### Touch Panel Computers

**Touch Panel Computer Selection Guide**

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To view all of Advantech's Automation Panel PCs, please visit www.advantech.com/products.
# Touch Panel Computer Selection Guide

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<td>Intel® Atom™ DS25 1.8 GHz</td>
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<td>Intel® Atom™ DS25 1.8 GHz</td>
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<td><strong>HDD</strong></td>
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<td>1 x Internal 2.5” SATA (optional)</td>
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<td>10/100/1000Base-T x 2</td>
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<td>10/100/1000Base-T x 2</td>
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<td><strong>Expansion Slots</strong></td>
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<td>PCI-E x 1 or Mini PCI-E x 1</td>
<td>PCI-E x 1 or Mini PCI-E x 1</td>
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<tr>
<td><strong>Dimension</strong></td>
<td>195 x 148 x 44.5 mm (7.68” x 5.83” x 1.75”)</td>
<td>195 x 148 x 44.4 mm (7.68” x 5.83” x 1.75”)</td>
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<td>5.5 kg (12.13 lbs)</td>
<td>4.57 kg (10.07 lbs)</td>
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<td>Die-Cast Aluminum Alloy</td>
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<td>Die-Cast Aluminum Alloy</td>
<td>ABS + PC</td>
<td>PC + ABS (TPC-661H)</td>
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<td>0 ~ 50°C (32 ~ 122°F)</td>
<td>0 ~ 50°C (32 ~ 122°F)</td>
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<td>18 ~ 28 Vcc, 18 ~ 32 Vcc</td>
<td>18 ~ 32 Vcc</td>
<td>18 ~ 32 Vcc</td>
<td>18 ~ 32 Vcc</td>
<td>18 ~ 32 Vcc</td>
<td>8 ~ 28 Vcc</td>
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<td>311 x 237 x 5.4mm</td>
<td>196 x 148 x 5.8mm</td>
<td>196 x 148 x 44.4mm</td>
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<td>120.79 x 85.5 x 26.5mm</td>
<td>120.8 x 85.5 x 26.5mm</td>
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<tr>
<td>12.24” x 9.35” x 2.12”</td>
<td>(7.68” x 5.83” x 2.28”)</td>
<td>(7.68” x 5.83” x 1.75”)</td>
<td>(7.68” x 5.83” x 1.75”)</td>
<td>(7.68” x 5.83” x 1.04”)</td>
<td>(7.68” x 5.83” x 1.75”)</td>
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<tr>
<td>383 x 307 x 58.1mm</td>
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<td>0.8 kg (1.76 lbs)</td>
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<tr>
<td>15.08” x 12.09” x 2.29”</td>
<td>3 kg (6.61 lb)</td>
<td>3.5 kg (7.71 lb)</td>
<td>8 ~ 28 Vcc</td>
<td>10/100/1000Base-T x 2</td>
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<td>419.7 x 347.2 x 63.8</td>
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<td>2.5 kg (5.51 lb)</td>
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**Selection Guide**

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- Building Automation
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- Profinet
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- CANopen
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- Ethernet Switches
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 1.5/1 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
- Mounting: Desktop, Wall or Panel Mount
- OS Support: Microsoft® Windows® XP/XPe/WES7 (TPC-1780H only)
- Power Consumption: 100 W Typical
- Power Input: 18 ~ 32 Vdc
- Watchdog Timer: 1 ~ 255 sec (system)
- Weight (Net): 8 kg (17.6 lbs)

System Hardware
- CPU: TPC-1780H: Intel® Core™ 2 Duo L7400 processor up to 1.5 GHz on board/
  Intel® Celeron® M processor up to 1 GHz on board
- Chipset: TPC-1780H: Intel® 945GME + ICH7
- Memory: TPC-1780H: 2GB SO-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 Tunit, Optional)
- Storage: CompactFlash® slot x 1
- I/O: 2.5" SATA HDD x 1 (optional)
  RS-232 x 2 (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
- Lumiance 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
- Humidity: Front panel: NEMA4, IP65
- Ingress Protection: -20 ~ 60°C ( -4 ~ 140°F)
- Operating Temperature: With HDD: 1 Grms (5 ~ 500 Hz)
- Storage Temperature: 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)
### 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 32/64bit/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: 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-1571H

