

# TPC-100WX

## 7"/10.1" High Brightness Touch Panel Computer with ARM Cortex™-A53 Processor

### Preliminary



### Features

- NXP® ARM® Cortex™-A53 i.MX 8M Mini quad-core processor
- 7", 10.1" 16:9 High brightness LCD with multi-touch P-CAP and true-flat IP66-rated front panel
- Supports Linux Yocto 4.0
- Wide operating temperature range (-30~70°C/ -22~158°F)

### Introduction

TPC-100WX series is a compact touch panel computer equipped with an NXP® Cortex™-A53 i.MX 8M Mini quad-core processor, 7"/10.1" High Brightness TFT LCD display, multi-touch glass sensor, 4 GB of DDR4 RAM, and 32 GB of eMMC storage. To ensure stable operation in harsh industrial environments and outdoor application, TPC-100WX supports high brightness LCD, wide operating temperature range (-30~70°C/ -22~158°F) and Panel/VESA mounting and features an IP66-rated front panel that protects against water and dust ingress.

For web-based operations, TPC-100WX offers two 10/100/1000 LANs that one supports the IEEE 802.3 at PoE-PD standard. The inclusion of VNC and browsers enable rapid Web application development and easy configuration. Finally, TPC-100WX supports Linux Yocto with full QT graphics and GUI interface to ensure easy deployment for diverse applications.

### Specifications

#### General

- **Certification** CE, BSMI, CCC, UL, FCC Class A
- **Dimensions (W x H x D)** TPC-107WX: 205 x 146.92 x 52 mm  
TPC-110W: 283.1 x 202.3 x 52 mm
- **Cutout Dimensions** TPC-107WX: 192.4 x 139.0 mm  
TPC-110W: 274.1 x 193.3 mm
- **OS Support** Linux Yocto 4.0
- **Power Input** 24V<sub>DC</sub> ±20
- **Power Consumption** TPC-107WX: 8.92W (typ.); 10.4W (max.)  
TPC-110WX: 20.78W (typ.); 23.8W (max.)
- **Unit Enclosure** Die-cast aluminum alloy front bezel  
Metal Shell
- **Mount Options** Panel and VESA
- **Weight (Net)** 7": 2kg (4.44lb)  
10.1": 3.9kg (8.63lb)

#### System Kernel

- **CPU** NXP® ARM® Cortex™-A53 i.MX 8M Mini quad-core  
1.6 GHz processor
- **Backup Memory** FRAM 1 MB
- **Memory** Quad core: 4 GB DDR4 RAM
- **Storage** 32 GB eMMC onboard

#### Communication Interface

- **Serial Port** 1 x RS-232/422/485 (COM 1)  
1 x selectable mode for RS-485 and CAN 2.0B (COM 2)
- **LAN** 2 x RJ45 (10/100/1000 Mbps)  
Optional module is required to support PoE PD (LAN A)  
IEEE802.3at PoE-PD standard
- **Others** 1 x USB 2.0 Type-B Client (Internal)  
2 x USB 2.0 Type-A Host  
1 x Micro SD (Internal)  
1 x M.2 Key-E 2230 (Wi-Fi/BT)

#### LCD Panel

	TPC-107WX	TPC-110WX
<b>Panel Size</b>	7"	10.1"
<b>Panel Type</b>	WSVGA TFT LCD	WXGA TFT LCD
<b>Aspect Ratio</b>	16:9	16:10
<b>Max. Resolution</b>	800 x 480	1280 x 800
<b>Max. Colors</b>	16M	16M
<b>Luminance (nits)</b>	1000	1200
<b>Viewing Angle (H/V)</b>	176/176	176/176
<b>Backlight Life</b>	50000	50000
<b>Treatment</b>	Anti-glare	Anti-glare
<b>Contrast Ratio</b>	800:1	800:1
<b>LED Indicator</b>	Yes	Yes

#### Touchscreen

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

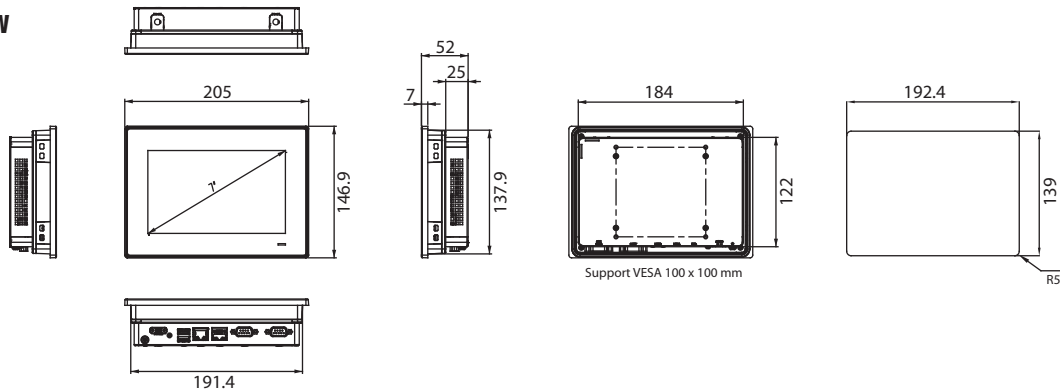
#### Environment

- **Operating Temperature** -30 ~ 70 °C (-22 ~ 158 °F)
- **Storage Temperature** -30 ~ 85 °C (-22 ~ 185 °F)
- **Humidity** 95% 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)

