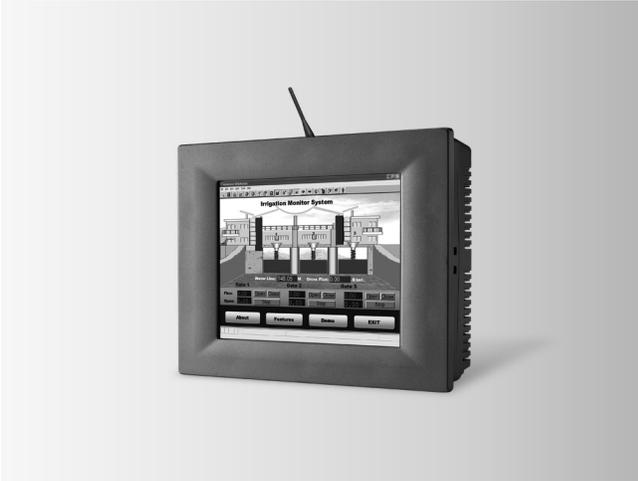# TPC-671H

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

Features

- Intel® Atom™ Z510 1.1GHz processor
- 6.5" VGA TFT LED LCD
- Super slim and compact design with PC/ABS Resin housing
- Fanless cooling system
- IP65 approved front panel
- Full-size Mini PCIe expansion support
- Serial port isolation protection
- Automatic data flow control RS-485
- Gigabit Ethernet supported
- Supports Microsoft® WES7/WES 2009/XPE/WinCE
- Supports external antenna for wireless communication

Introduction

With a high quality TFT LCD display, the 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-Rready and Communication module to meet more applications in outdoor and iTerminal Gateway.

Specifications

General

- **BIOS** — Award® 4Mbit
- **Certification** — 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** — PC/ABS Resin
- **Mounting** — Panel Mount
- **OS Support** — Microsoft® WES7/WES 2009/XPE/CE 6.0/CE5.0 /Linux / Android
- **Power Consumption** — 6.6W (Typical), 9W (Full load)
- **Power Input** — 18~32 V_{DC}
- **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, up to 2GB (one channel)
- **LAN** — 10/100/1000Base-T x 1
- **Expansion Slots** — Full-size Mini PCI-E
- **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 x 2 (Host)

LCD Display

- **Display Type** — VGA TFT LED 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
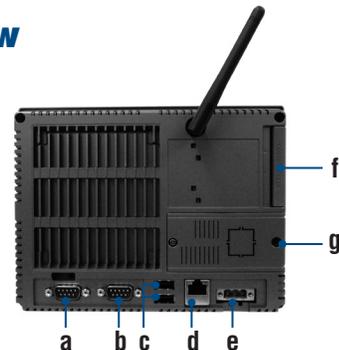- **Contrast Ratio** — 600:1

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: IP65
- **Operating Temperature** — 0 ~ 55°C (32 ~ 131°F)
- **Storage Temperature** — -20 ~ 60°C (-4 ~ 140°F)
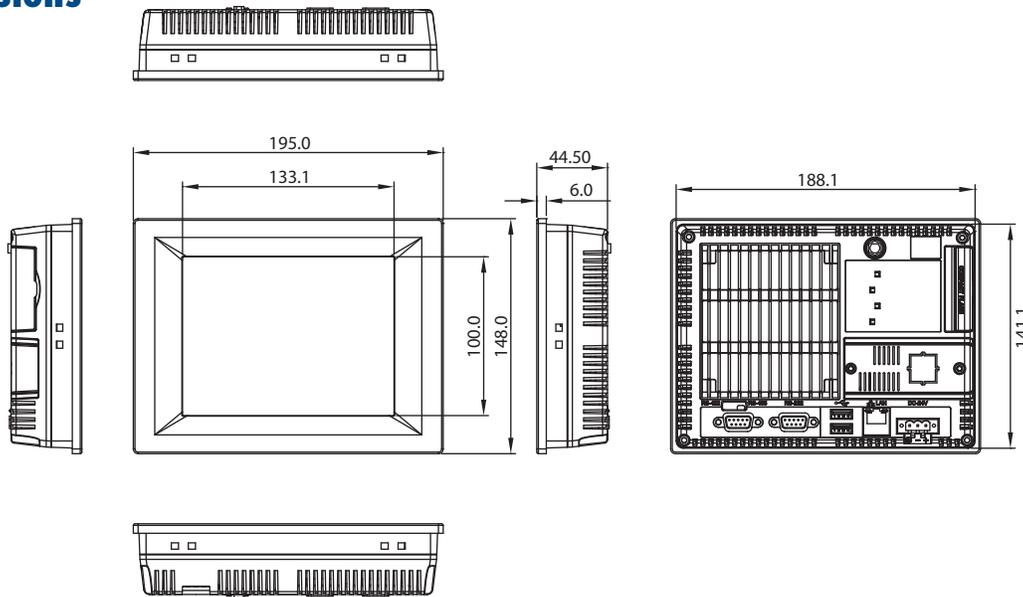- **Vibration Protection** — 2 Grms (5 ~ 500 Hz) (Operating, random vibration)

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

Last updated : 20-Jan-2014

Dimensions

Unit: mm

195.0

133.1

44.50

6.0

188.1

100.0

148.0

141.1

Panel Cut-out Dimensions: 188.4 x 141.4mm (7.42" x 5.57")

Ordering Information

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

Accessories

- **1757003463**   100-240VAC to 19VDC 90W Power Adapter
- **1700001524**   Power Cord 3P UL 10A 125V 1.8M
- **PWR-247-AE 50W**   DC 24V/2.3A Output Power Supply
- **1702002605**   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
- **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

Application Software

Software	Description
WebAccess	Version : V7.1 WebAccess, as the core of Advantech's IoT solution, is full web browser-based software package for HMI and SCADA software. All HMI and SCADA software features including: Animated Graphics Displays, Real-time Data, Control, Trends, Alarms and Logs, are available in a standard web browser. WebAccess is built around the latest internet technologies. With its open architecture, vertical domain applications can easily be integrated.
PANELEXPRESS Designed for Convenience	Version : V2.0.3.8 Panel Express, a windows based HMI mini SCADA, realizes the cross platform flexibility offered by WebOP Designer to switch hardware for the consideration of cost and performance become an easy job. Panel Express software provides the best economic and express solution for data intensive high-end HMI applications.
WebOP Designer	Version : V2.0.3.8 An easy to use integrated development tool featuring solution-oriented screen objects, high-end graphics, Windows fonts for multi-language applications. WebOP runtime, a part of WebOP Designer, guarantees reliability and performance because of the minimum system overhead, high communication data rates, and sub-second screen switching.