



# R12MG3S-GSM2(HB)

12.1" ARM A78 + A55 G-WIN GS-Series Full IP65 PCAP Panel PC



## KEY FEATURES

- 12.1" 1024 x 768 with PCAP touchscreen
- ARM 2 x A78 2.0GHz + 4 x A55 2.0GHz
- Fanless cooling system and Ultralow power consumption
- Full IP65
- Onboard 32GB eMMC
- Onboard LPDDR4 4GB
- 1 x LAN, 1 x RS232, 1 x USB, 1 x USB Type-C, 1 x Micro SD

## INTRODUCTION

Winmate G-WIN GC Series Panel PC Series offers advanced performance and flexibility, with sizes ranging from 7" to 24" and support for various operating systems, including Windows and Android. Designed with a fanless cooling system and ultra-low power consumption, these panel PCs feature a front IP65-rated edge-to-edge flat design for water and dust resistance and easy cleaning. With versatile I/O options, including USB, HDMI, and RS232/422/485, these robust devices are ideal for industrial automation, kiosks, and control systems, ensuring reliability in harsh environments.

## OVERVIEW



### Seamless Gestures Enabled by PCAP Touch

The GS series panel PC with PCAP displays seamlessly reacts to touch input, accommodating single-touch, dual-touch, and multi-touch functionalities with ease. In contrast to resistive screens, they operate without the need for pressure, thereby improving accuracy and user comfort. These displays find extensive utilization across various sectors such as consumer electronics, medical equipment, and industrial control systems, significantly enriching user interaction across a diverse range of applications.

### Enhanced Performance and Reliability

The GS series Panel PC integrating eMMC storage with DDR4 memory offers optimized performance, reliability, data integrity, space efficiency, energy efficiency, and cost-effectiveness, making it a compelling choice for a wide range of industrial applications requiring robust and efficient computing solutions.





**Silence and Performance Combined**

By adopting fanless cooling systems featuring heat sinks and vapor chambers, the Winmate GS Series ensures quiet and energy-efficient operation, eliminating the usual noise associated with fans. Specifically crafted for panel PCs and industrial settings, they offer smooth performance without compromising on silence. Additionally, these advanced cooling methods contribute significantly to energy conservation, enhancing their overall value.

**Water Resistance (IP65)**

The G-WIN GS series HMI panel PC features a front IP65 rating, providing robustness in challenging environments against water and dust. This shield defends it from water splashes, dust, and other contaminants, preserving operational reliability. With this certification, operators can confidently employ the HMI in demanding industrial conditions, without fears of damage from moisture or dust. This attribute enhances dependability and durability, facilitating effective support for critical industrial operations.



**Diverse I/O Ports**

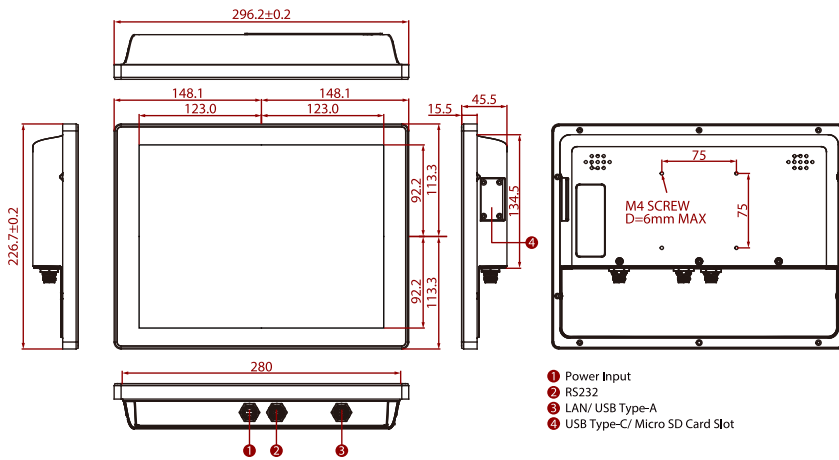
Tailored to address diverse industrial requirements, the Winmate G-WIN GS Series Panel PC offers an array of I/O interfaces, such as 1 x LAN, 1 x RS232, 1 x USB, 1 x USB Type-C, 1 x Micro SD. These interfaces enable effortless connectivity and interaction with a wide array of external devices and peripherals, enhancing the versatility of the Panel PCs for various applications.

**SPECIFICATIONS**

Display			
<b>Touch / Glass</b>	Projected Capacitive Multi Touch Screen Protection Glass (Optional)	<b>Resolution</b>	1024x768
<b>Size</b>	12.1 inches	<b>Contrast Ratio</b>	1000:1
<b>Panel Brightness</b>	500 nits 1000 nits(Optional)	<b>View Angles</b>	89,89,89,89
<b>Active Area</b>	245.76x184.32 mm		
System Specification			
<b>Processor</b>	ARM 2 x A78 2.0GHz + 4 x A55 2.0GHz	<b>Memory</b>	4GB LPDDR4
<b>Storage</b>	Onboard 32 GB	<b>Operating System</b>	Android 13 Linux Yocto 5.10.104 with QT 5.15 (Optional) Linux Ubuntu 22.04 (Optional)
Environment			
<b>Operating Humidity</b>	10% to 95% RH, Non-Condensing	<b>Operating Temperature</b>	-15°C to 55°C
<b>Storage Temperature</b>	-30°C to 60°C	<b>Shock</b>	MIL-STD-810H Method 516.8 Procedure I
<b>Vibration</b>	MIL-STD-810H Method 514.8 Procedure I	<b>IP rating</b>	IP65
Certification			
<b>Certification</b>	CE, FCC		
IO Ports			
<b>USB Port</b>	1 X USB 2.0 (M12 type) 1 X USB Type-C	<b>Serial Port</b>	1 x RS232 (M12 type)(Optional 422/485)
<b>SD Card Slot</b>	1 x Micro SD card slot	<b>Audio</b>	2 x Speaker
<b>LAN</b>	1 x LAN 10/100/1000 Mbps (M12 type)		
Mechanical			
<b>Dimension</b>	296.2 x 226.7 x 45.5 mm	<b>Mounting</b>	Panel mount VESA mount (Optional)
<b>Enclosure</b>	Metal Housing with Aluminum Bezel	<b>Cooling System</b>	Fanless Design
Power			
<b>Power Rating</b>	12V DC (M12 type)		
Accessory			
<b>Accessory</b>	Quick Start Guide (Hardcopy) M12 Power Cable M12 Serial Interface Cable M12 USB/ LAN Cable I/O Protective Cap x 3		



**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.

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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