo
L7400 Touch Panel Computer
17” SXGA TFT LCD Celeron® M
Touch Panel Computer

Features
- Intel® Core™ 2 Duo L7400 processor up to 1.5 GHz on board/
  Intel® Celeron® M processor up to 1 GHz on board
- 17” SXGA TFT LCD
- Compact design with die-cast Al front bezel
- Fanless cooling system
- NEMA/IP65 compliant front panel
- Supports Microsoft® Windows® XP/XPe/WS7 (TPC-1780H only)
- Downward I/O cabling
- Gigabit Ethernet and Fast Ethernet supported

Introduction
With a high quality TFT LCD display, TPC-1780H/TPC-1770H is designed with the Intel® Core™ 2 Duo L7400/Intel® Celeron® M processor as its core. The Intel® Core™ 2 Duo/Intel® Celeron® M has low power consumption and 1.52 GHz operating frequency. This system is fanless although the kernel is powerful. In addition, spindle-free storage makes the TPC-1780H/TPC-1770H a durable and reliable platform. For applications where spindle-free storage is not critical, a fast-access HDD module can be used. The rich I/O portfolio meets diverse requests.

Specifications

General
- BIOS
  Award® 4 MB
- Certifications
  BSMI, CCC, CE, FCC Class A, UL
- Cooling System
  Fanless design
- Dimensions (W x H x D)
  414 x 347.5 x 93 mm (16.3” x 13.68” x 3.66”)
- Enclosure
  Front bezel: Die-cast Aluminum alloy
  Back housing: ABS + PC
- Mounting
  Desktop, Wall or Panel Mount
- OS Support
  Microsoft® WES 7/XP/WES/Wince 5.0/6.0 (WES7 only for TPC-1780H)

Power Consumption
100 W Typical

Power Input
18 – 32 Vdc

Watchdog Timer
1 – 255 sec (system)

Weight (Net)
8 kg (17.64 lbs)

System Hardware
- CPU
  TPC-1780H: Intel® Core™ 2 Duo L7400 1.5 GHz
  TPC-1770H: Intel® Celeron® M 1 GHz 512k cache
- Chipset
  TPC-1780H: Intel® 945GME + ICH7
  TPC-1770H: Intel® 915GME + ICH6M
- Memory
  TPC-1780H: 2GB SD-DIMM DDR2 SDRAM, Up to 4 GB
  TPC-1770H: 1GB 240pin DIMM DDR2 SDRAM
- LAN
  10/100/1000Base-T x 2
- Expansion Slots
  PCI-104 (Up to 1 unit, Optional)
  RS-422/485 (Optional)
- Storage
  CompactFlash® slot x 1
  2.5” SATA HDD x 1 (optional)
- I/O
  RS-232 x 3 (COM1, 3, 4)
  USB 2.0 x 4 (Host)
  PS/2 Keyboard x 1, PS/2 Mouse x 1
  VGA x 1
  MIC-in x 1, Line-in x 1, Line-out x 1

LCD Display
- Display Type
  SXGA TFT LCD
- Display Size
  17”
- Max. Resolution
  1280 x 1024
- Max. Colors
  16.7 M
- Luminance cd/m²
  300
- Viewing Angle (H/V°)
  160/160
- Backlight Life
  50,000 hrs
- Contrast Ratio
  800:1

Touchscreen
- Lifespan
  1 million touches at single point
- Light Transmission
  Above 75%
- Resolution
  Linearity
- Type
  8-wire, analog resistive
- Environment
  10 – 95% RH @ 40°C, non-condensing
- Ingress Protection
  Front panel: NEMA4, IP65
- Operating Temperature
  0 – 45°C (32 – 113°F)
- Storage Temperature
  -20 – 60°C (-4 – 140°F)
- Vibration Protection
  With HDD: 1 Gms (5 – 500 Hz) (Operating, random vibration)
Dimensions

Panel Cut-out Dimensions: 400.8 x 334.3 mm (16.03" x 13.37")