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 100-240Vac to 19Vdc 90W Power Adapter
- 1700001524 Power Cord 3P UL 10A 125V 1.8M
- 170202605 Power cable EU Plug 1.8M
- 1702031801 Power cable UK Plug 1.8M
- 1702031836 Power cable China/Australia Plug 1.8M
- EWM-W139F01E 802.11 b/g/n, RT5390, 1T1R, Full-size Mini-PCIe
- PWR-247-AE 50W DC 24V/2.3A Output Power Supply
- 1750000318 EMI Antenna 2D8I 2.4GHz SMA CONN for ARK-3384
- 1750003222 802.11b/g 5dBi Dipole Antenna
- 1750003418 Wireless Antenna AN2400-5901RS R/P SMA-M9dB

Rear View

* Windows XP 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
  Back housing: ABS + PC
- Mounting: Desktop, Wall or Panel Mount
- OS Support: Microsoft® WES7/Win7 32/64bit/XP/WES/WinCE5.0/6.0
- 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
  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: 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 Grms (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, D525 1.8 GHz, 4 GB
- **TPC-1271H-D3AE**: 12.1” SVGA Touch Panel PC, D525 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 19V DC 90W Power Adapter
- **1700001524**: Power Cord 3P UL 10A 125V 19V DC 90W Power Adapter
- **1700102605**: Power cable EU Plug 1.8M
- **1702031801**: Power cable UK Plug 1.8M
- **1702031836**: Power cable China/Australia Plug 1.8M
- **EWM-W139F01E**: 802.11 b/g/n, RT5390, 1T1R, 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 AN2400-5901RS R/P SMA.M9dB

Rear View

a. 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 Receptor
i. DI/O ports
j. CompactFlash
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 Terminal Gateway.

Specifications

| General                           | Award® |
|                                  |        |
| BIOS                             |        |
| 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® WEST/Win7 32bit/XP/WES/ WinCE5.0/6.0 |
| Power Consumption                | 6.6W (Typical), 9W (Full load) |
| Power Input                      | 18-32VDC |
| 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) |

| 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 | |

TPC-671H 6.5” VGA LED LCD Intel® Atom™ Z510 Touch Panel Computer
**Dimensions**

Panel Cut-out Dimensions: 188.4 x 141.4mm (7.54" x 5.66")

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

**Accessories**
- **1757003463** 100-240V, to 15VDC 90W Power Adapter
- **1700001524** Power Cord 3P UL 10A 125V 1.8M
- **1702002605** Power cable EU Plug 1.8M
- **1702031801** Power cable UK Plug 1.8M
- **1702031836** Power cable China/Australia Plug 1.8M
- **1750000318** EMI Antenna 20Bi 2.4GHz SMA CONN for ARK-3384
- **PWR-247-AE** 50W DC 24V/2.3A Output Power Supply
- **EWM-W139F01E** 802.11 b/g/n, RT5390, 1T1R, Full-size Mini-PCIe

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**Rear View**

- 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

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* Windows XPe supports 10 languages with MUI. (English, Traditional Chinese, Simplified Chinese, French, German, Spanish, Russian, Italian, Japanese and Korean)
TPC-651H
TPC-1251H
TPC-1551H

5.7" VGA/12.1" SVGA/15" XGA TFT LCD
Intel® Atom™ Touch Panel Computers
with Wide Operating Temperatures

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/XPe/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 148 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
  1251H/1551H Front bezel: Die-cast Aluminum alloy
- Mounting Desktop, Wall or Panel Mount
- OS Support Windows XP/WES7/XPe/CE/Linux
- Power Consumption 17 W/35 W/40 W (typical)
- Power Input 18 ~ 32 V
- 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 + Poulsbo
- 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 backlight 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 2
  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 24 V 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

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Industrial Electronics
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): 650H: 195 x 148 x 58 mm (7.68” x 5.83” x 2.28”) 1250H: 311 x 237 x 54 mm (12.24” x 9.33” x 2.12”) 1550H: 383 x 307 x 58.1 mm (15.08” x 12.09” x 2.29”) 1750H: 413.7 x 347.2 x 63.8 (16.28” x 13.68” x 2.5”)
- Mounting: Desktop, Wall or Panel Mount
- OS Support: Microsoft® Windows® 7/XPe/WES Windows CE 5.0/6.0 with Java Script Linux with Firefox explorer and Java Script plugins
- Power Consumption: 17 W/35 W/40 W (typical)
- Power Input: 18 ~ 28 V DC, 18 ~ 32 V DC (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)

TPC-1250H/1550H/1750H: RS-232 x 1, RS-422/485 x 1 USB 2.0 x 2 (Host) PS/2 x 1 (TPC-650H only)

TPC-650H/1250H/1550H/1750H: RS-232 x 1, RS-422/485 x 1 USB 2.0 x 2 (Host) PS/2 x 1 (TPC-650H only)

