

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 G900G7 is a 8-inch ARM A78 + A55 Rugged Robotic Controller engineered for industrial automation, embedded systems, and mission-critical applications. It combines 8-inch display with 1920x1200 resolution, IP65, and 8" 1920 x 1200 IPS LED Panel with direct optical bonding to support reliable operation in harsh industrial environments. With 4GB RAM + 64GB eMMC, the G900G7 helps OEMs, system integrators, and project teams deploy durable, configurable solutions for demanding field, factory, and mission-critical applications.

SPECIFICATIONS

Display

Bonding	Optical Bonding for Sunlight Viewability	Type	Projected Capacitive Multi Touch
Viewability	Anti-Glare treatment + MOSMITE™ film	Touch Mode	Support Hand / Gloves and Rain Mode
Resolution	1920x1200	Size	8.0 inches
Contrast Ratio	1000:1	Panel Brightness	700 (MOSMITE™ Enhanced, >1000-nit-class Sunlight Readability) nits
View Angles	85,85,85,85		

System Specification

Processor	Genio 510 2 x A78 2.0GHz + 4 x A55 2.0GHz	Memory	4GB
Storage	64GB	Operating System	Android 13.0 Linux Ubuntu 22.04 (Optional)
WLAN	Support	BT	Support
WWAN	4G LTE (Optional, mutually exclusive with RF Module) 5G (Optional, mutually exclusive with RF Module)	GNSS	GPS/GLONASS

Mechanical

Dimension	259.8 x 166.1 x 44.2 mm	Weight	1.1kg
Cooling System	Fanless Design		

IO Ports

USB Port	1 x USB 3.0 (Type-A) 1 x USB 2.0 (Type C,PD)	Video	1 x micro HDMI output(Optional)
Audio	1x Speaker	LAN	1 x M12 LAN Connector (Mutually exclusive with RF Module) 1 x M10 Push-pull LAN Connector (Optional, mutually exclusive with RF Module)

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
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Control

Button	2 × Hall-effect Joysticks (Full self-centering; optional non-centering throttle axis) 7 × Momentary Push Buttons 2 × Hall-effect Roller Switches
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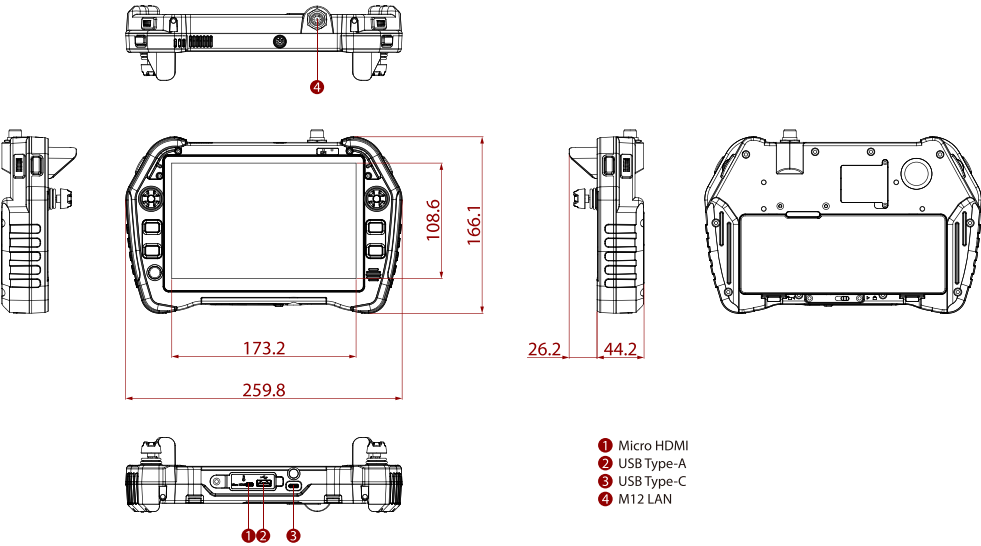
Power

Battery	Standard : 11.4V, typ. 3500 mAh Lilon Removable Battery (3S1P) Optional : 11.4V, typ. 4750 mAh Lilon Removable Battery (3S1P)	Battery Operating Time	Standard Battery : 5.5hrs High Capacity Battery : 7.5hr
Power Rating	20V DC	Adapter	20V/5A PD Adapter

Accessory

Accessory	1 × PD Adapter 100W 1 × M12 LAN External Cable 1 × Power Cord	Optional Accessory	Microhard pMDDL2450 (Mutually exclusive with LAN) High Capacity Battery M10 Push-pull Type LAN Cable
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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.
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