

# Rugged Fanless Low-Profile Industrial Automation Computer



## Karbon 521

### Scalable Rugged AI Computing for the Industrial Edge

The Karbon 521 is a rugged, low-profile industrial computer engineered to perform reliably in the most challenging edge environments. Leveraging powerful Intel® Core™ Ultra processors (Series 1 and 2), this system delivers unwavering performance for industrial automation, remote deployments, and in-vehicle applications. The system supports up to 96 GB of DDR5 memory for efficient operation and offers robust storage options including 2x M.2 2280 M-Key slots (PCIe 4, SATA III). The Karbon 521 is Intel vPro®-capable (depending on the CPU selected), enabling remote KVM access and firmware updates and designed specifically for demanding edge AI performance and scalability. It features a passively cooled, fanless design and a low-profile form factor optimized for DIN, Wall, VESA, and even rack mounting, making it suitable for space-constrained and dynamic industrial settings.



***Modular, rugged  
edge system with  
scalable expansion  
for powerful,  
reliable industrial  
performance  
powered by  
Intel® Core™ Ultra  
processors***

## Intel Products and Technologies

Accelerating AI and Analytics at the Edge



[Intel® Core™  
Ultra Processors](#)



[Intel vPro®](#)



[Intel® Ethernet](#)



[Intel® Arc™  
Graphics](#)



[OpenVINO™  
Toolkit](#)

# Key Features

Empowered by Intel.



Multiple Port Options



Automotive Power Input



Enhanced AI Capability



Comprehensive Range of Interfaces

## OnLogic Karbon 521



intel ai

Intel® AI Edge Systems

## Product Specifications

CPU	Intel® Core™ Ultra Processor (Series 1)
Graphics	Intel® Arc™ Graphics
Memory	Up to 96 GB DDR5 (5600 MHz)
Storage	2× M.2 2280 M-Key (PCIe Gen4 / SATA III) 1× M.2 B-Key slot for additional storage/wireless module
Wireless Network	M.2 slots support Wi-Fi/Bluetooth modules (E-Key and B-Key)
LAN	4× 2.5 GbE LAN (Intel® Ethernet Controller I226-IT)
Operating Temp.	-40°C ~ 70°C
Dimension (W x D x H)	50.8mm × 177mm × 225mm
Weight	2.26 kg
OS	Bare Metal / Windows / Ubuntu
I/O Options	4× 2.5 GbE LAN, 6× USB 3.2 Gen2 Type-A, 2× USB-C - Thunderbolt™ 4 / Up to 4× COM (RS-232/422/485), Optional CAN Optional DIO, 2× DisplayPorts

## Learn More

[OnLogic Karbon 521](#)

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