

# WebOP-3120T

## 12" XGA Operator Panel with ARM® Cortex™-A8 RISC Processor and Wide Operating Temperature



### Features

- ARM® Cortex™-A8 32-bit, 600 MHz, RISC processor
- Available with a variety of LCD sizes (7/10.1/12")
- TFT LCD with 50K lifetime and LED backlight
- Embedded Microsoft® WinCE 6.0 OS
- Supports Advantech's WebOP Designer HMI Runtime development tool
- 128 KB (64 words) Backup memory FRAM without battery concerns
- Isolation protection for power and terminal I/O ports
- Wide operating temperature range -20 ~ 60 °C (-4 ~ 140 °F)
- Supports the CANopen library defined by the CiA 301 V4.02 specification
- RS-422, RS-485, CAN terminal I/O ports support terminating resistor value of 120Ω
- IP66-rated front panel
- Die cast aluminum alloy front bezel
- Level 4 ESD protection (Air: 15KV/Contact: 8KV)
- UL 508 certification for industrial control equipment



### Introduction

The WebOP-3120T operator panel is powered by an ARM® Cortex™-A8 32-bit, 600 MHz, RISC processor that consumes minimal power without sacrificing performance and satisfies the stringent standards set for the automation market. Additionally, the WebOP-3120T system can be equipped with a variety of LCD sizes, ranging from 7 to 12", for diverse applications that involve PLCs, motion/thermal controllers, inverters, and sensors. Furthermore, the WebOP-3120T system supports a wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F) to ensure reliable operation in harsh industrial environments.

### Specifications

#### General

- Certification** CE, BSMI, CCC, UL 61010, FCC Class A
- Dimensions (W x H x D)** 311.8 x 238 x 54.5 mm (12.28 x 9.37 x 2.15 in)
- Cutout Dimensions** 302.5 x 228.5 mm (12.1 x 9.14 in)
- OS Support** Microsoft® Windows CE 6.0
- Power Input** 24 V<sub>DC</sub> ±10%
- Power Consumption** 20 W
- Enclosure Housing** PC + ABS
- Mounting** Panel
- Weight (Net)** 2.5 kg (5.51 lb)

#### System Hardware

- CPU** ARM® Cortex™-A8 32-bit, 600 MHz, RISC processor
- Backup Memory** FRAM 1M bit (128 KB, 64 words)
- Memory** DDR2 256 MB
- Storage** 512MB on board SLC type
- Power-On LED** Yes

#### Communication Interface

- COM1** RS-232/RS-422, RS-485 (DB9), 300~115.2 kbps
- COM2** RS-422/RS-485 (Terminal 4 pin+Ground), 300~115.2 kbps
- COM3** RS-485 (Terminal 2 pin), 300~115.2 kbps
- CAN** Terminal 2 pin
- Ethernet (RJ45)** 10/100BASE-T
- I/Os** 1 x USB 2.0 (Client)  
1 x USB 2.0 (Host)  
1 x micro SD slot  
1 x Audio line out, 1 x mic in

#### LCD Display

- Display Type** XGA TFT LCD
- Display Size** 12"
- Max. Resolution** 1024 x 768
- Max. Colors** 64K

- Luminance (cd/m<sup>2</sup>)** 500
- Viewing Angle (H/V)** 160/140
- Backlight Life** LED, 50,000 hr
- Dimming** Adjustable by touch panel
- Contrast Ratio** 500:1

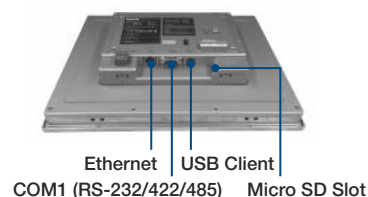
#### Touchscreen

- Lifespan** 36 million touches of 8 mm in diameter through silicone rubber, with at least 250 g load, twice per second
- Light** Transmission above 80%
- Resolution** Linearity
- Type** 5-wire analog resistive