Ordering Information

- **TPC-1780H-P3AE**
  - 17" SXGA Touch Panel PC, Core™ 2 Duo L7400, 2 GB
- **TPC-1770H-C2BE**
  - 17" SXGA Touch Panel PC, Celeron® M 1 GHz, 1 GB

Accessories

- **TPC-1000H-WMKE**
  - TPC series wallmount kit from 10" to 17"
- **TPC-1000H-SMKE**
  - TPC series stand kit from 10" to 17"
- **PWR-244-AE**
  - 24V 110W AC-DC Power Adapter

Rear View

a. Power Switch, Fuse  
b. Power Receptor  
c. PS/2  
d. COM (RS-232)  
e. VGA  
f. USB 2.0  
g. Audio (Line-In, Line-Out, MIC)  
h. 2.5" SATA HDD Housing  
i. LAN (10/100/1000)
TPC-1571H
15" XGA TFT LCD Intel® Atom™
Dual-Core D525 Touch Panel Computer

Introduction
With a high quality TFT LCD display, TPC-1571H is designed with the Intel® Atom™ D525 processor as its core. The Intel® Atom™ has low power consumption and 1.8 GHz operating frequency. This system is fanless although the kernel is powerful. In addition, spindle-free storage makes the TPC-1571H a durable and reliable platform. For applications where spindle-free storage is not critical, a fast-access HDD module can be used. The rich I/O portfolio meets diverse requests.

Specifications

General
- BIOS: AMI
- Certifications: BSMI, CCC, CE, FCC Class A, UL
- Cooling System: Fanless design
- Dimensions (W x H x D): 383 x 307 x 78.5 mm (15.08" x 12.09" x 3.09")
- Enclosure: Front bezel: Die-cast Aluminum alloy
- Back housing: ABS + PC
- Mounting: Desktop, Wall or Panel Mount
- OS Support: Microsoft® WES7/Win7 32/64 bit/XP/WES/WinCE 5.0/6.0
- Power Consumption: 21 W (typical)
- Power Input: 10 ~ 29 Vdc
- Watchdog Timer: 1 ~ 255 sec (system)
- Weight (Net): 5.5 kg (12.13 lbs)

System Hardware
- CPU: Intel® Atom™ D525 1.8 GHz with 1MB cache
- Chipset: ICH8M
- Memory: 4GB SO-DIMM DDR3 SDRAM
- LAN: 10/100/1000Base-T x 2
- Expansion Slots: Full-size PCI-E or Mini PCI-E
- Storage: CompactFlash® slot x 1
- 2.5" SATA HDD x 1 (Optional)
- I/O: RS-232 x 2 (COM1, 2) with isolation
- RS-422/485 x 1 (COM3) with isolation and auto data flow control
- USB 2.0/1.1 x 2 (Host)
- PS/2 x 1
- DI/DO & backup SRAM: 8 x DI/DO with isolation and backup 1MB SRAM

LCD Display
- Display Type: XGA TFT LCD
- Display Size: 15"
- Max. Resolution: 1024 x 768
- Max. Colors: 262 K
- Luminance cd/m²: 350
- Viewing Angle (H/V): 160/140
- Backlight Life: 50,000 hrs
- Contrast Ratio: 700:1

Touchscreen
- Lifespan: 10 million touches at single point
- Light Transmission: Above 75%
- Resolution: Linearity
- Type: 5-wire, analog resistive

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

Panel Cut-out Dimensions: 374.5 x 298.5 mm (14.98" x 11.94")

Ordering Information
- **TPC-1571H-D3AE**: 15" XGA Touch Panel PC, D525 1.8 GHz, 4GB