Features
- Intel® Atom™ N270 1.6 GHz processor
- 5.7" VGA/12.1" SVGA/15" XGA/17" SXGA TFT LCD
- Fanless cooling system
- NEMA4/IP65 compliant front panel
- Supports Microsoft® Windows XP/XP/CE
- Windows CE 5.0/6.0 with JavaScript ready
- Supports Linux OS with Firefox and Java Script plugins
- Gigabit Ethernet supported
- Energy Star approval

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 cd/m²: 2700/450/350
- 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: Linearity
- 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 Gms (5 ~ 500 Hz) (Operating, random vibration)
### Dimensions

**TPC-650H**

<table>
<thead>
<tr>
<th>Component</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Receptor</td>
<td>189.1 x 142.1 mm (7.56&quot; x 5.68&quot;)</td>
</tr>
<tr>
<td>COM (RS-232, RS-422/485)</td>
<td>180 x 6.5 mm (7.08&quot; x 0.26&quot;)</td>
</tr>
<tr>
<td>LAN (10/100/1000)</td>
<td>170 x 4.5 mm (6.69&quot; x 0.18&quot;)</td>
</tr>
<tr>
<td>PS/2</td>
<td>188.1 x 141.1 mm (7.43&quot; x 5.54&quot;)</td>
</tr>
<tr>
<td>USB 2.0</td>
<td>58 x 114.7 mm (2.28&quot; x 4.52&quot;)</td>
</tr>
</tbody>
</table>

**TPC-1250H/1550H/1750H**

<table>
<thead>
<tr>
<th>Component</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Receptor</td>
<td>301.5 x 6.5 mm (12.29&quot; x 0.26&quot;)</td>
</tr>
<tr>
<td>COM (RS-232, RS-422/485)</td>
<td>227.5 x 7.0 mm (9.00&quot; x 0.28&quot;)</td>
</tr>
<tr>
<td>LAN (10/100/1000)</td>
<td>187 x 5.5 mm (7.37&quot; x 0.22&quot;)</td>
</tr>
<tr>
<td>PS/2</td>
<td>373.0 x 3.5 mm (14.69&quot; x 0.14&quot;)</td>
</tr>
<tr>
<td>USB 2.0</td>
<td>140 x 4.5 mm (5.51&quot; x 0.18&quot;)</td>
</tr>
</tbody>
</table>

### 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
- **1702002600**
  - Power Cord 3P UL/CSA(USA) 125V 10A 1.83M

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

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**TPC-650H**

- a. Power Receptor
- b. COM (RS232 x 2)
- c. USB 2.0
- d. LAN (10/100/1000)
- e. PS/2

**TPC-1250H/1550H/1750H**

- a. COM (RS-232, RS-422/485)
- b. USB 2.0
- c. LAN (10/100/1000)
- d. Power Receptor
**TPC-31T**

**TPC-61T**

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

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**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

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**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.

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**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 lb)

**System Hardware**

- **CPU**: TI AM3517
- **Memory**: DDR2 256MB on board
- **LAN**: 10/100Base-T x 1
- **Storage**: 512MB on board micro SD card
- **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)
### Dimensions

<table>
<thead>
<tr>
<th></th>
<th>TPC-31T</th>
<th>TPC-61T</th>
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</thead>
<tbody>
<tr>
<td>Width</td>
<td>115 mm</td>
<td>189 mm</td>
</tr>
<tr>
<td>Height</td>
<td>79.5 mm</td>
<td>142 mm</td>
</tr>
</tbody>
</table>

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**
- LAN (10/100)
- COM (RS-232/485)
- Power Receptor

**TPC-61T**
- USB 2.0 (Host)
- SD Slot
- COM3 (RS-422/485)
- LAN (10/100)
- Power Switch
- Power Receptor

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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

Power Cable US Plug 1.8 M
1702002600

Power Cable EU Plug 1.8 M
1702002605

Power Cable UK Plug 1.8 M
1702031801

Power Cable China/Australia Plug 1.8 M
1702031836

Power Cable US Plug 1.8 M
1700001524

Power Cable EU Plug 1.8 M
170203183C

Power Cable UK Plug 1.8 M
170203180A

1702002600, 1702031801, 1702002605, 1702031836 are for PWR-247-AE
## Industrial Panel Computer Selection Guide

