

G900AD

8" Intel® Core™ i5-1235U Rugged Robotic Controller



KEY FEATURES

- 8" 1920 x 1200 IPS LED Panel with direct optical bonding
- Intel® Core™ i5-1235U processor
- Sunlight readable with antiglare solution
- Supports WIFI, BT and optional 4G/5G
- 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-inch to 10.1-inch, 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



Rugged and Advanced Build Design

The Winmate G900AD Handheld Robotic Controller is built for durability and high performance in demanding environments. Featuring an Intel® processor, it provides the computing power required for a wide range of applications, including robotic operations. Its rugged design meets IP65 standards for water and dust resistance and adheres to military-grade certifications for drop, shock, and vibration resistance, ensuring dependable functionality even in the harshest industrial conditions.

Uninterrupted Operation with Hot-Swappable Power

Equipped with a removable battery, the Winmate G900AD 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 G900AD 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.

Winmate offers a fully customizable robotic controller solution tailored to user-specific needs. The Winmate G900AD 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

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

System Specification

Processor	Intel® Core™ i5-1235U 3.3GHz(up to 4.40 GHz) Intel Core i3/i7 Processor (Optional)	Memory	8GB DDR5 SDRAM, up to 32GB
Storage	256GB SSD 512GB SSD (Optional) 1TB SSD (Optional) 2TB SSD (Optional)	Operating System	Windows 10 IoT Enterprise LTSC (64 bit) (Optional) Windows 11 IoT Enterprise LTSC (64 bit) (Optional) Linux Ubuntu 22.04 (Optional)
WLAN	Support	BT	Support
WWAN	4G LTE (Optional) 5G (Optional)	GNSS	GPS/GLONASS

Mechanical

Dimension	259.8 x 166.1 x 44.2 mm	Cooling System	Fan Design
------------------	-------------------------	-----------------------	------------

IO Ports

USB Port	1 x USB 3.0 (Type-A) 1 x USB 3.2 Gen 2 x 1 (Type C)	Video	1 x micro HDMI output
Audio	1x Speaker	LAN	1 x M8 LAN Connector (10/100 Mbps , Max to 250 Mbps)

Environment

Operating Humidity	10% to 90% RH, non-condensing	Operating Temperature	-20°C to 60°C (AC mode), -10°C to 50°C (Battery mode)
Storage Temperature	-30°C to 70°C (-22°F to 158°F)	Shock	MIL-STD-810H Method 516.8 Procedure I
Vibration	MIL-STD-810H Method 514.8 Procedure I	IP rating	IP65

Certification

Certification	CE, FCC
----------------------	---------

Control

Button	2 x joystick 2 x Roller switch 6 x buttons
---------------	--

Power

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

Accessory

Accessory	1 x PD Adapter 100W 1 x M8 LAN external cable(2M) 1 x Power Cord	Optional Accessory	shoulder strap(Optional)
------------------	--	---------------------------	--------------------------

DIMENSIONS UNIT:MM

NOTE

