

# WOP-210K

## 10.1" WSVGA Operator Panel Installed with HMINavi Software



### Features

- ARM9™ 32-bit RISC processor with 64 MB SDRAM working memory
- Supports over 500+ PLC industrial communication protocols
- Backup memory 128KB for retaining critical data or parameter
- Supports the HMINavi Designer development tool free on Windows 10
- Supports HMINavi Runtime data downloads through Serial, Ethernet, USB port
- No limitation on the internal I/Os points used for variety application
- Reliable firmware setting from HMINavi software for 24/7 operation
- Easy to switch one application to different LCD sizes in seconds
- Supports operation in both landscape and portrait mode
- Panel mount design ensures easy installation and IP66-rated front panel

### Introduction

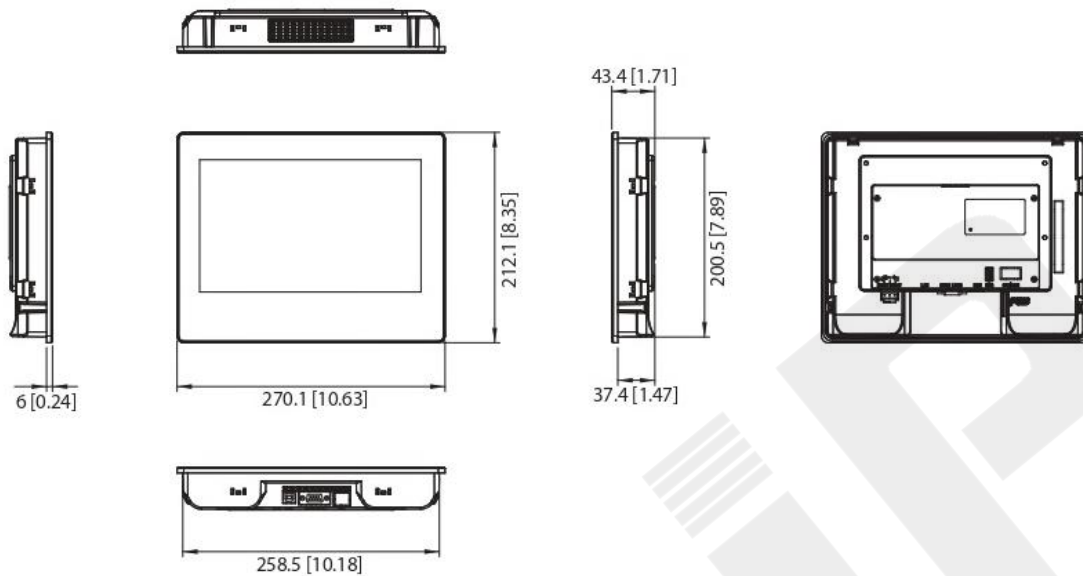
To fulfill the stringent standards of the automation market, especially for packaging, label slitting, and F&B applications, Advantech developed the WOP-200K series for diverse operations that involve PLCs, thermal controllers, inverters, and sensors. Powered by an ARM9™ 32-bit RISC processor with 64 MB working memory, the WOP-200K series systems are available with LCDs of varying size (from 4.3" to 15"). Additionally, WOP-200K systems are bundled with Advantech's HMINavi software – a human-machine interface designed for HMI applications to reduce labor and improve manufacturing efficiency through visualization. Powerful connectivity drivers support 500+ variety market brands of PLC.

