# WebOP-2100T

## 10.1" WSVGA Operator Panel Installed with WebAccess/HMI Software

## Features

- ARM9™ 32-bit, 200 MHz RISC processor with 128 MB flash memory
- Includes a RTC, battery backup RAM, and Ethernet-based operator panels
- Supports runtime data downloads through serial, Ethernet, and USB interfaces
- Supports brightness controls via touch panel
- Reliable firmware for 24/7 operation
- Supports the WebAccess/HMI Designer development tool on Windows XP/Vista/7
- Easy to run applications on screens of any screen
- Supports operation in both landscape and portrait mode
- Supports over 450 PLC industrial communication protocols
- Can communicate with up to four device types
- Panel mount design ensures easy installation
- IP66-rated front panel

## Introduction

To fulfill the stringent standards of the automation market, especially for packaging, label slitting, and robot dispensing applications, Advantech developed the WebOP-2000T series for diverse operations that involve PLCs, motion/thermal controllers, inverters, and sensors. Powered by an ARM9™ 32-bit, 200 MHz RISC processor with 128 MB flash memory, the WebOP-2000T series systems are available with LCDs of varying size (from 4.3 to 10.1"). Additionally, WebOP-2000T systems are bundled with Advantech's WebAccess/HMI software – a web browser-based human-machine interface designed for HMI applications to reduce labor and improve manufacturing efficiency through visualization.

## Specifications

### General

- **Certification** CE, BSMI, CCC, UL, FCC Class A
- **Dimensions (W x H x D)** 269.8 x 212 x 37.4 mm (10.62 x 8.35 x1.47 in)
- **Cutout Dimensions** 259.5 x 201.5 mm 10.22 x 7.93 in)
- **Front Panel Thickness** 6 mm (0.23 in)
- **Operating System** HMI RTOS, WebOP Designer
- **Power Supply Voltage** $24V_{DC}$ ±10%
- **Power Consumption** 10W
- **Enclosure Housing** Plastic
- **Mount Options** Panel
- **Weight (Net)** 1.2 kg (2.64 lbs)

### System Hardware

- **CPU** ARM9™ 32-bit, 200 MHz RISC processor
- **Battery Backup Memory** 128KB
- **Flash Memory** 8MB/ 8MB + 128M NAND flash
- **Power-On LED** Yes
- **Communication LED** No
- **Front USB Access** No

### Communication Interface

- **COM1** RS-232/422/485 (DB9 Female)
- **COM2** RS-422/485 (5-pin plug connector)
- **COM3** RS-232 (COM1: Pin 5, 7, 8)
- **Ethernet (RJ45)** 10/100BASE-T (for N2AE model)
- **I/Os** 1 x USB (Client)
  1 x USB (Host)
  1 x Micro SD Slot (for N1AE model)

### LCD and Touchscreen

- **Display Type** WSVGA TFT LCD
- **Display Size** 10.1"
- **Max. Resolution** 1024 x 600
- **Max. Colors** 65,536 colors
- **Luminance (cd/m²)** 250
- **Backlight Life** LED, 20,000 hr
- **Dimming** Adjustable by touch panel
- **Touchscreen** 4 wires analog resistive
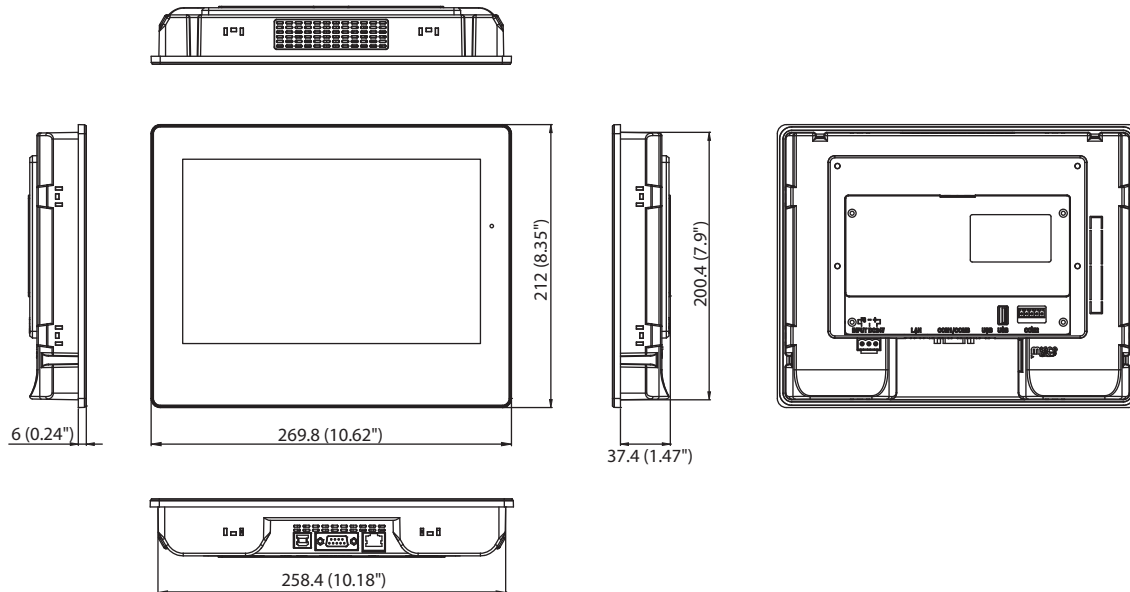
### Environment

