8" RUGGED TABLET PC | MW-81



FEATURES

- AI-Ready Performance with Qualcomm® QCS6490 (Up to 12 TOPS)
- Ultra-Lightweight Rugged Design Built for Field Mobility
- Sunlight-Readable Display with Glove & Wet Touch Support
- Dual OS Flexibility (Windows / Android) for Deployment Versatility
- Flexible Expansion via 14-pin Rear Pogo Pin Interface
  (Supports CAC Card Reader, RFID / NFC / UWB, and High-Precision GNSS Modules)
- Optional Integrated 2D Barcode Scanner
- Built for Harsh Environments (IP66 + MIL-STD-810H)
- High-Speed Connectivity with Wi-Fi 6E & Bluetooth 5.3
- Scalable ODM/OEM Architecture for Industry-Specific Customization
- Designed for Long Lifecycle Deployment & System Integration

The MW-81 is a compact, AI-ready 8-inch rugged tablet engineered for demanding field and industrial applications. Built around the Qualcomm® QCS6490 processor, it delivers powerful edge computing performance in a lightweight, highly mobile form factor—enabling real-time data processing, seamless connectivity, and efficient workflow execution in dynamic environments.

Designed with a modular ODM/OEM architecture, the MW-81 supports flexible OS deployment, integrated data capture, and configurable expansion through its 14-pin rear Pogo pin interface. Optional modules—including CAC card reader, RFID/NFC/UWB, and high-precision GNSS—can be selected based on project requirements and are implemented through this expansion interface. The 2D barcode scanner is available as an optional integrated feature, built directly into the device upon request.

With IP66 protection, MIL-STD-810H durability, and scalable customization options, the MW-81 provides a reliable foundation for long lifecycle deployment across industries such as logistics, public safety, field service, and industrial automation.

SPECIFICATIONS

RUGGEDNESS

IP Rating	IP66
Drop Rating	4ft (1.2m) to concrete
Shock Rating	MIL-STD-810H, Method 516.8, Procedure I
Vibration Rating	MIL-STD-810H, Method 514.8, Procedure I
ESD Protection	8kV contact / 15kV air

SYSTEM

Processor	Qualcomm® QCS6490 Octa-core (up to 2.7GHz), up to 12 TOPS
GPU	Qualcomm® Adreno™ 643
Memory	8GB LPDDR5
Storage	128GB UFS
OS	Windows 11 IoT Enterprise, Optional: Android 15

DISPLAY

Screen Size	8'' IPS LCD
Resolution	1280 × 800 (WXGA)
Brightness	700 nits
Contrast Ratio	1000:1
Touch Screen	10-point capacitive multi-touch Supports finger, glove, and wet touch input

COMMUNICATIONS

Wi-Fi	Wi-Fi 6E (802.11 a/b/g/n/ac/ax, 2.4GHz / 5GHz / 6GHz)
Bluetooth	Bluetooth 5.3
GNSS (Optional)	u-blox NEO-M10 module Supports GPS, GLONASS, Galileo, and BeiDou (BDS)

POWER

Battery	38Wh (7.7V / 4800mAh), 2S1P Li-ion
Power Adapter	USB Type-C, 40W

I/O INTERFACE

Sensors	Ambient light sensor, Accelerometer (G-sensor)
Audio	2 × microphones 1 × speaker
Camera	Front: 5MP Rear: 13MP, autofocus with LED flash
Ports	1 × USB Type-C (full function) 1 × 14-pin docking connector 1 × 14-pin rear Pogo pin (expansion interface)
Buttons	1 × power button 2 × volume buttons 2 × programmable buttons (F1/F2) 3 × function buttons (customizable)
2D Barcode Scanner (Optional)	Integrated 2D barcode scanner

MECHANICAL

Status Indicators	2 x LEDs (Power / Charging)
Thermal	Fanless design
Chassis	Double-injection molded housing
Color	Grey & Black
Dimensions	235.0 x 146.0 x 12.8mm
Weight	Approx. 0.65 kg

ENVIRONMENTAL

Temperature:	
- Operation	0°C to 40°C
- Storage	-20°C to 60°C
Thermal Shock	-20°C to 60°C within 5 minutes (non-operating)
Humidity	0% to 95% RH, non-condensing

Note: Specifications are subject to change without notice.

www.estonetech.com
sales@estonetech.com

U.S.-Headquarters
6834 Spring Valley Dr,
Holland, OH 43528

U.S.-West Coast
21015 Commerce Pointe Dr,
Walnut, CA 91789

Europe
Baltesakker 17-A, 5625 TC,
Eindhoven, The Netherlands

Japan
101-0021, 4F Kairaku Shinsuehiro
Bld., 6-5-12, Sotokanda, Chiyoda-Ku, Tokyo

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DIMENSIONS AND SYSTEM LAYOUT



OPTIONAL ACCESSORIES AND EXPANSION MODULES



Hand Strap



Shoulder Strap



Docking Station (14-pin)



2D Barcode Scanner

Expansion modules via rear Pogo pin interface





CAC card reader



RFID / NFC / UWB module



High-precision GNSS Module

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