

# WebOP-2040T

## 4.3" WQVGA Operator Panel with WebAccess/HMI



### Features

- Includes ARM 9-based CPUs 200 MHz and 128 MB flash memory
- Includes RTC, battery backup RAM, and Ethernet-based operator panels
- Supports runtime data downloads through serial, Ethernet, USB interface
- Supports brightness controls via touch panel
- Reliable firmware for 24/7 operation
- Supports WebAccess/HMI Designer development tool on Windows XP/Vista/7
- Easy to run one application on any screen size
- Supports vertical and horizontal application screen rotation
- Supports over 450 PLC industrial communication protocols
- Communicates with up to four types of devices
- Easily installed with panel mounting design
- Front panel with IP66 protection

### Introduction

To fulfill the stringent standards required in automation market especially in packaging, label slitting, and robot dispensing, Advantech offers the WebOP-2000T series for applications related to PLCs operation, motion/thermal controllers, inverters and sensors. It's designed with various LCD sizes from 4.3" to 10.1, ARM 9-based RISC CPU's, 128 MB flash memory and HMI application software. The WebOP-2000T series is bundled with WebAccess/HMI: a powerful software which is able to create HMI application solutions for labor-saving, manufacturing efficiency improved and visualized operation on every machine in factory.

### Specifications

#### General

- **Certification** 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<sub>DC</sub> ±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/m<sup>2</sup>)** 400
- **Backlight Life** LED, 20,000 hrs
- **Dimming** Adjustable by touch panel
- **Touchscreen** 4 wires analog resistive

#### Environment

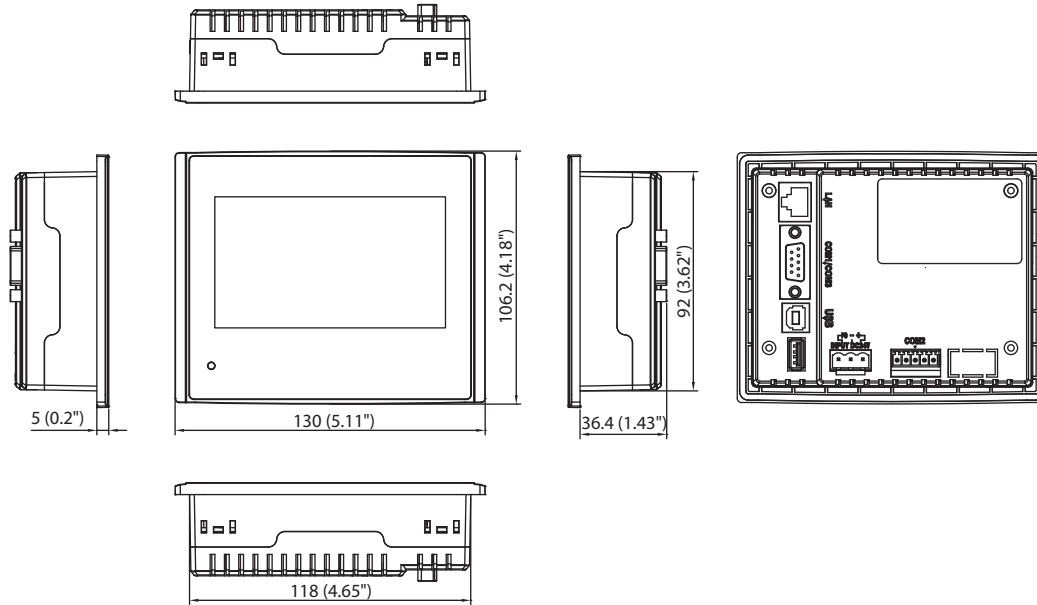
- **Operating Temperature** 0 ~ 50°C (32 ~ 122°F)
- **Storage Temperature** -20 ~ 60°C (-4 ~ 140°F)
- **Humidity** 10 ~ 90% RH @ 40°C, non-condensing
- **Ingress Protection** Front panel: IP66
- **Vibration Protection** Operating, random vibration 1 Grms (5 ~ 500 Hz)

### 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

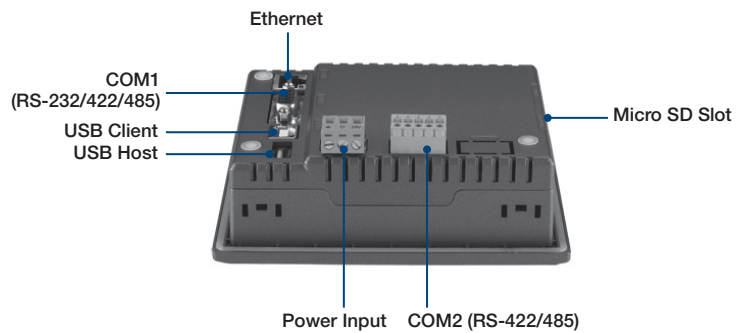


**Panel Cut-out Dimensions: 118.5 x 92.5 mm (4.66" x 3.64")**

## 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

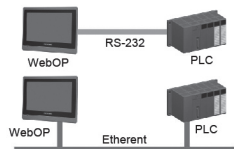
## Rear View



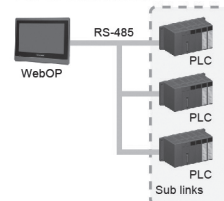
## Communication Links

### Direct Link

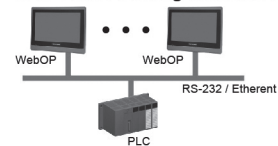
#### 1-to-1 Connection



#### 1-to-N Connection



#### N-to-1 Data Sharing Connection

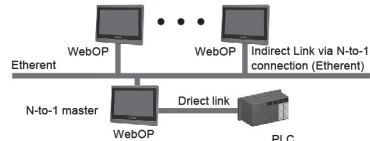


### In-Direct Link

#### 2-to-1 Connection



#### N-to-1 Connection



### 2-to-1 Transparent Connection

