G101AD-A

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

CE

FC

KEY FEATURES

- 10.1" 1920 x 1200 IPS LED Panel with direct optical bonding
- Intel® Core™ i5-1235U processor
- All-weather, dust, and water-resistant design (IP65). MIL-grade drop, Shock and vibration
- Supports WIFI, BT and optional 4G/5G
- With one removable battery

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.

SPECIFICATIONS

Display

Resolution	1920x1200	Size	10.1 inches
Contrast Ratio	800:1	Panel Brightness	800.0 nits
View Angles	85,85,85,85	Bonding	Optical Bonding for Sunlight Viewability
Type	Projected Capacitive Multi Touch	Viewability	AG+AF touch treatment

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	M.2 2280 M-Key NVMe 256GB SSD, Up To 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	802.11a/b/g/n/ac/ax	BT	5.3
WWAN	4G LTE (Optional) 5G (Optional)	GNSS	GPS/GLONASS

Mechanical

Dimension	317.75 x 188.87 x 35.8 mm	Weight	1.6kg
Cooling System	Fan Design		

IO Ports

USB Port	1 x USB 3.0 (Type-A) 1 x USB 3.0 (Type C)	Video	1 x micro HDMI output
Audio	2x Speaker	LAN	1 x M10 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

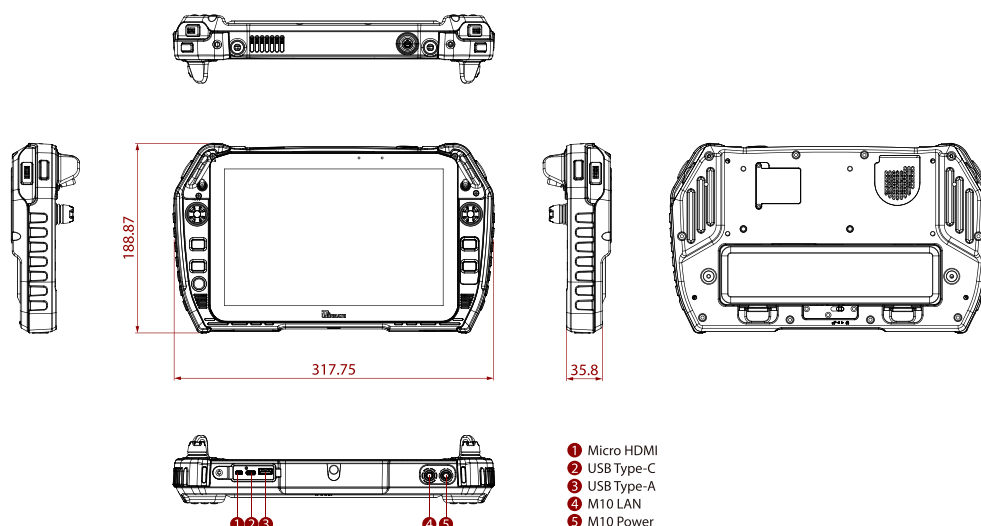|	
Button	Left Side: 1 x Two Band Toggle Switch 1 x Joystick 1 x Roller switch 4 x Buttons Right Side: 1 x Two Band Toggle Switch 1 x Joystick 1 x Roller switch 3 x Buttons 4 x Buttons (Optional)

Power

Battery	10.9 V, typ. 6700 mAh LiIon Removable Battery (3S2P)	**Power Rating**	19V DC
Adapter	100-240V, 50-60Hz / 19V DC		

Accessory

Accessory	1 x Adapter 120W 1 x M10 LAN External Cable 1 x M10 Power External Cable 1 x Power Cord

DIMENSIONS   UNIT:MM

188.87

317.75

35.8

❶ Micro HDMI
❷ USB Type-C
❸ USB Type-A
❹ M10 LAN
❺ M10 Power

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.