### Model
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</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Socket µFC-PGA988 Intel® Core™ i7, i5, i3, Celeron Mobile Processor</td>
<td>Socket µFC-PGA988 Intel® Core™ i7, i5, i3, Celeron Mobile Processor</td>
<td>Socket LGA775 Core™ 2 Quad Core™ 2 Dual up to 3GHz</td>
<td>Socket LGA775 Core™ 2 Quad Core™ 2 Dual up to 3GHz</td>
<td>Socket LGA775 Core™ 2 Quad Core™ 2 Dual up to 3GHz</td>
<td>Optional CPU Card</td>
<td>7157A: Pentium 4 (up to 2.8 GHz) Celeron® D 7158B: Optional CPU Card</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>Up to 8GB DDR3 SODIMM 1333MHz to 1066MHz</td>
<td>Up to 8GB DDR3 SODIMM 1333MHz to 1066MHz</td>
<td>Up to 4GB DDR3 SDRAM 1333MHz to 1066MHz</td>
<td>Up to 4GB DDR3 SDRAM 1333MHz to 1066MHz</td>
<td>Up to 4GB DDR3 SDRAM 1333MHz to 1066MHz</td>
<td>Optional CPU Card</td>
<td>7157A: Up to 2 GB DDR3 SDRAM 240pin, 400/533 MHz 7158B: Optional CPU Card</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>XGA LED LCD</td>
<td>SXGA LED LCD</td>
<td>XGA TFT LCD</td>
<td>SXGA TFT LCD</td>
<td>SXGA TFT LCD</td>
<td>VGA LED LCD</td>
<td>XGA TFT LCD</td>
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<td><strong>Touchscreen</strong></td>
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<tr>
<td><strong>Network/LAN</strong></td>
<td>2 x 10/100/1000Base-T</td>
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<td>2 x 10/100/1000Base-T</td>
<td>2 x 10/100/1000Base-T</td>
<td>-</td>
<td>7157A: 2 x 10/100/1000Base-T - 7158B: NA</td>
</tr>
<tr>
<td><strong>I/O ports</strong></td>
<td>4 x RS-232, 1 x VGA, 1 x HDMI, 5 x USB 2.0 (one at front), 1 x CFast slot, 1 x keyboard and 1 x mouse, Mic-in, Line-out, Line-in</td>
<td>4 x RS-232, 1 x VGA, 1 x HDMI, 5 x USB 2.0 (one at front), 1 x CFast slot, 1 x keyboard and 1 x mouse, Mic-in, Line-out, Line-in</td>
<td>2 x RS-232, 1 x VGA port, 1 x VGA port, 2 x PS2 (Keyboard, Mouse), 5 x USB 2.0 (one at front)</td>
<td>2 x RS-232, 1 x VGA port, 1 x VGA port, 2 x PS2 (Keyboard, Mouse), 5 x USB 2.0 (one at front)</td>
<td>2 x RS-232, 1 x VGA port, 1 x VGA port, 2 x PS2 (Keyboard, Mouse), 5 x USB 2.0 (one at front)</td>
<td>Optional CPU Card, 1 x USB port at front</td>
<td>7157A: 1 x RS-232, 1 x Parallel port, 1 x VGA port, 5 x USB 2.0 (one at front) 7158B: Optional CPU Card, 1 x USB port at front</td>
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<tr>
<td><strong>HDD (Optional)</strong></td>
<td>1 x 2.5&quot; SATA</td>
<td>1 x 2.5&quot; SATA</td>
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<td>2 x 2.5&quot; SATA</td>
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<td>3 x 5.25&quot; CD-ROM Bay (Optional)</td>
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<td><strong>Optical Drive</strong></td>
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<td>3 x 5.25&quot; CD-ROM Bay (Optional)</td>
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<td>1 x CFast® slot</td>
<td>1 x CFast® slot</td>
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<tr>
<td><strong>Expansion Slots</strong></td>
<td>1 x Half-length PCI-E</td>
<td>1 x Half-length PCI-E</td>
<td>2 x PCI/PCI-E</td>
<td>2 x PCI/PCI-E</td>
<td>2 x PCI/PCI-E</td>
<td>401D: 2 x PICMG, 10 x PCI, 2 x ISA 4008D: 8 x PCI</td>
<td>7157A: 5 x PCI, 2 x PCI-E 7158B: 10 x PCI, 2 x ISA, 2 x PCI/ISA</td>
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<tr>
<td><strong>Built in Keyboard/Mouse</strong></td>
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<td><strong>Power Input Voltage</strong></td>
<td>100–200 VAC</td>
<td>100–240 VAC</td>
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<td><strong>Front cover</strong></td>
<td>Aluminum</td>
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<td>Die-cast flat-sealed</td>
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<td>Die-cast flat-sealed</td>
<td>Aluminum</td>
<td>Die-cast</td>
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<tr>
<td><strong>Operating temperature</strong></td>
<td>0 – 50°C (32 – 122°F)</td>
<td>0 – 50°C (32 – 122°F)</td>
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<td>0 – 50°C (32 – 122°F)</td>
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<tr>
<td><strong>Storage Temperature</strong></td>
<td>-20 – 60°C (-4 – 140°F)</td>
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<tr>
<td><strong>Certification</strong></td>
<td>BSMI, CCC, CE, FCC, UL</td>
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<tr>
<td><strong>Dimension</strong></td>
<td>428 x 310 x 96.5 mm (16.4&quot; x 12.2&quot; x 3.8&quot;)</td>
<td>428 x 354.8 x 98 mm (17.7&quot; x 14.4&quot; x 4&quot;)</td>
<td>482 x 356 x 143 mm (19&quot; x 14.4&quot; x 5.6&quot;)</td>
<td>482 x 356 x 143 mm (19&quot; x 14.4&quot; x 5.6&quot;)</td>
<td>482 x 356 x 146 mm (19&quot; x 14.4&quot; x 5.7&quot;)</td>
<td>482 x 356 x 146 mm (19&quot; x 14.4&quot; x 5.7&quot;)</td>
<td>4001D: 482 x 175 x 487 mm (19&quot; x 6.9&quot; x 19&quot;.) 4008D: 482 x 176 x 360 mm (19&quot; x 7&quot; x 14.2&quot;) 824 x 354.8 x 162 mm (19&quot; x 14.4&quot; x 6.4&quot;)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>10.52 Kg (22.19 lbs)</td>
<td>14 Kg (30.86 lbs)</td>
<td>13 Kg (28.6 lbs)</td>
<td>15 Kg (33.04 lb)</td>
<td>16.6 Kg (36.6 lbs)</td>
<td>19.99 Kg (44 lbs)</td>
<td>18 Kg (39.7 lbs)</td>
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Introduction

