Rugged Fanless System Powered by Intel® Core™ processors on Mini-ITX Architecture

Portwell WEBS-45J1

Portwell × intel ai

Ideal Industrial Platform for Factory Automation and Digital Signage

The WEBS-45J1 is a compact, fanless AI edge system designed for industrial applications requiring reliable performance and flexible integration. Built on the Intel® Q670E chipset and supporting 12th/13th/14th Gen Intel® Core™ i3/i5/i7/i9 processors, it delivers scalable compute power for real-time data processing and intelligent automation. With dual DDR5 memory slots and 2x SATA ports, it supports high-speed memory and storage access. The system features dual Gigabit Ethernet ports, multiple USB interfaces, and both M.2 E Key and M Key sockets for wireless modules and expansion. Triple display outputs with up to 8K resolution enable rich visual applications, while TPM 2.0 and watchdog timer enhance security and reliability. Designed for harsh environments, the WEBS-45J1 is ideal for smart kiosks, digital signage, factory automation applications, and edge AI deployments powered by Intel's advanced architecture.

Optional pre-assembled with Hailo-8 M.2 M Key AI Accelerator Module

Intel Products and Technologies

Accelerating AI and Analytics at the Edge

Intel® Core™ Processors

OpenVINO™ Toolkit

Key Features

Empowered by Intel.

DDR5 Memory Support

Triple Display Output

Wi-Fi Module Ready

AI Accelerator Slot

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Product Specifications

CPU	14th/13th/12th Gen Intel® Core™ processors
Graphics	Intel® UHD Graphics 770
Memory	2x SO-DIMM support DDR5 DRAM up to 96GB
Storage	2x SATAIII ports and 1x M.2 M Key slot for SATA/NVMe SSD
Wireless Network	1x M.2 E Key slot for wireless module
LAN	1x 1GbE and 1x 2.5GbE RJ45 connectors
Operating/Storage Temp.	-20°C ~ 60°C / -40°C ~ 80°C
Dimension (W x D x H)	253mm x 201.2mm x 111.8mm
Weight	5.25kg
OS	Windows 11 IoT

Learn More

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