Accessories
- **TPC-1000H-WMKE**: TPC series wallmount kit from 10" to 17"
- **TPC-1000H-SMKE**: TPC series stand kit from 10" to 17"
- **1757003463**: Power Cord 3P UL 10A 125V 1.8M
- **1700001524**: Power Cable EU Plug 1.8M
- **1702002605**: Power Cable UK Plug 1.8M
- **1702031801**: Power cable China/Australia Plug 1.8M
- **EWM-W139F01E**: 802.11 b/g/n, RTS390, 11R, Full-size Mini-PCIe
- **PWR-247-AE**: 50W DC 24V/2.3A Output Power Supply
- **1750000318**: EMI Antenna 2Dbi 2.4GHz SMA CONN for ARK-3384
- **1750003222**: 802.11b/g 5Dbi Dipole Antenna
- **1750003418**: Wireless Antenna AN2460-5901RS R/P SMA M9dB

* Windows XPe supports 10 languages with MUI. (English, Traditional Chinese, Simplified Chinese, French, German, Spanish, Russian, Italian, Japanese and Korean)
# Introduction

With a high quality TFT LCD display, TPC-1071H/1271H are designed with the Intel® Atom™ D525 processor as its core. The Intel® Atom™ has low power consumption and 1.8 GHz operating frequency. This system is fanless although the kernel is powerful. In addition, spindle-free storage makes the TPC-1071H/1271H are durable and reliable platforms. For applications where spindle-free storage is not critical, a fast-access HDD module can be used. The rich I/O portfolio meets diverse requests.

# Specifications

## General
- **BIOS**: AMI
- **Certifications**: BSMI, CCC, CE, FCC Class A, UL
- **Cooling System**: Fanless design
- **Dimensions (W x H x D)**:
  - TPC-1071H: 286 x 227 x 70.3 mm (11.26” x 8.94” x 2.76”)
  - TPC-1271H: 311 x 237 x 71.6 mm (12.24” x 9.33” x 2.82”)
- **Enclosure**: Front bezel: Die-cast Aluminum alloy
- **Mounting**: Desktop, Wall or Panel Mount
- **OS Support**: Microsoft® WES7/Win7 32/64 bit/XP/WES/WinCE
- **Power Consumption**:
  - TPC-1071H: 17W
  - TPC-1271H: 20W (typical)
- **Power Input**: 10~29 VDC
- **Watchdog Timer**: 1~255 sec (system)
- **Weight (Net)**:
  - TPC-1071H: 3.5 kg (7.72 lbs)
  - TPC-1271H: 4.57 kg (10.07 lbs)

## System Hardware
- **CPU**: Intel® Atom™ D525 1.8 GHz with 1MB cache
- **Chipset**: ICH8M
- **Memory**: 4GB SO-DIMM DDR3 SDRAM
- **LAN**: 10/100/1000Base-T x 2
- **Expansion Slots**: Full-size PCI-E or Mini PCI-E
- **Storage**: CompactFlash® slot x 1
- **I/O**:
  - RS-232 x 2 (COM1, 2) with isolation
  - RS-422/485 x 1 (COM3) with isolation and auto data flow control
- **USB**:
  - 2.0 x 1 (Host)
  - 2.0 x 1 (Device)
- **DI/DD & backup SRAM**: 8 x DI/DD with isolation and backup 1MB SRAM

## LCD Display
- **Display Type**: SVGA TFT LCD
- **Display Size**: 10.4”
- **Max. Resolution**: 800 x 600
- **Max. Colors**: 262 K
- **Luminance cd/m²**: TPC-1071H: 400
  - TPC-1271H: 450
- **Viewing Angle (H/V°)**:
  - TPC-1071H: 120/100
  - TPC-1271H: 160/140
- **Backlight Life**: 50,000 hrs
- **Contrast Ratio**: TPC-1071H: 400:1
  - TPC-1271H: 700:1

## Touchscreen
- **Lifespan**: 10 million touches at single point
- **Light Transmission**: Above 75%
- **Resolution**: Linearity
- **Type**: 5-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**: With HDD: 1 Gms (5 ~ 500 Hz) (Operating, random vibration)
TPC-1071H/TPC-1271H

