WebOP-2040T

4.3" WQVGA Operator Panel with WebOP Designer Software

NEW

Features

- Various LCD sizes (4.3" to 15")
- 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/ 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

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 15" 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
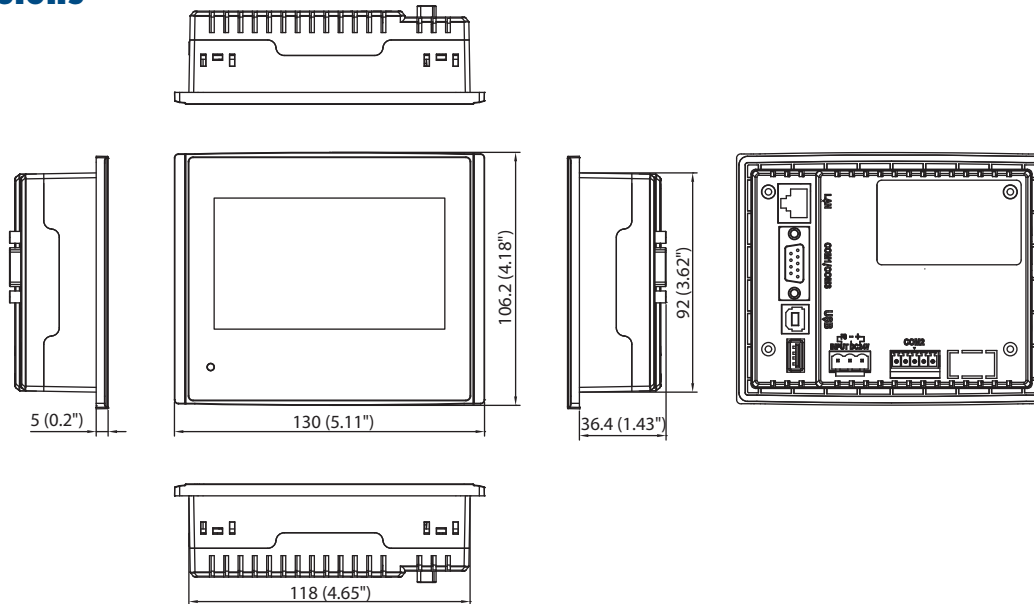
Environment

- **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

Ordering Information

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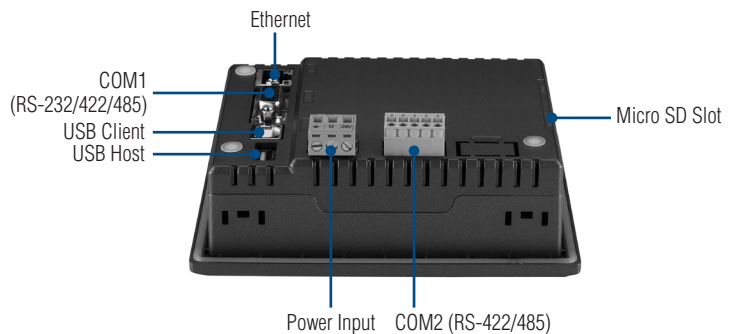
Dimensions

Unit: mm

106.2 (4.18")

92 (3.62")

5 (0.2")

130 (5.11")

36.4 (1.43")

118 (4.65")

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
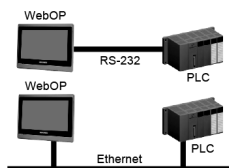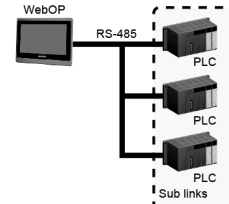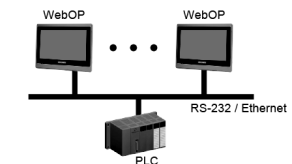- **1702031836** Power Cable China/Australia Plug 1.8 M

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 — Indirect Link via N-to-1 connection (Ethernet)

Ethernet — N-to-1 master — WebOP — Direct link — PLC
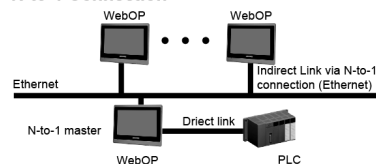
2-to-1 Transparent Connection

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

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