WebOP-2040T

4.3" WQVGA Operator Panel with WebOP Designer Software

NEW

Features

- Various LCD sizes (4.3" to 10.1")
- Supports ARM9-based CPUs with 200MHz and 128MB flash memory
- Supports RTC, battery backup RAM, and Ethernet-based operator panels
- Supports runtime data downloads through Serial, Ethernet, USB
- Supports adjustable brightness controls via touch panel
- Reliable firmware for 24/7 operation
- Supports Windows XP/7/Vista-based WebOP Designer development tool
- Easy to switch one application to different LCD sizes in seconds
- Supports vertical and horizontal application screen rotation
- Supports over 300 PLC industrial communication protocols
- Communicates with up to four types of devices
- Panel mounting for machinery
- Front panel is NEMA4/IP66 compliant

CE FCC UL CCC

Introduction

To satisfy the stringent standards required in the automation market, especially packaging, label slitting, and motion-based robot dispensing, Advantech offers the WebOP-2000T series with 200MHz ARM9-based RISC CPU's and 128MB flash memory for application software. The WebOP-2000T series also support a variety of LCD sizes from 4.3" to 10.1" for different applications involving the use of PLCs, motion/thermal controllers, inverters and sensors. The WebOP-2000T series is bundled with WebOP Designer: a software development kit which helps create application solutions for labor-saving, improved efficiency of manufacturing and easy control of every machine in the factory. WebOP Designer offers an outstanding price performance ratio for various markets such as conventional operator panels, HMI + Low mini SCADA systems, and HMI + communication gateways.

Specifications

General

- **Certifications** CE, BSMI, CCC, UL, FCC Class A
- **Dimensions (WxHxD)** 130 x 106.2 x 36.4mm (5.11" x 4.18" x 1.43")
- **Cut-out Dimensions** 118.5 x 92.5mm (4.66" x 3.64")
- **Front Panel Thickness** 5mm
- **Operating System** HMI RTOS, WebOP Designer
- **Power Supply Voltage** 24V$_{DC}$ ±10%
- **Power Consumption** 5W
- **Enclosure Housing** Plastic
- **Mounting** Panel
- **Weight (Net)** 0.3 kg (0.66 lbs)

System Hardware

- **CPU** RISC 32bits, 200MHz
- **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: Pin5;7;8)
- **Ethernet (RJ45)** 10/100-BaseT (for N1AE model)
- **I/Os**
  - USB Client   Yes
  - USB Host   Yes
  - Micro-SD Slot   Yes (for N1AE model)

LCD Display and Touchscreen

- **Display Type** WQVGA TFT LCD
- **Display Size** 4.3"
- **Max. Resolution** 480 x 272
- **Max. Colors** 65,536 colors
- **Luminance (cd/m²)** 400
- **Backlight Life** LED, 20,000 hrs
- **Dimming** Adjustable by touch panel
- **Touchscreen** 4 wire 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: NEMA4, IP66
- **Vibration Protection** Operating, radom vibration 1 Grms (5 ~ 500 Hz)

Ordering Information

- **WOP-2040T-S1AE** 4.3" WQVGA, 32MB (SDRAM), 8MB (NOR)
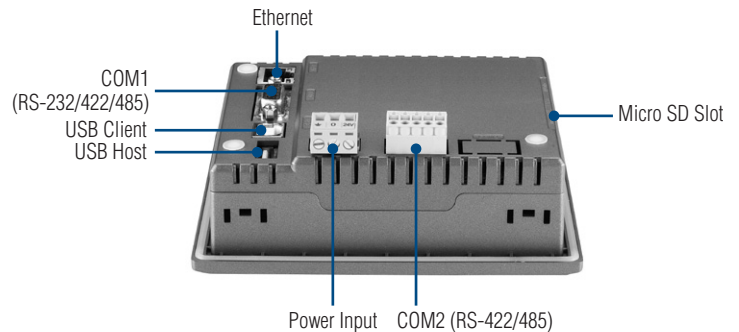- **WOP-2040T-N1AE** 4.3" WQVGA, 32MB (SDRAM), 8MB (NOR) & 128MB (NAND)