Dimensions

**TPC-1071H**

- Panel Cut-out Dimensions: 279.5 x 219 mm (11.18" x 8.76")

**TPC-1271H**

- Panel Cut-out Dimensions: 302 x 228 mm (12.08" x 9.12")

**Ordering Information**

- **TPC-1071H-D3AE**: 10.4" SVGA Touch Panel PC, DS25 1.8 GHz, 4 GB
- **TPC-1271H-D3AE**: 12.1" SVGA Touch Panel PC, DS25 1.8 GHz, 4 GB

**Accessories**

- **TPC-1000H-WMKE**: TPC series wallmount kit from 10" to 17"
- **TPC-1000H-SMKE**: TPC series stand kit from 10" to 17"
- **1757003463**: Power Cord 3P UL 10A 125V 1.8M
- **1700001524**: Power Cord EU Plug 1.8M
- **1702031801**: Power cable UK Plug 1.8M
- **1702031836**: Power cable China/Australia Plug 1.8M
- **EWM-W139FB1E**: 802.11b/g/n, RT5390, T11R, Full-size Mini-PCIe
- **PWR-247-AE**: 50W DC 24V/2.3A Output Power Supply
- **1750000318**: EMI Antenna 2DBI 2.4GHz SMA CONN for ARK-3384
- **1750003222**: 802.11b/g 6dBi Dipole Antenna
- **1750003418**: Wireless Antenna AN2400-S961RS R/P SMA M0dB

**Rear View**

- a. Hard Drive (HDD)
- b. PCI-E slot
- c. COM (RS-422/485)
- d. COM (RS-232)
- e. LAN (10/100/1000)
- f. USB 2.0
- g. PS/2
- h. Power Receptacle
- i. DIO ports
- j. CompactFlash

Panel Cut-out Dimensions: 279.5 x 219 mm (11.18" x 8.76")

Panel Cut-out Dimensions: 302 x 228 mm (12.08" x 9.12")
TPC-671H

6.5" VGA LED LCD Intel® Atom™ Z510 Touch Panel Computer

Features
- Intel® Atom™ processor up to 1.1 GHz
- 6.5" VGA TFT LCD
- Super slim and compact design with ABS+PC housing
- Fanless cooling system
- NEMA4/IP65 compliant front panel
- Full-size Mini PCIe expansion support
- Serial port isolation protection
- Automatic data flow control RS-485
- Gigabit Ethernet supported
- Supports Microsoft® WES7/XP/WES/WinCE

Introduction
With a high quality TFT LCD display, TPC-671H is designed with the Intel® Atom™ Z510 processor as its core. The Intel® Atom™ has low power consumption and 1.1 GHz operating frequency. This system is fanless although the kernel is powerful. In addition, spindle-free storage makes the TPC-671H a durable and reliable platform. Supports Mini-PCIe expansion to bundle with IoT-Ready and Communication module to meet more applications in outdoor and ITerminal Gateway.

Specifications

General
- BIOS: Award®
- Certifications: BSMI, CCC, CE, FCC Class A, UL
- Cooling System: Fanless design
- Dimensions (W x H x D): 195 x 148 x 44.5 mm (7.68" x 5.83" x 1.75")
- Enclosure: ABS + PC
- Mounting: Desktop, Wall or Panel Mount
- OS Support: Microsoft® WES7/Win7 32bit/XP/WES/WinCE5.0/6.0
- Power Consumption: 6.6W (Typical), 9W (Full load)
- Power Input: 18 ~ 32 Vc
- Watchdog Timer: 1 ~ 255 sec (system)
- Weight (Net): 0.95 kg (2.1 lbs)

System Hardware
- CPU: Intel® Atom™ Z510 1.1GHz with 512KB cache
- Chipset: US15WP
- Memory: 1GB SO-DIMM DDR2 SDRAM
- LAN: 10/100/1000Base-T x 1
- Expansion Slots: Full-size Mini PCIe
- Storage: CompactFlash® slot x 1
- I/O: RS-232 x 1(COM1)
- RS-422/485 x 1 (COM2) with isolation and auto data flow control
- USB 2.0/1.1 x 2 (Host)

