

WOP-2057V

5.7" QVGA Operator Panel with PM Designer 2.0 Software



Features

- Various LCD sizes (3.5", 5.7", 7", 8", 10.4", 12.1")
- Supports ARM9-based CPUs with 70~200MHz and 4~16M flash memory size
- 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 PM Designer 2.0 development tool
- Easy to switch one application to different LCD sizes in seconds
- Supports vertical and horizontal application screen rotation
- Supports over 250 PLC industrial communication protocols
- Communicates with up to four types of devices
- Panel mounting for machinery

Introduction

To satisfy the stringent standards required in the automation market, especially packaging, label slitting, and motion-based robot dispensing, Advantech offers the WOP-2000 series which are designed with ARM9-based RISC CPU with 70~200MHz and 4~16MB flash memory size for application software. The WOP-2000 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. PM Designer 2.0 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-2000 series is bundled with PM Designer 2.0 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 / FCC / BSMI / UL / CCC
- **Dimensions (WxHxD)** 187 x 145.7 x 45 mm (7.36" x 5.73" x 1.77")
- **Cut-out Dimensions** 174.5 x 132.5 mm (6.87" x 5.21")
- **Front Panel Thickness** 6mm
- **Operating System** HMI RTOS, PM Designer 2.0
- **Power Supply Voltage** 24V_{DC} ±10%
- **Power Consumption** 15W
- **Enclosure Housing** Plastic
- **Mounting** Panel
- **Weight (Net)** 0.65 kg (1.42 lbs)

System Hardware

- **CPU** RISC 32bits, 70MHz
- **Battery Backup Memory** 128KB
- **Flash Memory** 4MB
- **Power-On LED** Yes
- **Communication LED** COM1 and COM2
- **Front USB Access** No

Communication Interface

- **COM1** RS-232/422/485 (DB9 Female)
- **COM2** RS-232/422/485 (DB9 Male & 5-Pin Connector)
- **COM3** None
- **Ethernet (RJ45)** 10/100-BaseT (for N1AE model)
- **I/Os**
 - USB Client No
 - USB Host No
 - Micro-SD Slot No

LCD Display and Touchscreen

- **Display Type** QVGA TFT LCD
- **Display Size** 5.7"
- **Max. Resolution** 320 x 240
- **Max. Colors** 265 colors
- **Luminance (cd/m²)** 400
- **Viewing Angle (H/V°)** 100/95
- **Backlight Life** LED, 20,000 hrs
- **Dimming** Adjustable by touch panel
- **Touchscreen** 4 wire analog resistive

Environment

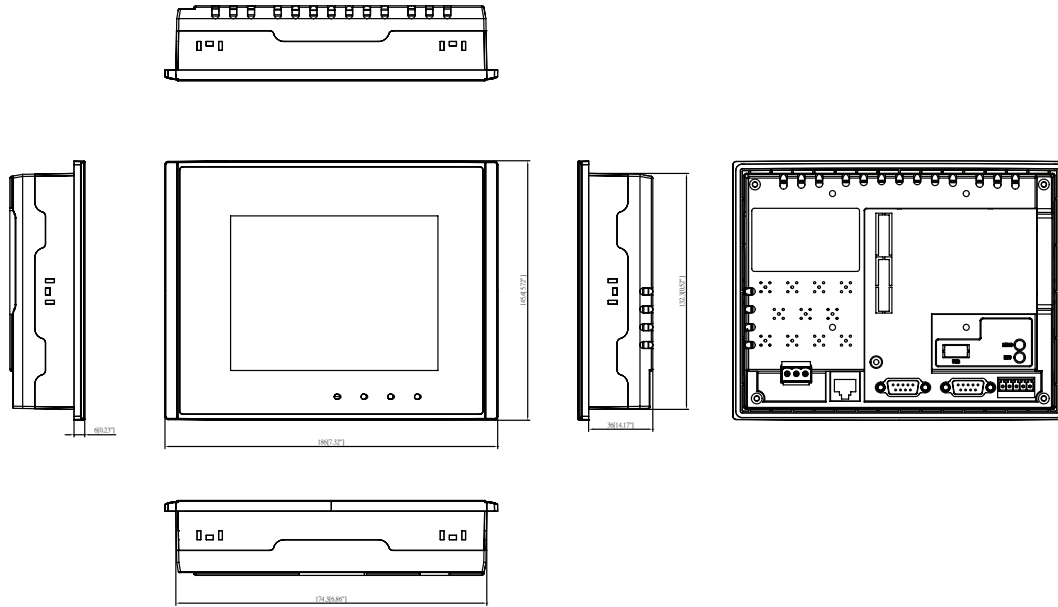
- **Operating Temperature** 0 ~ 50° C (32 ~ 122° F)
- **Storage Temperature** -20 ~ 60° C (-4 ~ 140° F)
- **Humidity** 10 ~ 95% RH @ 40° C, non-condensing
- **Ingress Protection** Front panel: NEMA4, IP65
- **Vibration Protection** Operating, random vibration 1 Grms (5 ~ 500 Hz)

Ordering Information

- **WOP-2057V-S1AE** 5.7" QVGA, 4MB, RS-232/422/485
- **WOP-2057V-N1AE** 5.7" QVGA, 4MB, RS-232/422/485, Ethernet

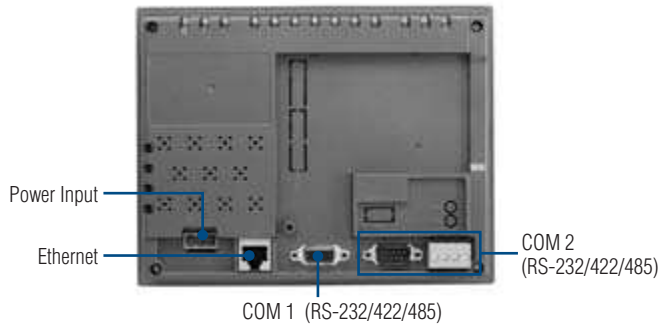
Dimensions

Unit: mm



Panel Cut-out Dimensions: 174.5 x 132.5 mm (6.87" x 5.21")

Rear View



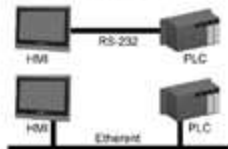
HMI Development Software Features



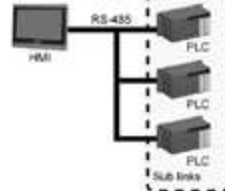
Communication Links

Direct Link

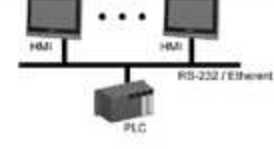
1-to-1 Connection



1-to-N Connection

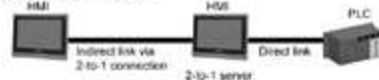


N-to-1 Data Sharing Connection

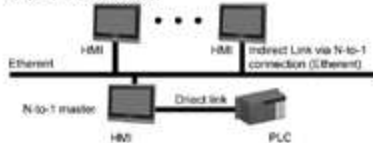


In-Direct Link

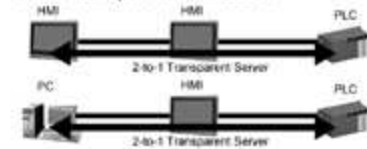
2-to-1 Connection



N-to-1 Connection



2-to-1 Transparent Connection



- 1 Operator Panels
- 2 Fanless Panel PCs
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