

WebOP-3100T

10.1" WSVGA 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 (7/10.1/12/15")
- 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-3100T 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-3100T system can be equipped with a variety of LCD sizes, ranging from 7 to 15", for diverse applications that involve PLCs, motion/thermal controllers, inverters, and sensors. Furthermore, the WebOP-3100T 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, FCC Class A
- Dimensions (W x H x D)** 271.5 x 213.5 x 43.2 mm (10.69 x 8.41 x 1.7 in)
- Cutout Dimensions** 260 x 201.5 mm (10.24 x 7.93 in)
- OS Support** Microsoft® Windows CE 6.0
- Power Input** 24V_{DC} ±10%
- Power Consumption** 9W (Typical)
- Enclosure Housing** PC + ABS
- Mounting** Panel
- Weight (Net)** 1.2 kg (2.65 lbs)

System Hardware

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

Communication Interface

- COM1** RS-232/422/485 (DB9 Male)
- COM2** RS-422/485 (Terminal Plug 4-Pin)
- COM3** RS-485 (Terminal Plug 2-Pin)
- CAN** Terminal Plug 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** WSVGA TFT LCD
- Display Size** 10.1"
- Max. Resolution** 1024 x 600
- Max. Colors** 64K

- Luminance (cd/m²)** 550
- Viewing Angle (H/V)** 140/110
- Backlight Life** LED, 50,000 hr
- Dimming** Adjustable by touch panel
- Contrast Ratio** 500:1

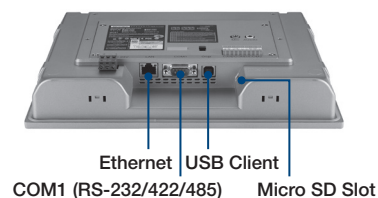
Touchscreen

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

Environment

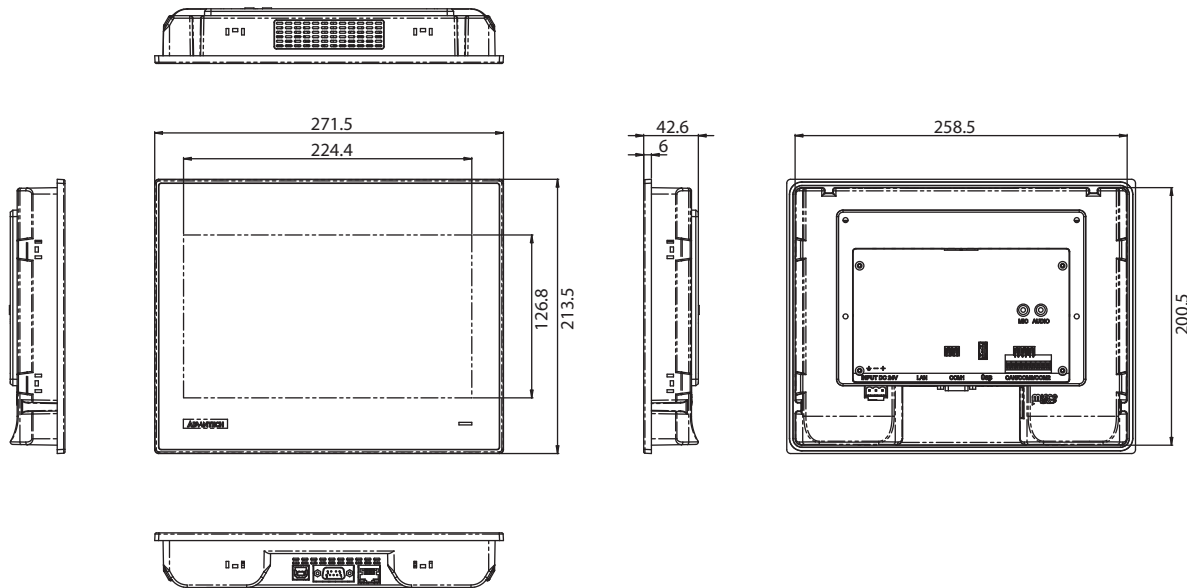
- Operating Temperature** -20 ~ 60 °C (-4 ~ 140 °F)
- Storage Temperature** -30 ~ 70 °C (-22 ~ 158 °F)
- Humidity** 10 ~ 90% RH @ 40 °C, non-condensing
- Ingress Protection** Front panel: IP66
- Vibration Protection** Operating, random vibration 1 Grms (5 ~ 500 Hz)

Base View



Dimensions

Unit: mm



Panel Cutout Dimensions: 260 x 201.5 mm (10.24 x 7.93 in)

Ordering Information

- WOP-3100T-C4BE 10.1" WSVGA, Cortex™-A8, 256MB DDR, WinCE 6.0

Optional Accessories

- PWR-247-AE 24 V 50 W AC-DC Power Adapter
- 1702002600 Power Cable US Plug 1.8 M
- 1702002605 Power Cable EU Plug 1.8 M
- 1702031801 Power Cable UK Plug 1.8 M
- 1702031836 Power Cable China/Australia Plug 1.8 M

S/W Bundle Offering

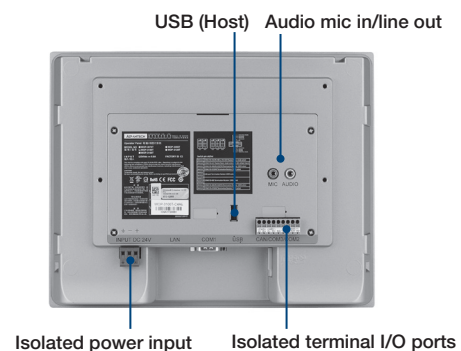
- WA-HT3100T-R15H0AE WOP-3100T-C4BE with WebAccess/HMI Runtime

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