

# G101G7

10.1" ARM A78 + A55 Rugged Robotic Controller



## KEY FEATURES

- 10.1" 1920x1200 LED Panel with PCAP Touch
- Android 13.0/Linux Ubuntu
- 4G RAM + 64G eMMC
- ARM Genio 510 2 x A78 2.0GHz + 4 x A55 2.0GHz
- Supports WIFI, BT and optional 4G
- All-weather, dust, and water-resistant design (IP65). MIL-grade drop, Shock and vibration

## INTRODUCTION

Winmate's Rugged Handheld Robotic Controller Series is a versatile and durable solution tailored for robotics, defense, public safety, and industrial automation. Available in sizes from 5.5" to 10.1", these controllers support Windows, Android, and Linux, providing flexibility for various applications. Featuring IP65-rated water and dust resistance, along with MIL-grade shock and vibration protection, they are built for all-weather reliability. With PCAP touchscreens, Intel or ARM processors, Wi-Fi, Bluetooth, and optional 4G connectivity, these robotic controllers deliver robust performance in demanding environments.

## OVERVIEW



### Built for Extreme Conditions

As part of Winmate's robust robotics controller lineup, the G101G7 is designed to withstand harsh conditions. It complies with US defense standard MIL-STD 810H and is IP65-rated, making it perfect for remote vehicle control in demanding environments.

### Securing the Device from Unauthorized Access

In addition to the embedded TPM IC in the Winmate rugged robotics controller series, the G101G7 controller offers optional OPAL SSD to safeguard sensitive data from unauthorized access. These security features are integrated into the device, ensuring it remains lightweight, compact, and user-friendly without compromising on security.





### Reliable Power for Extended Use

Winmate's G101G7 rugged portable controller features a dual battery system that supports all-day operation. This ensures continuous power, allowing pilots to focus on their aerial missions without interruption.

### Tailored for Your Needs

At Winmate, we work closely with our customers to deliver rugged solutions tailored to industry demands and workforce needs. Our robotics controller solutions offer configurable wireless modules, joysticks, switches, and buttons, all in a modular design.



### Advanced Wireless Communication

The robotics controller supports optional WIFI, bluetooth, and 4G/5G connectivity, making it an essential tool for UAV enthusiasts. Its versatile connectivity options allow users to access live video feeds, control their robotics remotely, and stay connected to the internet while flying.

## SPECIFICATIONS

### Display

<b>Resolution</b>	1920x1200	<b>Size</b>	10.1 inches
<b>Contrast Ratio</b>	800:1	<b>Panel Brightness</b>	800.0 nits
<b>View Angles</b>	85,85,85,85	<b>Type</b>	Projected Capacitive Multi Touch
<b>Viewability</b>	Anti-Glare touch treatment	<b>Touch Mode</b>	Support Hand / Gloves and Rain Mode

### 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>Security</b>	Trusted Platform Module (TPM) 2.0
<b>Operating System</b>	Android 13.0 Linux Ubuntu	<b>WLAN</b>	Support
<b>BT</b>	Support	<b>WWAN</b>	4G (Optional)
<b>GNSS</b>	GPS/GLONASS	<b>Sensors</b>	Light Sensor

### Camera

<b>Front Camera</b>	2MP Front Camera
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### Mechanical

<b>Dimension</b>	369.35 x 221.5 x 67.3 mm	<b>Weight</b>	2.4kg
<b>Cooling System</b>	Fan Design		

### IO Ports

<b>USB Port</b>	1 x USB 2.0	<b>SD Card Slot</b>	1 x Micro SD Card Slot (Max to 2TB)
<b>Video</b>	2 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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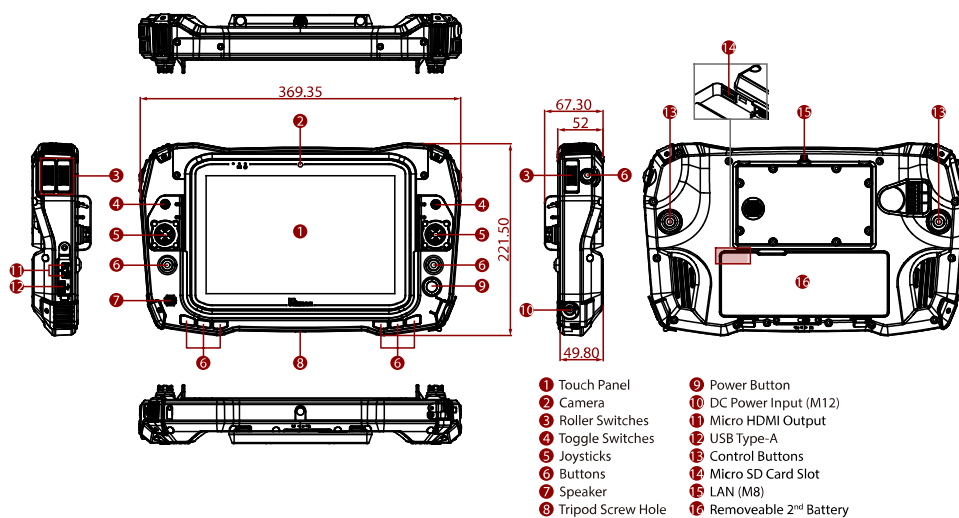
### Control

<b>Button</b>	Left Side: 1x joystick 2x roller switch 1x 2 band toggle switch 4x button (front side) 1x control button (rear side) Right Side: 1x joystick 1x roller switch 5x button (front side) 1x power button 1x 2 band toggle switch 1x control button (rear side)
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### Power

<b>Battery</b>	11.4V, typ. 3500 mAh Lilon Rechargeable Internal Battery (3S1P) 11.4V, typ. 3500 mAh Lilon Rechargeable Secondary Battery (3S1P)	<b>Power Rating</b>	19V DC
<b>Accessory</b>	1 x Adapter 19V/65W 1 x M8 LAN external cable(2M) 1 x Power Cord	<b>Optional Accessory</b>	Battery Charger (Optional) Stylus (Optional) shoulder strap(Optional)

## 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.