#### Environment

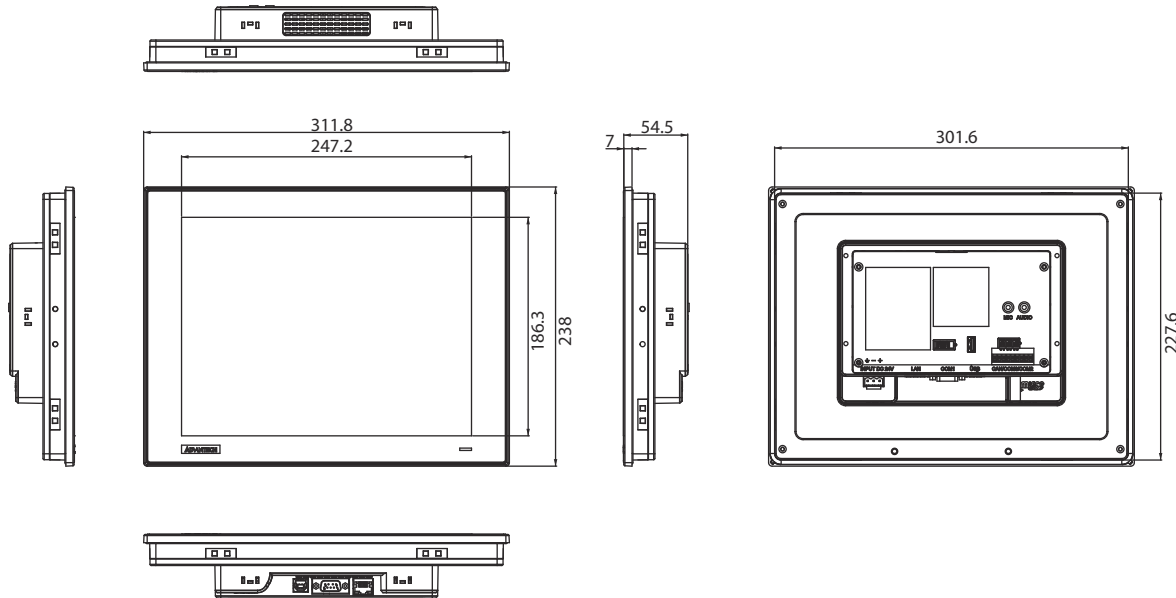
- Operating Temperature** -20 ~ 60 °C (-4 ~ 140 °F)
- Storage Temperature** -30 ~ 70 °C (-22 ~ 158 °F)
- Humidity** 10% ~ 90% RH @ 40 °C, non-condensing
- Ingress Protection** Front panel: IP66
- Vibration Protection** Operating, random vibration 1 Grms (5 ~ 500 Hz)

### Base View



## Dimensions

Unit: mm



**Panel Cutout Dimensions: 302.5 x 228.5 mm (12.1 x 9.14 in)**

## Ordering Information

- WOP-3120T-C4AE 12" XGA, Cortex™-A8, 256MB DDR, WinCE 6.0

## Optional Accessories

- PWR-247-BE 63W DC 24V/2.62A Output Power Supply
- WOP-3000T-WMKE WOP-3000T Series Wallmount Kits
- 1702002600 Power Cable US Plug 1.8 M
- 1702002605 Power Cable EU Plug 1.8 M
- 1702031801 Power Cable UK Plug 1.8 M
- 1700000596-11 Power Cable China/Australia Plug 1.8 M

## S/W Bundle Offering

- WA-HT3120T-R15H001 WOP-3120T-C4AE, WebAccess/HMI Runtime 1500 tags, 512MB SD, WinCE6.0

## Application Software

### WebAccess/HMI

Advantech WebAccess/HMI is human-machine interface (HMI) software based on Microsoft's Windows operating system. This software features excellent communication and monitoring capabilities, supports more than 350 PLC communication protocols, and offers a wide choice of screen design objects to satisfy diverse integrations of factory automation and HMI operation and monitoring requirements.

## Rear View

