

R12IP7T-PPM2

12.1" Intel® Pentium® N4200 PP Series HMI Panel PC



CE

FC

KEY FEATURES

- 12.1", 1024 x 768, 500 nits
- Projected capacitive multi-touch screen
- Intel® Pentium® Apollo Lake N4200, 1.10 GHz
- Fanless cooling system and ultra-low power power consumption
- Front IP65 water and dust proof
- Aluminum housing and fanless design
- Room booking schedule, access control, room information display

INTRODUCTION

Winmate PP Series HMI offers a sleek and modern solution for industrial automation and control applications, featuring sizes from 7" to 27" with optional high-brightness displays up to 1000 nits for enhanced visibility. Designed with a flat, slim aluminum housing, these fanless HMI Panel PCs include a PCAP multi-touch screen, multiple I/O interfaces, and support for DP/HDMI/LVDS/eDP. The front IP65-rated water and dust protection ensure durability in harsh environments, making them ideal for industrial control, room scheduling, and interactive displays.

SPECIFICATIONS

Display

Resolution	1024x768	Size	12.1 inches
Contrast Ratio	1000:1	Panel Brightness	500.0 nits
View Angles	89,89,89,89	Active Area	245.76x184.32 mm
Touch / Glass	Projected Capacitive Multi Touch Screen		

System Specification

Processor	Intel Pentium N4200 1.1GHz (up to 2.5GHz)	Memory	Dual-channel (non-ECC) SO-DIMM RAM.Up to 16GB
Storage	128GB SSD(Default) (Default) 256GB SSD (Optional) 512GB SSD (Optional) 1TB 2 x SATA III for 2.5" SSD/HDD(Supprt RAID) (Optional)	Ethernet controller	2 x Intel® Ethernet Controller
Security	TPM 2.0	Operating System	Windows 10 IoT Enterprise (64 bit) (Optional) Linux Ubuntu 20.04 (Optional)
WLAN	Support (Optional)	BT	Support (Optional)

Mechanical

Dimension	322 x 256 x 79 mm	Weight	2.7 kg
Mounting	Panel mount (Default) VESA mount (Optional)	Enclosure	Metal Housing
Cooling System	Fanless Design	Cut out	302 x 237 mm

Environment

Operating Humidity	10% to 90% RH, Non-Condensing	Operating Temperature	0°C to 50°C
Storage Temperature	-10°C to 60°C	IP rating	Front IP65

Certification

Certification	CE, FCC
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IO Ports

Power Input	1 x 12V DC, Din4 pin connector	USB Port	4 x USB3.2 Gen1x1 (Type-A)
Serial Port	1 x RS232/422/485 (Default RS232) 1 x RS232	Video	1 x DP1.2 (Default) 1 x HDMI 1.4 (Optional) 1 x VGA (Optional)
Audio	1 x Mic in 1 x Line out 2 x Speaker	Expansion Port	1 x M.2 2242 B-key Slot (for SATA III SSD) 1 x M.2 2230 E-Key Slot (for Wi-Fi module) 1 x PCIe 2.0 (x1) slot
LAN	2 x Giga LAN RJ45 Connector	Indicator	1 x LED Indicator for power 1 x LED Indicator for storage
Brightness Knob	1 x Brightness Adjustment Knob		

Control

Button	1 x Power Button 1 x Reset Button
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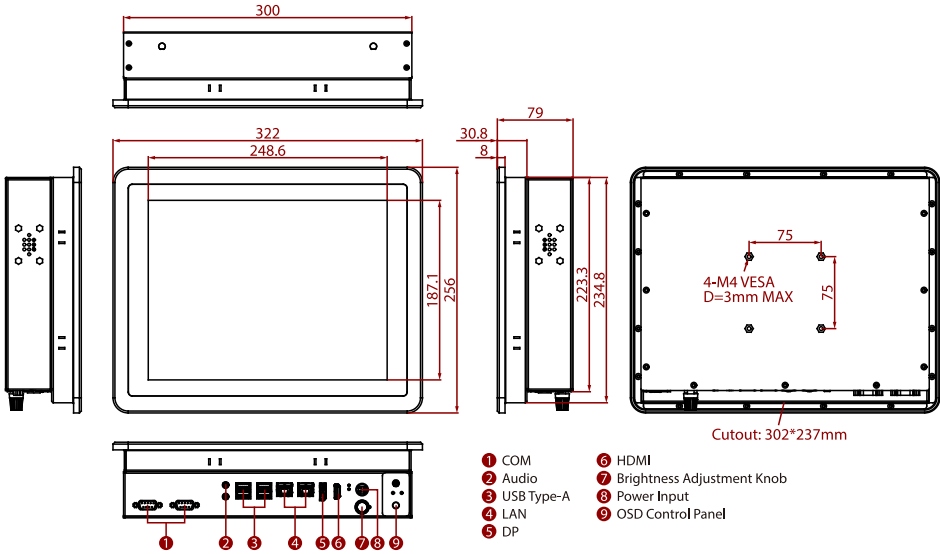
Accessory

Accessory	100~240V AC to DC Adapter Power Cord VESA screws Mounting clips
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Power

Power Rating	12V DC	Adapter	12V 84W
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DIMENSIONS UNIT:MM



NOTE

1. This is a simplified drawing and some components are not marked in detail.
2. Please contact our sales representative if you need further product information.
3. All specifications are subject to change without prior notice.
4. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.