The IPPC-6000 Series is an Industrial Panel PC with front USB access, supports the powerful Intel® Core™ 2 Quad/Core™ 2 Duo, high speed DDR3 memory, two expansion PCI slots and slim type DVD-RW. The processor and chipset combination form the foundation of vPro, Intel's next generation digital office platform, offering remote out-of-band manageability, improved security, and energy efficient performance. Two SATA hard drive interfaces with RAID 0,1 support provides data security. The flat-sealed front panel design also allows easier cleaning and liquid run off. Also the control box has a gull-wing design for easy component installation and maintenance.

Specifications

General
- BIOS: AMI 4 MB Flash BIOS
- Certifications: UL, CE, FCC, CCC, BSMI
- Enclosure: Die-cast flat-sealed front with SGCC Housing
- Dimensions (W x H x D):
  - IPPC-6152A: 449.92 x 315.63 x 142.7 mm (17.71” x 12.43” x 5.62”)
  - IPPC-6172A: 481.9 x 355.9 x 144.7 mm (18.97” x 14.01” x 5.7”)
  - IPPC-6192A: 481.9 x 384.60 x 148.2 mm (18.97” x 15.14” x 5.83”)
- Mounting: Panel, Rack (option)
- OS Support: Windows 7, Windows XP
- Power Input: 100 – 240 VAC, @ 60 – 50 Hz, 7 – 3.5 A
- Power Supply: 350 W
- Weight (Gross):
  - IPPC-6152A: 13 Kg (18.6 lbs)
  - IPPC-6172A: 15 Kg (33.04 lbs)
  - IPPC-6192A: 16.6 Kg (35.6 Ibs)