- **Operating Temperature** 0 ~ 50 °C (32 ~ 122 °F)
- **Storage Temperature** -20 ~ 60 °C (-4 ~ 140 °F)
- **Humidity** 10 ~ 90% RH @ 40 °C, non-condensing
- **Ingress Protection** Front panel: IP66
- **Vibration Protection** Operating, radom vibration 1 Grms (5 ~ 500 Hz)

## Ordering Information

- **WOP-2100T-S2AE** 10.1" WSVGA, 64MB (SDRAM), 8MB (NOR)
- **WOP-2100T-N2AE** 10.1" WSVGA, 64MB (SDRAM), 8MB (NOR) & 128MB (NAND)

All product specifications are subject to change without notice.

Last updated: 27-Jun-2018

# Dimensions

Unit: mm

212 (8.35")

200.4 (7.9")

6 (0.24")

269.8 (10.62")
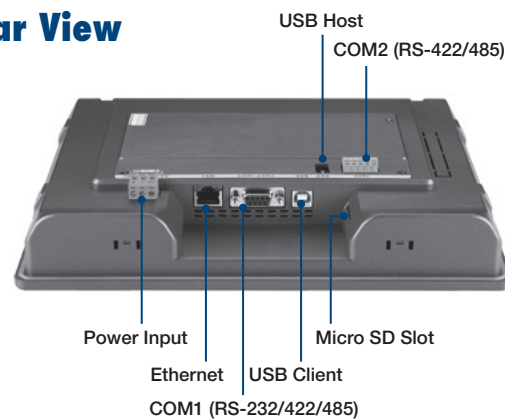
37.4 (1.47")

258.4 (10.18")

**Panel Cutout Dimensions: 259.5 x 201.5 mm (10.22 x 7.93 in)**

# Optional Accessories

- **PWR-247-CE**      100-240V 60W 24V 2.5A Power Supply
- **1702002600**      Power Cable US Plug 1.8 M
- **1702002605**      Power Cable EU Plug 1.8 M
- **1702031801**      Power Cable UK Plug 1.8 M
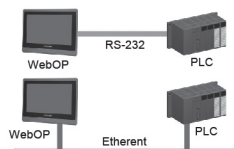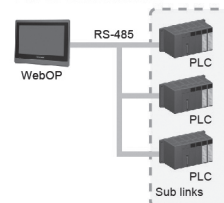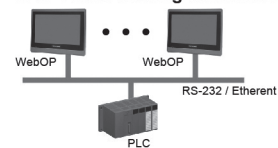- **1700000596**      Power Cable China/Australia Plug 1.8 M

# Rear View

USB Host

COM2 (RS-422/485)

Power Input

Ethernet

USB Client

Micro SD Slot

COM1 (RS-232/422/485)

# Communication Links

**Direct Link**

**1-to-1 Connection**

RS-232

WebOP    PLC

WebOP   Etherent   PLC

**1-to-N Connection**

RS-485

WebOP

PLC

PLC

PLC

Sub links

**N-to-1 Data Sharing Connection**

WebOP     WebOP

RS-232 / Etherent

PLC

**In-Direct Link**

**2-to-1 Connection**

WebOP     WebOP     PLC

Indirect link via 2-to-1 connection

2-to-1 server

Direct link

**N-to-1 Connection**

WebOP     WebOP

Etherent

Indirect Link via N-to-1 connection (Etherent)

N-to-1 master

Direct link

WebOP

PLC
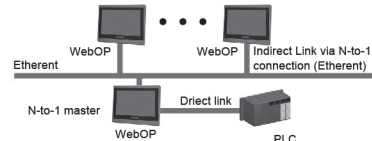
**2-to-1 Transparent Connection**

WebOP     WebOP     PLC

2-to-1 Transparent Server

PC     WebOP     PLC

2-to-1 Transparent Server