TPC-71W

7" Touch Panel Computer with ARM Cortex™-A9 Processor

Features
- NXP® ARM® Cortex™-A9 i.MX6 dual/quad-core processor
- 7" 16:9 WS-VGA LCD with multi-touch P-CAP control and true-flat IP66-rated front panel
- Up to 2 GB DDR3L RAM and 8 GB eMMC storage onboard
- 10/100/1000 Mbps LAN with IEEE 802.3at PoE-PD support
- 1 MB FRAM backup memory for unexpected power interruptions
- Serial port with 120Ω termination resistor that supports the CAN 2.0B protocol and offers a programmable bit rate of up to 1 Mbps/sec
- Embedded browser and VNC tool for rapid Web App development
- Supports Linux Yocto, Linux Ubuntu and Android
- Optional NFC and mPCIe expansion modules
- Compatible with VESA and panel mounting
- Wide operating temperature range (-20 – 60 °C / -4 – 140 °F)

Introduction
TPC-71W is a compact touch panel computer equipped with an NXP® i.MX 6 Cortex™-A9 dual/quad-core processor, 7" TFT LCD display, multi-touch glass sensor, 2 GB of DDR3L RAM, and 8 GB of eMMC storage. To ensure stable operation in harsh industrial environments, TPC-71W supports a wide operating temperature range (-20 ~ 60 °C / -4 ~ 140 °F) and VESA mounting and features an IP66-rated front panel that protects against water and dust ingress.

For web-based operations, TPC-71W offers 10/100/1000 Mbps LAN that supports the IEEE 802.3 PoE-PD standard. The inclusion of VNC Tools and browsers enable rapid Web application development and easy configuration. Finally, TPC-71W supports various OS including Linux Yocto, Linux Ubuntu with full QT graphics, and Android to ensure easy deployment for diverse applications.

Specifications

General
- Certification: CE, BSMI, CCIB, UL, FCC Class A
- Dimensions (W x H x D): 205 x 146.92 x 46 mm (8.07 x 5.78 x 1.81 in)
- Cutout Dimensions: 192 x 138.5 mm (7.56 x 5.45 in)
- OS Support: Linux Yocto 2.1, Linux Ubuntu 16.04 and Android 6
- Power Input: 24VDC ±20%
- Power Consumption: 9W (typical)
- Unit Enclosure: Die-cast aluminum alloy front bezel, PC + ABS rear housing
- Mount Options: Panel and VESA
- Weight (Net): 1.2 kg (2.65 lb)

System Kernel
- CPU: NXP® ARM® Cortex™-A9 i.MX6 dual/quad-core 1.0 GHz processor
- Backup Memory: 1 MB FRAM
- Memory: Dual core: 1 GB DDR3L RAM, Quad core: 2 GB DDR3L RAM
- Storage: 8 GB eMMC onboard

Communication Interface
- Serial Port: 1 x DB9 selectable mode for RS-232/485 and CAN 2.0 B
- LAN: 1 x RJ45 with 10/100/1000 Mbps LAN supporting IEEE 802.3af PoE / 802.3at PoE+ PD standard
- Others: 1 x USB 2.0 Type-B Client, 2 x USB 2.0 Type-A Host, 1 x Micro SD

LCD Panel
- Panel Type: WS-VGA TFT LCD
- Panel Size: 7 in (177.8 mm)
- Max. Resolution: 1024 x 600
- Max. Colors: 16.7M
- Luminance: 400 cd/m²
- Viewing Angle (H/V): 170/170
- Backlight Life: 50,000 hrs
- Treatment: Anti-glare
- Contrast Ratio: 800:1
- Front Panel LED Indicator: Yes

Touchscreen
- Touch Points: 10 Points
- Light: Transmission above 85%
- Pencil Hardness: ≥7H
- Type: Projected capacitive (P-CAP) touch

Environment
- Operating Temperature: -20 – 60 °C (-4 – 140 °F)
- Storage Temperature: -30 – 70 °C (-22 – 158 °F)
- Humidity: 10 – 90% RH @ 40 °C, non-condensing
- Ingress Protection: IP66-rated front panel
- Vibration Protection: 2 Grms random vibration (5 – 500 Hz) during operation (compliant with IEC60068-2-64)
- Shock Protection: 10 G shock under 11 ms operation (compliant with IEC60068-2-27)
TPC-71W

**Dimensions**

Panel Cutout Dimensions: 192 x 138.5 mm (7.56 x 5.45 in)

**Ordering Information**

- **TPC-71W-N10PA**  
  7" Touch Panel Computer, WSVGA, Cortex™-A9 Dual Core CPU, 1GB DDR3L

- **TPC-71W-N21PA**  
  7" Touch Panel Computer, WSVGA, Cortex™-A9 Quad Core CPU, 2GB DDR3L

**Optional Accessories**

- **96PSA-A60W24T2**  
  Adaptor A/D 100 – 240V 60W 24V C14 cord-end terminal

- **1702002600**  
  Power cable with US plug, 1.8 M

- **1702002605**  
  Power cable with EU plug, 1.8 M

- **1702031801**  
  Power cable with UK plug, 1.8 M

- **1702031836**  
  Power cable with China/Australia plug, 1.8 M

**External I/O**

- **Power Input**
- **Type A USB Host**
- **Micro SD Slot**
- **Type B USB Client**
- **Ethernet**
- **RS-232/485/CAN**

**PoE Module Expansion**

- **Screw M2.5x4L**