### Specifications

General		LCD and Touchscreen	
▪ <b>Certification</b>	CE, FCC, UL61010	▪ <b>Display Type</b>	WSVGA TFT LCD
▪ <b>Dimensions (W x H x D)</b>	270.1 x 212.1 x 43.4mm (10.63' x 8.35' x 1.71')	▪ <b>Display Size</b>	10.1"
▪ <b>Cutout Dimensions</b>	259.5 x 201.5mm (10.22' x 7.93')	▪ <b>Max. Resolution</b>	1024 x 600
▪ <b>Front Panel Thickness</b>	6 mm (0.23 in)	▪ <b>Max. Colors</b>	65,536 colors
▪ <b>Operating System</b>	HMI RTOS, HMINavi Designer	▪ <b>Luminance (cd/m<sup>2</sup>)</b>	350
▪ <b>Power Supply Voltage</b>	24V <sub>DC</sub> ± 10%, Isolation	▪ <b>Backlight Life</b>	LED, 20,000 hr
▪ <b>Power Consumption</b>	20W	▪ <b>Touchscreen</b>	4 wires analog resistive
▪ <b>Enclosure Housing</b>	Plastic		
▪ <b>Mount Options</b>	Panel		
▪ <b>Weight (Net)</b>	1.1 kg (2.43 lbs)		
System Hardware		Environment	
▪ <b>CPU</b>	ARM9™ 32-bit RISC processor	▪ <b>Operating Temperature</b>	-10 ~ 60°C (14 ~ 140° F)
▪ <b>Battery Backup Memory</b>	128KB	▪ <b>Storage Temperature</b>	-20 ~ 70°C (-4 ~ 158° F)
▪ <b>Working Memory</b>	64 MB SDRAM	▪ <b>Humidity</b>	95% RH @ 40°C, non-condensing
▪ <b>Storage</b>	128 MB NAND Flash Runtime Max Size: 64 MB Data Logger Max Size: 64 MB	▪ <b>Ingress Protection</b>	Front panel: IP66
		▪ <b>Vibration Protection</b>	5 ~ 500Hz (X,Y,Z direction, 1Grms, 1hour per axis)
Communication Interface		Ordering Information	
▪ <b>COM1</b>	RS-232 (DB9 Female)	▪ <b>WOP-210K-NAE</b>	10.1" WSVGA, 64MB, 128MB(NAND), Serial x3, Ethernet
▪ <b>COM2</b>	RS-422/485 (COM1: Pin 1, 4, 5, 6, 9)		
▪ <b>COM3</b>	RS-485 (COM1: Pin 5, 7, 8)		
▪ <b>Ethernet (RJ45)</b>	10/100-BaseT		
▪ <b>I/Os</b>	1 x USB (Client) 1 x USB (Host)		

## Dimensions

Unit: mm [inch]



**Panel Cutout Dimensions: 259.5 x 201.5 mm (10.22 x 7.93 in)**

## Optional Accessories

### DIN-Rail Type Power Supply Module

- 96PSD-A60W24-MM A/D 100-240V 60W 24V MDR DIN RAIL
- 96PSD-A120W24-MN A/D 100-240V 120W 24V NDR DIN RAIL

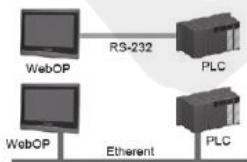
## Rear View



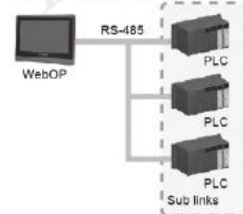
## Communication Links

### Direct Link

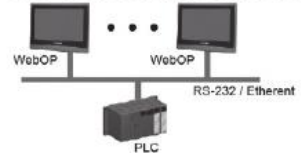
#### 1-to-1 Connection



#### 1-to-N Connection

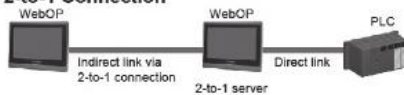


#### N-to-1 Data Sharing Connection

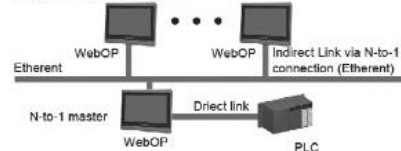


### In-Direct Link

#### 2-to-1 Connection



#### N-to-1 Connection



#### 2-to-1 Transparent Connection