LCD Display
- Display Type: VGA TFT LCD
- Display Size: 6.5"
- Max. Resolution: 640 x 480
- Max. Colors: 262 K
- Luminance cd/m²: 700
- Viewing Angle (H/V°): 160/140
- Backlight Life: 50,000 hrs
- Contrast Ratio: 600:1

Touchscreen
- Lifespan: 36 million touches at single point (finger hitting rate by 250g at 2 times per second)
- Light Transmission: Above 75%
- Resolution: Linearity
- Type: 5-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: 2 Gms (5 ~ 500 Hz) (Operating, random vibration)
**TPC-671H**

---

### Dimensions

![Dimensions Diagram]

Panel Cut-out Dimensions: 188.4 x 141.4mm (7.54" x 5.6")

---

### Ordering Information

- **TPC-671H-Z2AE**: 6.5" VGA Touch Panel, Z510 1.1GHz, 1GB

**Accessories**

- **1757003463**: 100-240VAC to 19VDC, 90W Power Adapter
- **170001524**: Power Cord 3P UL 10A 125V 1.8M
- **170202605**: Power cable EU Plug 1.8M
- **1702011801**: Power cable UK Plug 1.8M
- **1702013836**: Power cable China/Australia Plug 1.8M
- **1750000318**: EMI Antenna 2DBI 2.4GHz SMA CONN for ARK-3384
- **PWR-247-AE**: 50W DC 24V/2.3A Output Power Supply
- **EWM-W139F81E**: 802.11 b/g/n, RTS390, T11R, Full-size Mini-PCle

---

### Rear View

![Rear View Diagram]

- **a. COM (RS-422/485)**
- **b. COM (RS-232)**
- **c. USB 2.0**
- **d. LAN (10/100/1000)**
- **e. Power Receptor**
- **f. Compact Flash**
- **g. Mini PCI-E slot**

---

* Windows XPe supports 10 languages with MUI. (English, Traditional Chinese, Simplified Chinese, French, German, Spanish, Russian, Italian, Japanese and Korean)
**Features**

- Intel® Atom™ processor (up to 1.33 GHz)
- 5.7” VGA/12.1” SVGA/15” XGA TFT LED backlight LCDs
- -20 – 60°C wide operating temperature
- Compact design with die-cast Al alloy front bezel
- Fanless cooling system
- NEMA4/IP65 compliant front panel
- Supports Microsoft® Windows® WES7/XP/XPp/CE
- Dual Gigabit Ethernet supported
- Isolation Protection for Serial ports
- Energy Star approved

**Introduction**

With a high quality TPC product line, TPC extends its Touch Panel Computer family with Intel® Atom™ platform for 5.7”, 12.1” & 15”. They are designed with Intel® Atom™ eMenlow XL processor as its core. The Intel® Atom™ has low power consumption and wide operating temperature. This system is fanless, slim design and the front bezel is die-cast Al alloy material. This product also provides a -20 – 60°C wide operating temperature solution and complete isolation protection for its serial ports. TPC series are durable and reliable platform.

**Specifications**

### General
- **BIOS**
  - Award® 4 MB
- **Certifications**
  - BSMI, CCC, CE, FCC Class A, UL
- **Cooling System**
  - Fanless design
- **Dimensions (W x H x D)**
  - 651H: 195 x 146 x 58 mm (7.68” x 5.83” x 2.28”)
  - 1251H: 311 x 237 x 54 mm (12.24” x 9.33” x 2.12”)
  - 1551H: 383 x 307 x 58.1 mm (15.08” x 12.09” x 2.29”)
- **Enclosure**
  - TPC-651H Front Bezel: PC + ABS
  - TPC-1251H/1551H Front bezel: Die-cast Aluminum alloy
  - Backup housing: SECC
- **Mounting**
  - Desktop, Wall or Panel Mount
- **OS Support**
  - Windows XP/XPp/CE/Linux
- **Power Consumption**
  - 17 W/SS W/40 W (typical)
- **Power Input**
  - 18 – 32 VDC
- **Watchdog Timer**
  - 1 – 255 sec (system)
- **Weight (Net)**
  - 1.43 kg (3.15 lb)/2.5 kg (5.51 lb)/3 kg (6.61 lb)