Dimensions

Unit: mm
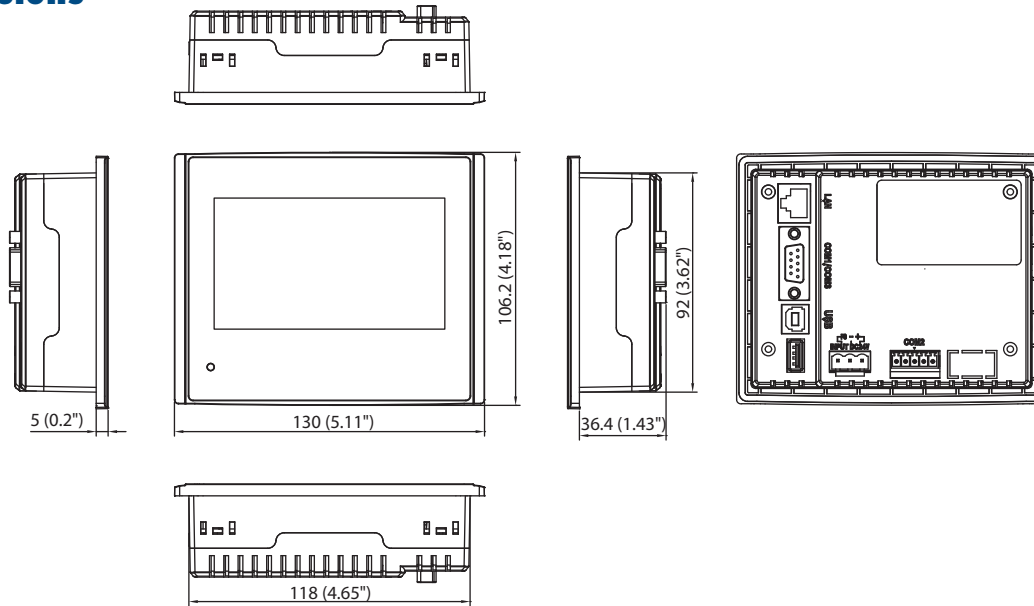
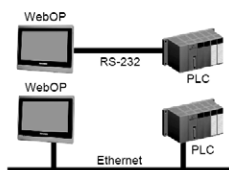**Panel Cut-out Dimensions: 118.5 x 92.5 mm (4.66" x 3.64")**

Accessories

- **CWOP-P2HFM-AD12E** PC to HMI program download cable, DB9/2m
- **CWOP-P2HAB-ADU2E** PC to HMI program download cable, USB/2m
- **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
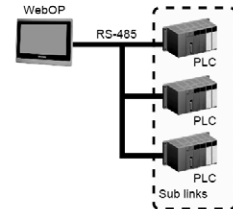
Rear View

Ethernet
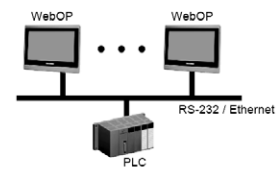COM1 (RS-232/422/485)
USB Client
USB Host
Micro SD Slot
Power Input
COM2 (RS-422/485)

Communication Links

Direct Link
1-to-1 Connection

WebOP — RS-232 — PLC
WebOP — Ethernet — PLC

1-to-N Connection

WebOP — RS-485 — PLC / PLC / PLC
Sub links

N-to-1 Data Sharing Connection

WebOP — WebOP
RS-232 / Ethernet
PLC

In-Direct Link
2-to-1 Connection

WebOP — Indirect link via 2-to-1 connection — WebOP 2-to-1 server — Direct link — PLC

N-to-1 Connection

WebOP — WebOP
Ethernet
Indirect Link via N-to-1 connection (Ethernet)
N-to-1 master — Direct link
WebOP — PLC
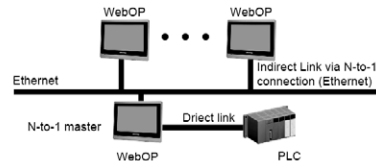
2-to-1 Transparent Connection

WebOP — WebOP — PLC
2-to-1 Transparent Server
PC — WebOP — PLC
2-to-1 Transparent Server