System Hardware
- CPU: Supports Socket LGA775 based up to Intel® Core™ 2 Quad 2.8 GHz/Core™ 2 Duo 3.0 GHz
- Chipset: Intel® Q45 GMCH/ICH10DD
- Memory: Two DDR3 240pin slots up to 4GB 1066/1333 MHz SDRAM
- LAN: 10/100/1000 Base-T Ethernet x 2
- Expansion: 2 x half-length PCI Slots
- Storage: Supports 2 x 2.5” SATA HDD Interface and Intel® Matrix Storage Technology RAID 0/1
- Optical Driver: 1 x Slim Type DVD-RW
- I/Os:
  - 2 x RS-232, 1 x RS-232/422/485
  - 5 x USB 2.0 (one at front)
  - 2 x PS2 (Keyboard, Mouse)
  - 1 x VGA Port
  - Mic-in, Line-in, Line-out
- Backlight Life: 50,000 hrs
- Contrast Ratio: IPPC-6152A: 700:1; IPPC-6172A: 1000:1; IPPC-6192A: 1300:1
- Display Size: IPPC-6152A: 15”; IPPC-6172A: 17”; IPPC-6192A: 19”
- Display Type: IPPC-6152A: XGA TFT LCD; IPPC-6172A: SXGA TFT LCD; IPPC-6192A: SXGA TFT LCD
- Luminance: IPPC-6152A: 250 cd/m²; IPPC-6172A: 380 cd/m²; IPPC-6192A: 300 cd/m²
- Max. Colors:
  - IPPC-6152A: 16.2M (RGB 6-bit + FRC data)
  - IPPC-6172A: 16.2M (RGB 6-bit + Hi-FRC data)
  - IPPC-6192A: 16.2M (RGB 6-bit + FRC data)
- Max. Resolution:
  - IPPC-6152A: 1024 x 768
  - IPPC-6172A: 1280 x 1024
  - IPPC-6192A: 1280 x 1024
- Viewing Angle (H/V°):
  - IPPC-6152A: 160/130
  - IPPC-6172A: 170/160
  - IPPC-6192A: 178/178

Touchscreen
- Lifespan: 36 million with a silicone rubber of R8 finger, writing rate is by 250g at 2 times/s
- Light Transmission: > 80%
- Type: Analog resistive 5-wire

Environment
- Humidity: 5 – 85% @ 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: 5 – 500 Hz, 1 Grms random vibration
IPPC-6152A/IPPC-6172A/IPPC-6192A

Dimensions

Panel Cut-out Dimensions: 
- IPPC-6152A: 424 x 293 mm (16.69" x 11.54")
- IPPC-6172A: 454 x 338 mm (17.87" x 11.54")
- IPPC-6192A: 449 x 338 mm (17.68" x 11.54")

I/O View

Ordering Information
- IPPC-6152A-R1AE: 15" Core 2 Quad/Core 2 Duo Industrial Panel PC
- IPPC-6172A-R1AE: 17" Core 2 Quad/Core 2 Duo Industrial Panel PC
- IPPC-6192A-R1AE: 19" Core 2 Quad/Core 2 Duo Industrial Panel PC

Accessories
- IPPC-6152A-RMKE: IPPC-6152A/IPPC-6152F Rack Mount Kit
- IPPC-6172A-RMKE: IPPC-6172A/IPPC-6172F Rack Mount Kit
- IPPC-6192A-RMKE: IPPC-6192A Rack Mount Kit
- 170202600: Power Cable US Plug 1.8 M
- 170202605: Power Cable EU Plug 1.8 M
- 1702031801: Power Cable UK Plug 1.8 M
- 1702031836: Power Cable China/Australia Plug 1.8 M

Front Accessible USB Port

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18. DAQ Boards
**IPPC-9151G**

**IPPC-9171G**

15" XGA/17" SXGA LED backlight TFT LCD Intel® Core™ i7/i5/i3 Celeron® Mobile Processor Industrial Panel PC with 1 x PCIe Slot

### Introduction

IPPC-9151G/IPPC-9171G is a fully functional computer system with front USB access, with Intel® mobile Core i7-2710QE 2.1GHz/Core i5-2510E 2.5 GHz/Core i3-2330E 2.2 GHz/Celeron® B810 1.6 GHz processors up to 6 MB L3 cache and DDR3 SO-DIMM 1066/1333 up to 8 GB and a resolution up to 1024 x 768 to meet the demands of today’s high-end industrial software. The IPPC-9151G/IPPC-9171G is a rugged unit with an aluminum panel, 15”/17” TFT LCD with LED backlight, a stainless steel structure and a PCIe slot. The IPPC-9151G/IPPC-9171G is rugged enough to handle the toughest industrial operating environments. With optional mounting accessories, from panels to racks, it can be mounted anywhere.

### Specifications

#### General
- **BIOS** AMI EFI 64 Mbit SPI
- **Certifications** BSMI, CCC, CE, FCC, UL
- **Cooling System** 2 x 10.1 CFM fans w/50,000 hrs MTBF
- **Dimensions (W x H x D)**
  - IPPC-9151G: 428 x 310 x 96.5 mm (16.35" x 12.2" x 3.79")
  - IPPC-9171G: 482 x 354.8 x 98 mm (18.98" x 13.97" x 3.86")
- **Disk Drive Bay** Supports 1 x 2.5" SATA II or SATA III HDD
- **Enclosure** Stainless steel back case, 10 mm aluminum front panel
- **Mounting** Panel, rack
- **Power Input** 100–240 VAC @ 4A 50~60hz
- **Power Supply** 180 W; MTBF: 100,000 hrs
- **Weight (Gross)** IPPC-9151G: 10.52 Kg (23.19 lbs)
  - IPPC-9171G: 14 Kg (30.86 lbs)

