WebOP-2070V

7" WVGA Operator Panel with WebOP Designer Software

Features

- Various LCD sizes (3.5", 5.7", 7", 8", 10.4", 12.1")
- Supports ARM9-based CPUs with 70~200MHz and 4~16MB 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

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 WOP-2000V series which are designed with ARM9-based RISC CPU with 70~200MHz and 4~16MB flash memory for application software. The WOP-2000V series also support a variety of LCD size from 3.5" to 12.1" for different applications involving the use of PLCs, motion/thermal controllers, inverters and sensors. WebOP Designer is 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. The WOP-2000V series is bundled with WebOP Designer offering 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)**   188 x 143.3 x 40 mm (7.4" x 5.64" x 1.57")
- **Cut-out Dimensions**   175 x 132.5 mm (6.89" x 5.21")
- **Front Panel Thickness** 6 mm
- **Operating System**   HMI RTOS, WebOP Designer
- **Power Supply Voltage** $24V_{DC}$ ±10%
- **Power Consumption**   25W
- **Enclosure Housing**   Plastic
- **Mounting**   Panel
- **Weight (Net)**   1 kg (2.2 lbs)

System Hardware

- **CPU**   RISC 32 bits, 200 MHz
- **Battery Backup Memory**   128KB
- **Flash Memory**   16 MB
- **Power-On LED**   Yes
- **Communication LED**   No
- **Front USB Access**   No

Communication Interface

- **COM1**   RS-232/422/485 (DB9 Female)
- **COM2**   RS-232/422/485 (DB9 Male & 5-Pin Plug Connector)
- **COM3**   None
- **Ethernet (RJ45)**   10/100-BaseT
- **I/Os**   USB Client   No
                        USB Host   Yes
                        Micro-SD Slot   No

LCD Display and Touchscreen

- **Display Type**   WVGA TFT LCD
- **Display Size**   7"
- **Max. Resolution**   800 x 480
- **Max. Colors**   65,536 colors
- **Luminance (cd/m²)**   300
- **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 ~ 95% RH @ 40°C, non-condensing
- **Ingress Protection**   Front panel: IP65
- **Vibration Protection**   Operating, radom vibration 1 Grms (5 ~ 500 Hz)

Ordering Information

- **WOP-2070V-N4AE**   7" WVGA, 16 MB, RS-232/422/485, Ethernet

Dimensions

Unit: mm

145.4 [5.72]

131 [5.15]

6 [0.23"] 186 [7.32"] 39 [1.53]

173.5 [6.83]
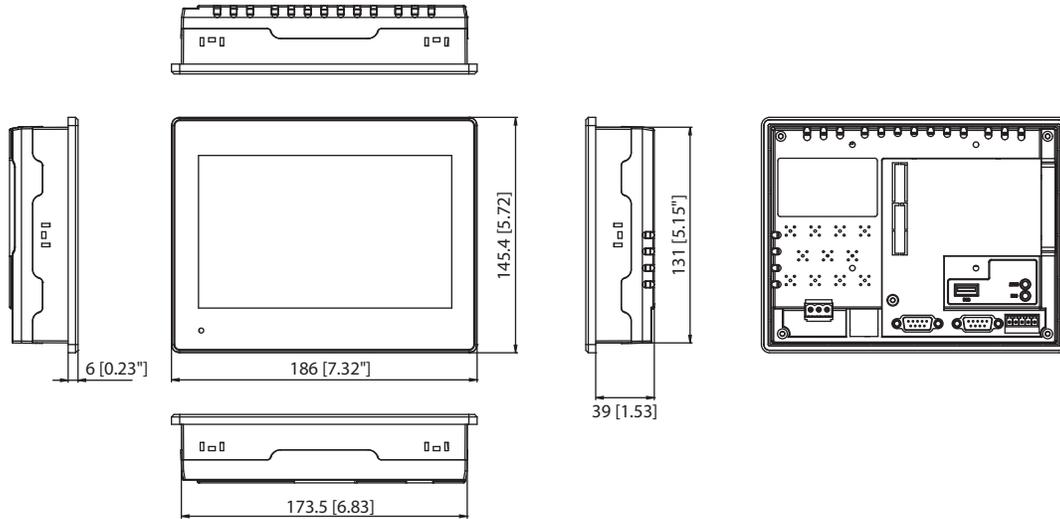
Panel Cut Out Dimensions: 175 x 132.5 mm (6.89" x 5.21")

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

USB (Host)

Ethernet

Power Input

COM 1 (RS-232/422/485)

COM 2 (RS-232/422/485)
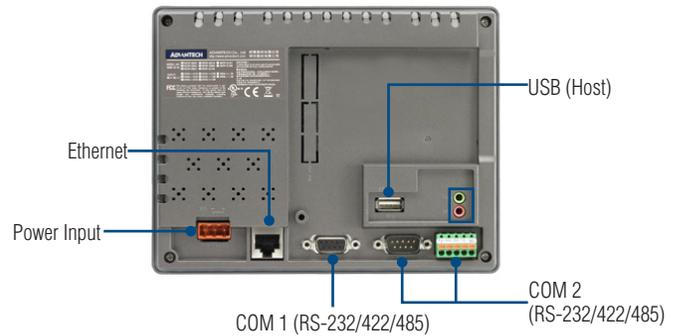
Communication Links

Direct Link

1-to-1 Connection

WebOP RS-232 PLC
WebOP Etherent PLC

1-to-N Connection

WebOP RS-485 PLC / PLC / PLC Sub links
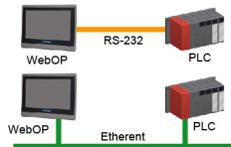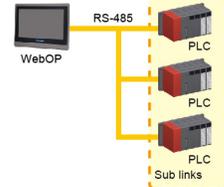
N-to-1 Data Sharing Connection

WebOP WebOP RS-232 / Etherent PLC
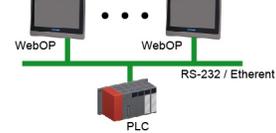
In-Direct Link

2-to-1 Connection

WebOP 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 (Etherent) Etherent N-to-1 master WebOP Direct link PLC
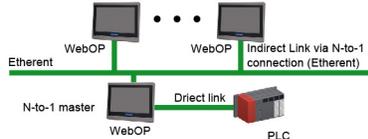
2-to-1 Transparent Connection

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