M156AD

15.6" Windows Rugged Tablet PC with Intel® Core™ i5-1235U

KEY FEATURES

- 12th generation Intel® Processor Family - Alder Lake Processor
- 15.6" FHD Panel resolution with PCAP touch
- Sunlight readable with antiglare solution
- Hot-swappable battery design
- USB TypeC port support PD 3.0 and ALT mode
- Integrated GigaLAN Port
- MIL-STD-461G and MIL-STD-810H Compliant
- IP65 waterproof and dustproof

OVERVIEW

Lightning-Fast Network Performance with GigaLAN Port

The M156AD rugged tablet comes with a GigaLAN port, offering high-speed data and image transfers from 10 to 1000 Mbps. Ideal for factory automation and AIoT applications, it enhances productivity by minimizing latency and improving response times, ensuring swift and efficient connectivity for seamless task execution.

Compliance with MIL-STD-810H and MIL-STD-461G Standards

The M156AD rugged tablet undergoes MIL-STD-810H testing to ensure it can withstand shock, vibration, and drops, mimicking real-world conditions for durability assessment. Additionally, it undergoes MIL-STD-461G evaluation for electromagnetic compatibility, ensuring reliable operation in environments with electromagnetic interference while maintaining safe emission levels.

Hot-Swappable

Winmate M156AD rugged tablet ensures prolonged usage with its dual battery setup and a hot-swappable design. It allows users to effortlessly swap batteries for uninterrupted productivity throughout the day. This design enhances convenience and reliability, catering to the demands of dynamic work environments.

Enhanced Interaction with Versatile Features

The Winmate M156AD rugged tablet features 15.6” FHD panel resolution options to fulfill diverse applications. Its anti-glare technology ensures readability in direct sunlight, while the projective capacitive touch supports switchable rain, glove, and stylus modes for versatile interaction.

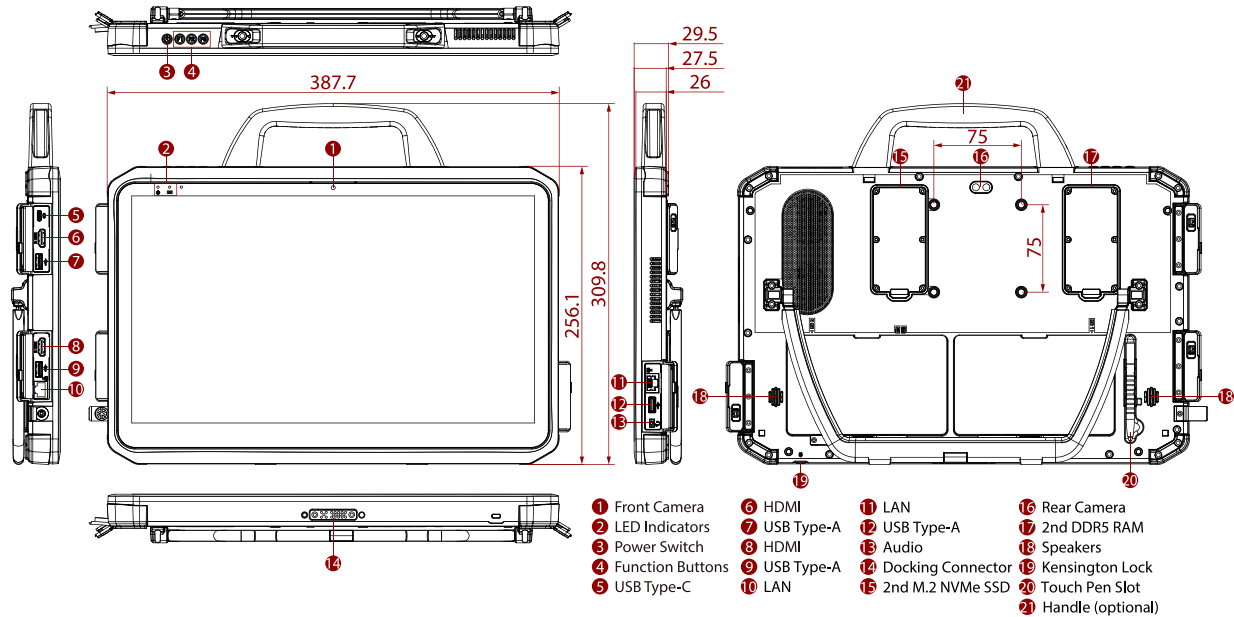### Industrial-Grade Tablet with IP65 Water Resistance

The M156AD rugged tablet, equipped with an IP65 rating, ensures resilience against dust and low-pressure water jets, guaranteeing reliability in demanding environments. These qualities render it ideal for diverse industries prioritizing durability and steadfast performance.