#### System Hardware
- **CPU** Supports uFC-PGA988 Intel® mobile Core i7-2710QE 2.1GHz/Core i5-2510E 2.5 GHz/Core i3-2330E 2.2 GHz/Celeron® B810 1.6GHz processor
- **Chipset** Intel® 6 series chipset (QM67)
- **Audio Ports** Mic-in, Line-out, Line-in
- **Expansion Slots** Supports 1 x PCIe x 1 or x 4
- **PS/2** 1 x keyboard and 1 x mouse
- **LAN** 2 x 10/100/1000 Mbps
- **Memory** 2 x 204 pin DDR3 1066/1333 SODIMM sockets supports up to 8GB (2 x 4GB)
- **Cfast** 1 x CFast slot
- **I/Os** 1 x VGA; 1 x HDMI; 5 x USB 2.0 (one at front); 4 x RS-232

#### LCD Display
- **LCD Display Type** IPPC-9151G: XGA TFT LCD with LED Backlight
  - IPPC-9171G: SXGA TFT LCD with LED Backlight
- **Display Size** IPPC-9151G: 15"; IPPC-9171G: 17"
- **Max. Resolution** IPPC-9151G: 1024 x 768; IPPC-9171G: 1280 x 1024
- **Max. Colors** IPPC-9151G: 16.2M or 256K Color
  - IPPC-9171G: 16.7M colors (RGB 6-bits +Hi-FRC data)
- **Viewing Angle** (H/V°)
- **Luminance** IPPC-9151G: 350 cd/m²; IPPC-9171G: 380 cd/m²
- **Backlight Life** 50,000hrs
- **Contrast Ratio** IPPC-9151G: 700:1; IPPC-9171G: 400:1

#### Touchscreen
- **Lifespan** 36 million with a silicone rubber of R8 finger, writing rate is by 250g at 2 times/s
- **Light Transmission** > 80%
- **Type** Analog resistive (5-wire)

#### Environment
- **Humidity** 5 ~ 85% @ 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** 5 ~ 500 Hz, 1 G RMS random vibration
### Dimensions

**IPPC-9151G-402 [15.827]**
**IPPC-9171G-445.2 [17.528]**

**IPPC-9151G-428 [16.850]**
**IPPC-9171G-482 [18.976]**

Panel Cut-out Dimensions: **IPPC-9151G**: 404 x 292mm (15.90" x 11.49")
**IPPC-9171G**: 447.5 x 329.5mm (17.618" x 12.972")

### Ordering Information
- **IPPC-9151G-R1AE**: 15" XGA Intel® Core™ i7/i5/i3 Celeron with TS
- **IPPC-9171G-R1AE**: 17" SXGA Intel® Core™ i7/i5/i3 Celeron with TS

### Accessories
- **IPPC-9151G-RMKE**: (IPPC-9151G) Mounting Kit for standard 19" industrial rack

### Notes:
1. When used in a panel mounted environment, the panel's thickness cannot be over 10mm.

### I/O Overview

- COM Ports 1-3
- COM Port 4
- LAN Ports
- Audio Ports
- PS/2 Keyboard & Mouse
- CFast Slot
- USB Ports 1-4
- VGA Port
- HDMI Port

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**IPPC-9151G/PPC-9171G**
Introduction

IPPC-4000 series is a 4U 19" rackmount/19" half-sized rackmount Industrial Panel PC with 5.7" VGA TFT LCD display, passive backplane and ISA/PCI/PICMG or 8 PCI expansion slots. Designed to be an all-in-one and cost-effective solution for traditional IPC users, IPPC-4000D series includes a slim type 85 key keyboard and touch pad drawer making input troublefree, and a 5.7"TFT LCD screen is perfect for information displays like: charts, trends, a control panel, simple programming, production data or field monitoring records. A wide range of standard computing peripherals from the Advantech IPC family can be integrated into the unit to meet different application development requirements in mission-critical environments.

