

W12IM3S-PPB1

12.3" ARM A53 PP Series HMI Panel PC



KEY FEATURES

- 12.3" 1920 x 720 panel with projected capacitive multitouch screen
- ARM A53 Quad Core 2.0GHz CPU
- Front IP65 water and dust proof
- Aluminum housing and fanless design
- Room booking schedule, access control, room information display



OVERVIEW

Aluminum Housing and Fanless Design



Front IP65 Water and Dust Proof for Harsh Environments



Efficient Performance with ARM A53 Quad Core 2.0GHz CPU



Streamlining Room Booking, Access Control, and Room Information Display



Industrial HMI with Aluminum Housing and Fanless Design

The industrial HMI features a durable aluminum housing and a fanless design. The aluminum housing provides robust protection against harsh environmental conditions, ensuring long-lasting durability. The fanless design eliminates the need for cooling fans, reducing the risk of mechanical failure and minimizing the accumulation of dust and debris. This combination of an aluminum housing and a fanless design enhances the reliability and stability of the industrial HMI, making it suitable for demanding industrial environments where reliability and longevity are paramount.

Front IP65 Water and Dust Proof for Harsh Environments

The Industrial HMI is equipped with a front IP65 water and dust-proof rating, making it highly resilient in harsh environments. This level of protection ensures that the HMI is safeguarded against water splashes, dust particles, and other contaminants that could potentially disrupt its operation. With the front IP65 rating, operators can confidently use the HMI in demanding industrial settings without concerns about damage caused by moisture or dust. This feature enhances the reliability and longevity of the HMI, allowing it to effectively support critical industrial processes with optimal performance and durability.

Efficient Performance with ARM A53 Quad Core 2.0GHz CPU

The ARM A53 Quad Core 2.0GHz CPU is a processing unit commonly used in various electronic devices, including smartphones, tablets, and embedded systems. The A53 architecture is part of the ARMv8-A instruction set, designed to offer a balance between performance and power efficiency. With its quad-core configuration, the CPU features four independent processing cores that can handle multiple tasks simultaneously, providing improved multitasking capabilities. Each core operates at a clock speed of 2.0GHz, which determines the rate at which instructions are executed.

Streamlining Room Booking, Access Control, and Room Information Display

The 12.3" Industrial HMI is an ideal solution for room booking schedule, access control, and room information display applications. With its intuitive interface, users can easily book rooms, manage access permissions, and view relevant room information. The HMI provides real-time updates, ensuring accurate scheduling and efficient resource allocation. Additionally, it offers seamless integration with access control systems, allowing for secure room entry. The room information display feature enables users to view room availability, occupancy status, and other relevant details. The Industrial HMI streamlines room management processes, enhances security, and improves overall user experience in various settings such as offices, hotels, and conference centers.

SPECIFICATIONS

Display

Touch / Glass	Projected Capacitive Multi Touch Screen	Resolution	1920x720
Size	12.3 inches	Contrast Ratio	1000:1
Panel Brightness	1000.0 nits	View Angles	88,88,88,88
Active Area	292.92×110.22 mm		

System Specification

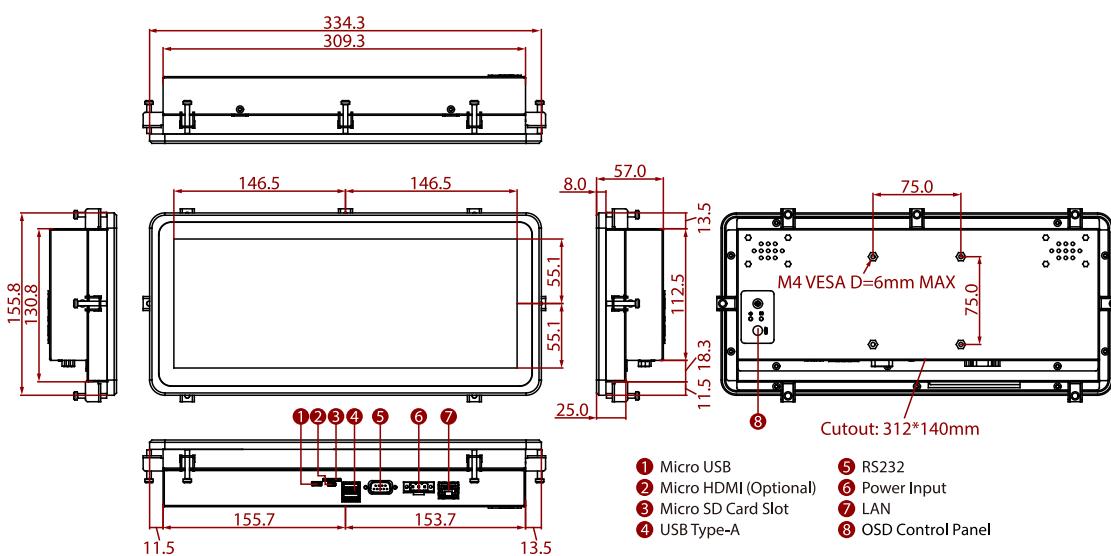
Processor	ARM A53 (Quad Core 2.0GHz)	Memory	4GB LPDDR4
Storage	eMMC: Onboard 32 GB	Operating System	Android 11 (Upgradeable to Android 13) Linux Yocto 5.10.104 with QT 5.15 (Optional) Linux Ubuntu Server 22.04 (Optional)
WLAN	Support (Optional)	BT	Support (Optional)

Mechanical

Dimension	334.3 x 155.8 x 57 mm	Mounting	Panel Mount VESA Mount
Enclosure	Metal Housing	Cooling System	Fanless Design
IO Ports			
USB Port	2 x USB 2.0 Type A 1 x Micro USB 2.0 OTG	Serial Port	1 x RS232/422/485 (Default RS232)
SD Card Slot	1 x Micro SD card slot (Max to 32GB)	Video	1 x Micro HDMI Output (Optional)
Audio	2 x Speaker (Optional)	LAN	1 x LAN 10/100/1000 Mbps
Environment			
Operating Humidity	10% to 90% RH, Non-Condensing	Operating Temperature	0°C to 50°C
Storage Temperature	-20°C to 60°C	Shock	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I	IP rating	Front IP65
Certification			
Certification	CE, FCC		
Control			
Button	1 x Power Button (Optional)		
Power			
Power Rating	12V DC with Terminal Block	Adapter	12V 50W
Accessory			
Accessory	100~240V AC to DC Adapter Power Cord VESA screws Manual Mounting clips		

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.