SPECIFICATIONS

Display			
Bonding	Optical Bonding for Sunlight Viewability	**Type**	Projected Capacitive Multi Touch
Resolution	1920x1080	**Size**	15.6 inches

Contrast Ratio	800:1	**Panel Brightness**	800.0 nits
View Angles	85,85,85,85		

System Specification

Processor	Intel Core i5-1235U (up to 4.4GHz)	**Memory**	8GB DDR5 SDRAM 16GB DDR5 SDRAM (Optional) 32GB DDR5 SDRAM 2nd Memory available with up to 32+32GB DDR5 SDRAM (Optional)
Storage	256GB M.2 NVMe SSD 512GB M.2 NVMe SSD (Optional) 1TB M.2 NVMe SSD (Optional) 2TB M.2 NVMe SSD (Optional) 2nd storage available with up to 2TB M.2 NVMe SSD (Optional)	**Security**	Trusted Platform Module (TPM) 2.0 Kensington Lock
Operating System	Windows 10 IoT Enterprise LTSC (64 bit) Windows 11 IoT Enterprise LTSC (64 bit) (Optional)	**WLAN**	Support
BT	Support	**WWAN**	4G LTE (Optional) 5G (Optional)
GNSS	GPS, GLONASS	**RFID**	HF RFID reader 13.56 MHz (Optional)
Sensors	Light sensor/ G-sensor / Gyro		

Camera

Front Camera	2MP Front Camera	**Rear Camera**	8MP Rear Camera with auto-focus and LED light

Mechanical

Dimension	387.7 x 256.1 x 27.5 mm	**Weight**	2.8kg
Cooling System	Fan Design		

IO Ports

USB Port	3 x USB 3.0 (Type A), 1 x USB 3.0 (Type C)	**SD Card Slot**	1 x Micro SDXC Slot
SIM Card Slot	1 x Nano SIM card slot	**Video**	2 x HDMI 4K Output (Optional)
Audio	1 x Audio combo 3.5mm audio combo jack Dual Digital Mic With Noise Cancellation Dual Speaker	**LAN**	2 x RJ45-10/100/1000 GigaLAN port
Indicator	2x LED Indicator for Power, Battery		

Environment

Operating Humidity	10% to 90% RH, non-condensing	**Operating Temperature**	-20°C to 60°C
Storage Temperature	-30°C to 70°C	**Shock**	MIL-STD-810H Method 516.8 Procedure I
Vibration	MIL-STD-810H Method 514.8 Procedure I	**IP rating**	IP65
Drop	MIL-STD-810H Method 516.8, 3 ft	**EMC**	MIL-STD-461G CE101, CE102, RE101, RE102, CS118 (Default) MIL-STD-461G CS101, CS114, CS115, CS116, RS101, RS103 (Optional)

Certification

Certification	CE, FCC

Security Function

SOTI MobiControl	SOTI MobiControl Compliance	**Kensington Lock**	Kensington Lock Support

Control

Button	1 x Power, 3 x Programmable Function Keys

Power

Battery	Hotswappable 2 x 11.55V typ. 3220 mAh LiIon Battery (3S1P)	**Battery Operating Time**	Standard. Battery: 11 hours
Power Rating	19V DC	**Adapter**	100-240V, 50-60Hz, 120W / 19.5V DC

Accessory

Accessory	Adapter and Power Cord Capacitive Stylus Standard Battery	**Optional Accessory**	Spare Battery (Optional) Battery Charger (Optional) Handle (Optional)

DIMENSIONS   UNIT:MM

Dimensions shown: 387.7, 29.5, 27.5, 26, 309.8, 256.1, 75, 75

#	Component	#	Component	#	Component	#	Component
1	Front Camera	6	HDMI	11	LAN	16	Rear Camera
2	LED Indicators	7	USB Type-A	12	USB Type-A	17	2nd DDR5 RAM
3	Power Switch	8	HDMI	13	Audio	18	Speakers
4	Function Buttons	9	USB Type-A	14	Docking Connector	19	Kensington Lock
5	USB Type-C	10	LAN	15	2nd M.2 NVMe SSD	20	Touch Pen Slot
						21	Handle (optional)

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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