### System Hardware
- **CPU**
  - Intel® Atom™ 1.33 GHz with 512KB cache
- **Chipset**
  - eMenlow XL + Poulbo
- **Memory**
  - 1GB SO-DIMM DDR2 667 SDRAM
  - Up to 2GB (One channel)
- **LAN**
  - 10/100/1000Base-T x 2
- **Storage**
  - CompactFlash® slot x 1
  - 2.5” SATA HDD bundled with extension HDD kit x 1 (optional)
- **I/O**
  - RS-232 x 1 (with isolation)
  - RS-422/485 x 1 (with isolation)
  - USB 2.0 x 2 (Host)

### LCD Display
- **Display Type**
  - VGA/SVGA/XGA TFT LED LCD
- **Display Size**
  - 5.7”/12.1”/15”
- **Max. Resolution**
  - 640 x 480/800 x 600/1024 x 768
- **Max. Colors**
  - 262 K
- **Luminance cd/m²**
  - 700/450/350
- **Viewing Angle (H/V°)**
  - 160/140
- **Backlight Life**
  - 50,000 hrs
- **Contrast Ratio**
  - 800:1/700:1/700:1

### Touchscreen
- **Lifespan**
  - 10 million touches at single point
- **Light Transmission**
  - Above 75%
- **Resolution**
  - Linearity
- **Type**
  - 5-wire, analog resistive

### Environment
- **Humidity**
  - 10 – 95% RH @ 40°C, non-condensing
- **Ingress Protection**
  - Front panel: NEMA4, IP65
- **Operating Temperature**
  - -20 – 60°C (-4 – 140°F)
- **Storage Temperature**
  - -30 – 80°C (-22 – 176°F)
- **Vibration Protection**
  - 2 Gms (5 – 500 Hz)
  - (Operating, random vibration)
**Dimensions**

**TPC-651H**

Panel Cut-out Dimensions: TPC-651H: 189.1 x 142.1 mm (7.56" x 5.68")
TPC-1251H: 302.5 x 228.5 mm (12.1" x 9.14")
TPC-1551H: 374.5 x 298.5 mm (14.98" x 11.94")

**Ordering Information**

- **TPC-651H-Z2AE** 5.7" VGA Touch Panel PC, Atom 1.33GHz, 1GB
- **TPC-1251H-Z2AE** 12.1" SVGA Touch Panel PC, Atom 1.33GHz, 1GB
- **TPC-1551H-Z2AE** 15" XGA Touch Panel PC, Atom 1.33GHz, 1GB

**Accessories**

- **TPC-1000H-WMKE** TPC series wallmount kit from 10" to 17"
- **TPC-1000H-SMKE** TPC series stand kit from 10" to 17"
- **TPC-651H-EHKE** TPC-651H/1251H/1551H Extension HDD Kit
- **PWR-247-AE** 24V 50 W AC-DC Power Adapter
- **1702002600** Power Cord 3P UL(CSA(USA) 125V 10A 1.83M

* Stand and Wall mount kits not compatible with HDD extension kit.

**Rear View**

TPC-1251H/1551H

**TPC-651H**

a. COM (RS-232, RS-422/485)
b. USB 2.0
c. LAN (10/100/1000)
d. Power Receptor
# Introduction

With a high quality TPC product line, TPC extends its Touch Panel Computer family with Intel® Atom™ platform for 5.7", 12.1", 15" and 17". TPC thin client is designed with Intel® Atom™ 1.6 GHz processor as its core. The Intel® Atom™ has low power consumption and 1.6 GHz operating frequency. This system is fanless, slim design for Web-based terminal solutions, so JavaScript is included in the Windows operating system. For Linux systems, we provide Mozilla Firefox.