Specifications

General
- Button Control: Membrane Key 5 Function Keys (F1 to F5), 5 Cursor Keys (Up, Down, Left, Right, Enter)
- Certifications: BSMI, CCC, CE, FCC Class A, UL
- Dimensions (W x H x D): IPPC-4001D: 482 x 174.9 x 486.7 mm (18.97" x 6.88" x19.16") IPPC-4008D: 482 x 174 x 360 mm (19" x 7" x 14.2")
- Keyboard Drawer: Integrated 88-Key (US) slim type keyboard w/ touchpad
- Mounting: 19" Rack
- Power Input: 100 ~ 240 VAC @ 50~60 Hz full range 10A
- Power Supply: Watt: 300 W, MTBF: 100,000 hrs
- Weight: IPPC-4001D: 19.99 kg (44 lbs); IPPC-4008D: 18 kg (39.6 lbs)

System Hardware
- Passive Backplane: IPPC-4001D: PCA-6114P10; IPPC-4008D: PCA-6108P8
- Slots: IPPC-4001D: 2 PICMG, 10 PCI, 2 ISA; IPPC-4008D: 8 PCI
- Backplane Size: IPPC-4001D: 315 x 260 mm (12.4" x 10.24") IPPC-4008D: 182 x 185 mm
- PCI Bridge: Pericom P17CS150MA
- PCI Slot: IPPC-4001D: Main board, 3 slots; Secondary 7 slots IPPC-4008D: 1 CPU PCI, 3 PCI, 4 SPCI
- Storage: 3 x 5.25" disk drive bay

LCD Display
- Backlight Life: 50,000 hrs (LED Backlight)
- Contrast Ratio: 800:1
- Display Size: 5.7"" VGA TFT LCD
- Luminance: 700 cd/m2
- Max. Colors: 262 K (RGB 6-bit)
- Max. Resolution: 640 x 480
- OSD Control: ON/OFF, Brightness down, up
- Viewing Angle (H/V°): 160/140

Environment
- Humidity: 5 ~ 85% 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: 5 ~ 500 Hz, 1 GRMS random vibration (operating)

Ordering Information
- IPPC-4001D-B0AE: 5.7" VGA 4U 19" IPPC, 300W, 2 PICMG, 10 PCI, 2 ISA
- IPPC-4008D-B0AE: 5.7" VGA 4U 19" Half-sized IPPC, 300W, 8 PCI

CPU Card Suggestions

<table>
<thead>
<tr>
<th>Part No</th>
<th>CPU Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCA-6194G2-00A1E</td>
<td>Intel Core2 Duo</td>
<td>LGA775 Core 2 Duo/ Pentium 4/ Pentium 4/ Celeron D Processor Card with IPMI/VGA/Dual GbE LAN (FSB 1066/800 MHz)</td>
</tr>
<tr>
<td>PCA-6187VG-00A2E</td>
<td>Intel Pentium 4</td>
<td>LGA775 Pentium 4/ Celeron Processor Card with VGA/LAN</td>
</tr>
<tr>
<td>PCA-6187VG-00A2E</td>
<td>Intel Pentium 4</td>
<td>Socket 478 Pentium 4/ Celeron Processor Card with VGA/LAN</td>
</tr>
<tr>
<td>PCA-6008VG-06A1E</td>
<td>Intel Pentium M/Celeron M</td>
<td>Socket 478 Pentium M/ Celeron M Processor Card with VGA/DV Dual GbE LAN</td>
</tr>
<tr>
<td>PCI-7020VG-00A1E</td>
<td>Intel Core 2 Duo</td>
<td>LGA775 Intel Core 2 Duo PCI Half-size SBC with VGA/4GbE LAN/16/4GbE SSD (FSB 1066/800 MHz)</td>
</tr>
<tr>
<td>PCI-6886F-00A2E</td>
<td>Socket-4 Intel Core 2 Duo</td>
<td>Socket-4 Intel Core 2 Duo (667/533 MHz FSB)</td>
</tr>
</tbody>
</table>
**Dimensions**

Unit: mm

**Accessories**

- 1702002600  Power Cable US Plug 1.8 M
- 1702002605  Power Cable EU Plug 1.8 M
- 1702031801  Power Cable UK Plug 1.8 M
- 1702031836  Power Cable China/Australia Plug 1.8 M

**System View**

- PWR LED
- Power On/Off
- Reset
- OSD Controls
- HDD LED
- 2 x USB
- PCI Card Holder (with Clamp)
- System Fan
- Passive Backplane
- PSU

**Rear View**

**IPPC-4001D**

**IPPC-4008D**
IPPC Accessories

**IPPC-6192A-RMKE**
IPPC-6192A/FPM-5191G Rack Mount Kit

**IPPC-6172A-RMKE**
IPPC-6172A/FPM-5171G Rack Mount Kit

**IPPC-6152A-RMKE**
IPPC-6152A/FPM-5151G Rack Mount Kit

**1702002600**
Power Cable US Plug 1.8 M

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