

# G900G7

8" ARM A78 + A55 Rugged Robotic Controller



## KEY FEATURES

- 8" 1920 x 1200 IPS LED Panel with direct optical bonding
- 4GB RAM + 64GB eMMC
- ARM Genio 510 2 x A78 2.0GHz + 4 x A55 2.0GHz
- Supports WIFI, BT, and optional 4G/5G
- Sunlight readable with antiglare solution
- All-weather, dust, and water-resistant design (IP65). MIL-grade drop, Shock and vibration

## INTRODUCTION

Winmate Robotic Controller is an advanced control solution designed specifically for modern automation and robotics applications, delivering exceptional performance and reliability in demanding industrial environments. These controllers integrate cutting-edge technology with a rugged design, making them ideal for industries that require precision and durability. Equipped with powerful Intel and Qualcomm processors, Winmate Robotic Controllers support multitasking while handling complex computations and data processing needs.

## OVERVIEW



### Durable and High-Performance Design

The Winmate G900G7 Handheld Robotic Controller is engineered to deliver exceptional performance in challenging industrial settings. Powered by a Qualcomm® processor and running on Android or Linux Ubuntu, this device is optimized for applications requiring robust computational power. Its rugged construction meets IP65 standards for water and dust resistance and adheres to military-grade certifications for drop, shock, and vibration.

### Uninterrupted Operation with Hot-Swappable Power

Equipped with a removable battery, the Winmate G900G7 Handheld Robotic Controller ensures uninterrupted operations, even during extended use. The hot-swappable design allows users to replace the battery without powering down the device, making it ideal for critical applications that demand consistent uptime. This feature minimizes downtime and enhances productivity, particularly in field operations.





### Seamless Connectivity Across Networks

Designed for seamless communication, the Winmate G900G7 Handheld Robotic Controller supports WiFi, Bluetooth, and optional 4G/5G connectivity. These connectivity options provide reliable and high-speed data transfer, ensuring smooth integration with robotic systems and other industrial networks. This enhanced connectivity empowers users with real-time control and data access in diverse applications, from smart manufacturing to defense applications.

### Tailored Configurations for Versatile Applications

Winmate offers a fully customizable robotic controller solution tailored to user-specific needs. The Winmate G900G7 Handheld Robotic Controller supports various wireless modules and features a modular design with configurable joysticks, switches, and buttons. This flexibility allows users to adapt the device to different robotic systems and operational requirements, making it a versatile tool for modern industrial automation.



## SPECIFICATIONS

### Display

<b>Bonding</b>	Optical Bonding for Sunlight Viewability	<b>Type</b>	Projected Capacitive Multi Touch
<b>Viewability</b>	Anti-Glare touch treatment	<b>Touch Mode</b>	Support Hand / Gloves and Rain Mode
<b>Resolution</b>	1920x1200	<b>Size</b>	8.0 inches
<b>Contrast Ratio</b>	1000:1	<b>Panel Brightness</b>	1000.0 nits
<b>View Angles</b>	85,85,85,85		

### System Specification

<b>Processor</b>	Genio 510 2 x A78 2.2GHz + 4 x A55 2.0GHz	<b>Memory</b>	4GB
<b>Storage</b>	64GB eMMC	<b>Operating System</b>	Android 13.0
<b>WLAN</b>	Support	<b>BT</b>	Support
<b>WWAN</b>	4G LTE (Optional) 5G (Optional)	<b>GNSS</b>	GPS/GLONASS

### Mechanical

<b>Dimension</b>	259.8 x 166.1 x 44.2 mm	<b>Cooling System</b>	Fan Design
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### IO Ports

<b>USB Port</b>	1 x USB 3.0 (Type-A) 1 x USB 3.1 Gen 1 (Type C)	<b>Video</b>	1 x micro HDMI output
<b>Audio</b>	1x Speaker	<b>LAN</b>	1 x M8 LAN Connector (10/100 Mbps , Max to 250 Mbps)

### Environment

<b>Operating Humidity</b>	10% to 90% RH, non-condensing	<b>Operating Temperature</b>	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)
<b>Storage Temperature</b>	-30°C to 70°C (-22°F to 158°F)	<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
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### Control

<b>Button</b>	2 x joystick 2 x Roller switch 6 x buttons
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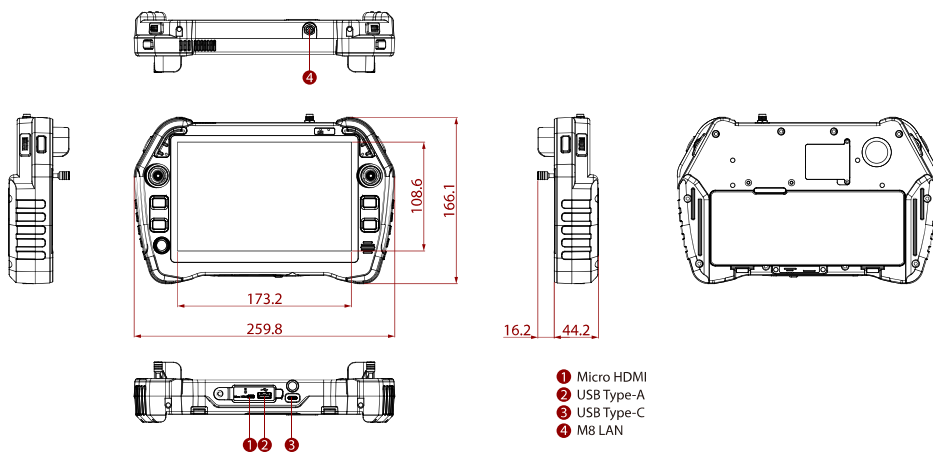
### Power

<b>Battery</b>	11.4V, typ. 3500 mAh Lilon Rechargeable Internal Battery (3S1P) 11.4V, typ. 4750 mAh Lilon Rechargeable Secondary Battery (3S1P)	<b>Power Rating</b>	1 x USB (Type C) (Charging)
<b>Adapter</b>	PD Adapter 100W		

### Accessory

<b>Accessory</b>	1 x PD Adapter 100W 1 x M8 LAN external cable(2M) 1 x Power Cord	<b>Optional Accessory</b>	shoulder strap(Optional)
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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.