## 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 120Q
- 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
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
OS Support
302.5 x 228.5 mm (12.1 x 9.14 in)
Microsoft® Windows CE 6.0

Power Input
Power Consumption
Enclosure Housing
Mounting
Weight (Net)
24 V<sub>DC</sub> ±10%
20 W
PC + ABS
Panel
Weight (Net)
2.5 kg (5.51 lb)

#### **System Hardware**

■ **CPU** ARM® Cortex<sup>TM</sup>-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
Display Size
Max. Resolution
Max. Colors
Max. Colors
Max. Colors
XGA TFT LCD
12"
1024 x 768
64K

Luminance (cd/m²)
Viewing Angle (H/V)
Backlight Life
Dimming
500
160/140
LED, 50,000 hr
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)

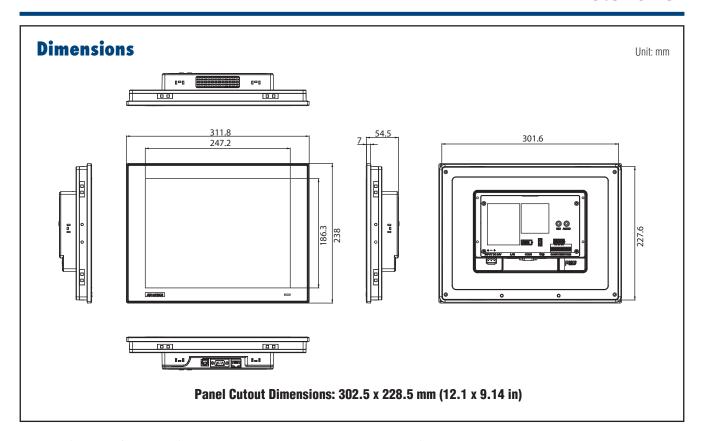
• **Humidity**  $10\% \sim 90\%$  RH @ 40 °C, non-condensing

Ingress Protection Front panel: IP66

• **Vibration Protection** Operating, random vibration 1 Grms (5 ~ 500 Hz)

#### **Base View**





## **Ordering Information**

■ **WOP-3120T-C4AE** 12" XGA, Cortex<sup>TM</sup>-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

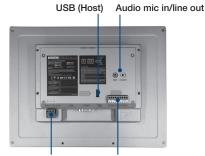
 WA-HT3120T-R15H001 WOP-3120T-C4AE, WebAccess/HMI Runtime 1500 tags, 512MB SD, WinCE6.0

## **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**





Isolated terminal I/O ports