## Dimensions

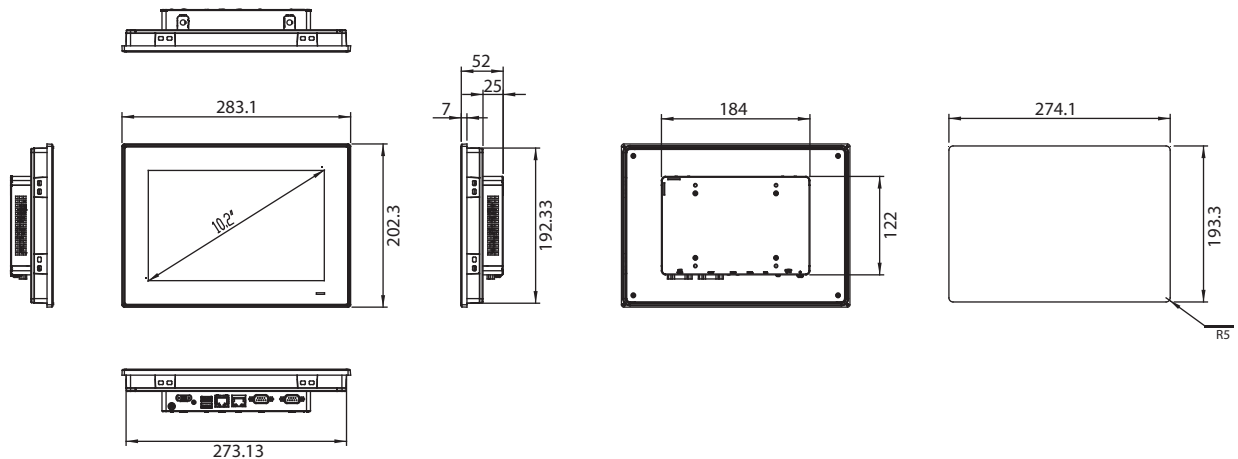
Unit: mm

### TPC-107W



**Panel Cutout Dimensions: 192.4 x 139.0 mm, R=5.0 mm (±0.5 mm)**

### TPC-110W



**Panel Cutout Dimensions: 274.1 x 193.3 mm, R=5.0 mm (±0.5 mm)**

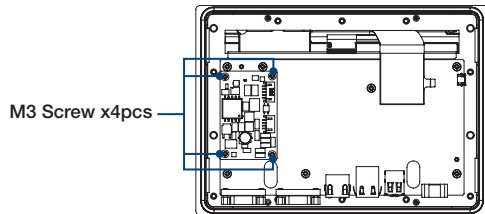
## Ordering Information

- **TPC-107WX-N32YA** 7" high brightness Touch Panel Computer, Cortex™-A53 Quad Core CPU, 4GB DDR4, 32G eMMC, Linux Yocto 4.0 with QT Browser and Chromium
- **TPC-107WX-N32YA** 7" high brightness Touch Panel Computer, Cortex™-A53 Quad Core CPU, 4GB DDR4, 32G eMMC, Android
- **TPC-110WX-N32YA** 10.1" high brightness Touch Panel Computer, Cortex™-A53 Quad Core CPU, 4GB DDR4, 32G eMMC, Linux Yocto 4.0 with QT Browser and Chromium
- **TPC-110WX-N32AA** 10.1" high brightness Touch Panel Computer, Cortex™-A53 Quad Core CPU, 4GB DDR4, 32G eMMC, Android

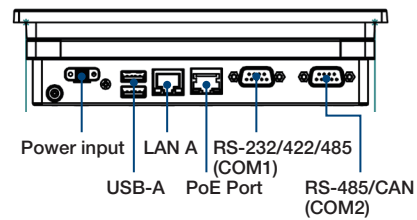
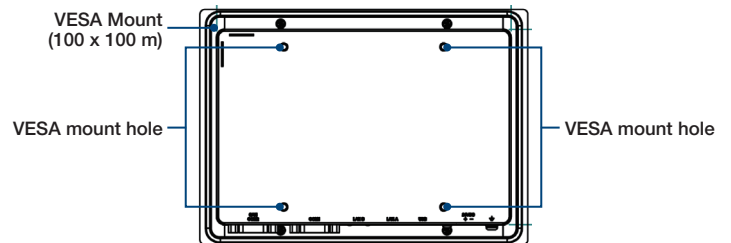
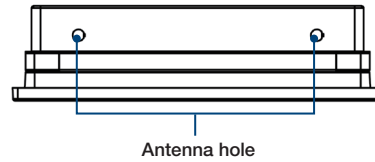
## Optional Accessories

- **96PSA-A60W24T2-3** 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
- **98R4T100W01** Economic package for TPC-100W, WiFi/Bluetooth KIT
- **98R4T100W00** TPC-100W, PoE Module (7" and 10.1" only)

## PoE Module Expansion



## External I/O



## Packing List

Item	Part No.	Depiction	TPC-107WX	TPC-110WX
			Qty	Qty
Lock Cable	1990026085S000	WC LOCKINE CABLE 62x8mm WL3-60T For SCH	2	2
Plug-In Block	1652002209	PLUG-IN BLOCKDIP 2P(F)	1	1
Cable	1703011001-11	A Cable G-TEM 4.3 100CM C=GR/Y	1	1
Clamp	1962055040	CLAMPER PPC-55 M1632611 A2	4	8
Clamp Screw	1935042520	Screw M4x25L R/S D=8.3 H=2.5 (2+) ST BZn	4	8

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.