## Specifications

### General
- **BIOS**: Award® 4 MB
- **Certifications**: BSMI, CCC, CE, FCC Class A, UL
- **Cooling System**: Fanless design
- **Dimensions (W x H x D)**:
  - 600H: 196 x 146 x 58 mm (7.72" x 5.78" x 2.28")
  - 1250H: 311 x 237 x 54 mm (12.24" x 9.33" x 2.12")
  - 1550H: 393 x 307 x 58.1 mm (15.08" x 12.09" x 2.29")
  - 1750H: 413.7 x 347.2 x 63.8 mm (16.28" x 13.68" x 2.5")
- **Enclosure**: TPC-650H Front bezel: PC + ABS
  - TPC-1250H/1550H/1750H Front bezel: Die-cast aluminum alloy
- **Mounting**: Desktop, Wall or Panel Mount
- **OS Support**: Microsoft® Windows® XP/XP Embedded/CE
  - Windows CE 5.0/6.0 with Java Script ready
  - Supports Linux OS with Firefox and Java Script plug-ins
  - Gigabit Ethernet supported
- **Power Consumption**: 17 W/35 W/40 W (typical)
- **Power Input**: 18 – 28 Vac, 18 – 32 Vdc (TPC-1750H only)
- **Watchdog Timer**: 1 – 255 sec (system)
- **Weight (Net)**: 1.43 kg (3.15 lb)/2.5 kg (5.51 lb)/3 kg (6.61 lb)/3.5 kg (7.71 lb)

### System Hardware
- **CPU**: Intel® Atom™ N270 1.6 GHz
- **Chipset**: Intel® 945GSE/ICH7M
- **Memory**: 2GB SO-DIMM DDR2 667 SDRAM
  - 1GB SO-DIMM DDR2 667 SDRAM (TPC-650H only)
- **LAN**: 10/100/1000Base-T x 2 (TPC-650H with One Giga LAN)
- **Storage**: CompactFlash® (TPC-650H only) / CFast slot x 1
  - 2.5" SATA HDD bundled with extension HDD kit x 1 (optional, TPC-650H not included)
- **I/O**: TPC-650H: RS-232 x 2 (COM1, 2)

### LCD Display
- **Display Type**: VGA/SVGA/XGA TFT LED LCD
- **Display Size**: 5.7"/12.1"/15"/17"
- **Max. Resolution**: 640 x 480/800 x 600/1024 x 768/1280 x 1024
- **Max. Colors**: 262 K
- **Luminance**: 270 cd/m² (for 5.7"), 450 cd/m² (for 12.1"), 350 cd/m² (for 15"/17")
- **Viewing Angle (H/V)**: 160/140; 170/160 (for 17")
- **Backlight Life**: 50,000 hrs
- **Contrast Ratio**: 800:1/700:1/700:1/1000:1

### Touchscreen
- **LifeSpan**: 10 million touches at single point
- **Light Transmission**: Above 75%
- **Resolution**: Linearly
- **Type**: 5-wire, analog resistive

### Environment
- **Humidity**: 10 – 95% RH @ 40°C, non-condensing
- **Ingress Protection**: Front panel: NEMA4, IP65
- **Operating Temperature**: 0 – 45°C (32 – 113°F)
- **Storage Temperature**: -20 – 60°C (-4 – 140°F)
- **Vibration Protection**: 2 Gsms (5 – 500 Hz) (Operating, random vibration)
Dimensions

TPC-650H

Panel Cut-out Dimensions: TPC-650H: 189.1 x 142.1 mm (7.56" x 5.68")
TPC-1250H: 302.5 x 228.5 mm (12.1" x 9.14")
TPC-1550H: 374.5 x 298.5 mm (14.98" x 11.94")
TPC-1750H: 400.8 x 334.3 mm (16.03" x 13.37")

Ordering Information

- TPC-650H-N2AE 5.7” VGA Touch Panel PC, Atom™ N270 1.6GHz, 1GB
- TPC-1250H-N2BE 12.1” SVGA Touch Panel PC, Atom™ N270 1.6GHz, 2GB
- TPC-1550H-N2BE 15” XGA Touch Panel PC, Atom™ N270 1.6GHz, 2GB
- TPC-1750H-N2BE 17” XGA, Touch Panel PC, Atom™ N270 1.6GHz, 2GB

Accessories

- TPC-1000H-WMKE TPC series wallmount kit from 10" to 17"
- TPC-1000H-SMKE TPC series stand kit from 10" to 17"
- TPC-651H-EHKE TPC-651H/1251H/1551H Extension HDD Kit
- PWR-247-AE 24 V 50 W AC-DC Power Adapter
- 1702802600 Power Cord 3P UL/CSA(USA) 125V 10A 1.83M

* Stand and Wall mount kits not compatible with HDD extension kit

Rear View

TPC-1250H/1550H/1750H

TPC-650H

- a. COM (RS-232, RS-422/485)
- b. USB 2.0
- c. LAN (10/100/1000)
- d. Power Receptor

TPC-650H

- a. Power Receptor
- b. COM (RS232 x 2)
- c. USB 2.0
- d. LAN (10/100/1000)
- e. PS/2
**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 VDC
- **Watchdog Timer**
  - Programmable as 250 ms, 500 ms, 1 second
- **Weight (Net)**
  - 0.25 kg (0.55 lbs)/0.8 kg (1.76 lbs)

### 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**
  - Linearly
- **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 G rms (5 ~ 500 Hz)
TPC-31T/61T

Dimensions

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
- 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

TPC-61T

Power Receptor
LAN (10/100) COM (RS-232/485)
SD Slot USB 2.0 (Host)
USB 2.0 (Client)
COM 2 (RS-232)
COM 1 (RS-232)
Fuse (3.15A)
LAN (10/100)
COM3 (RS-422/485)
Power Switch Power Receptor
TPC Installation Accessories

Introduction

Advantech’s Touch Panel Computers have been designed to be slim and compact so they can be installed into all kinds of environments. They can be wallmounted, panel mounted or simply placed on a desktop with an stand. Standard mounting holes and features make a wide range of mounting options available.

Ordering Information

- **TPC-1000H-WMKE**: TPC series wallmount kit from 10” to 17”
- **TPC-1000H-SMKE**: TPC series stand kit from 10” to 17”
- **TPC-1270H-EPKE**: TPC Series PC/PCI-104 extension kit
- **TPC-651H-EHKE**: TPC-651H/1251H/1551H extension HDD kit
- **PWR-247-AE**: 24 V 50 W AC-DC power adapter

Stand Kit

Wallmount kit

TPC-1270H-EPKE

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1702002600</td>
<td>Power Cable US Plug 1.8 M</td>
</tr>
<tr>
<td>1702002605</td>
<td>Power Cable EU Plug 1.8 M</td>
</tr>
<tr>
<td>1702031801</td>
<td>Power Cable UK Plug 1.8 M</td>
</tr>
<tr>
<td>1702031836</td>
<td>Power Cable China/Australia Plug 1.8 M</td>
</tr>
<tr>
<td>1700001524</td>
<td>Power Cable US Plug 1.8 M</td>
</tr>
<tr>
<td>170203183C</td>
<td>Power Cable EU Plug 1.8 M</td>
</tr>
<tr>
<td>170203180A</td>
<td>Power Cable UK Plug 1.8 M</td>
</tr>
</tbody>
</table>

- 1702002600, 1702301801, 1702002605, 1702031836 are for PWR-247-AE