RT Rack

Optimized Industrial PC for CANoe Simulations With Improved Timing Behavior

What Is the RT Rack?

The RT Rack is an industrial PC with an operating system that is optimized for CANoe simulations. It helps you master demanding simulation tasks with confidence. Its modular and scalable architecture lets you adapt the platform to changing requirements, integrate the hardware you need, and protect existing investments. This gives you the flexibility to build a test system tailored to your application today and ready for future challenges.

Advantages

> **Master complex realtime testing tasks with confidence**, even in applications with high channel density and demanding performance requirements.
> **Increase the quality and reproducibility of your test results** through improved and deterministic system behavior.
> **Reuse proven CANoe configurations and simulations**, minimizing migration effort and accelerating project startup.
> **Scale your test system as requirements evolve,** without being tied to a fixed hardware architecture.
> **Reduce complexity** by bringing multiple test functions together on a powerful and centralized platform.

Application Area

Execute your CANoe simulation on a dedicated platform and keep configuration and evaluation on your workstation. This separation minimizes the influence of operating system activities on CANoe simulation execution, helping you to achive improved timing behavior, greater determinism, and consistently reliable test results.

Variants

The RT Rack is available in two variants for different CANoe operating modes and system configurations:

> The **CANoe RT Rack** variant is optimized for executing CANoe simulations. Simulations run in CANoe Distributed Mode, providing improved timing performance. In this configuration, the RT Rack behaves like a network interface.
> Choose the RT Rack as an **Industrial PC** variant with CANoe installed to run Vector applications directly on the system. This variant operates in the CANoe Interface Mode and does *not* include the optimizations available in the CANoe RT Rack variant.

More Information:

vector.com/fs-rt-rack

Let's Talk:

vector.com/contact



The RT Rack with connections and expansion options for various PCIe cards (figure similar).

Technical Data	RT Rack "AS246E"	RT Rack "CS246E"
Housing	19" IPC, ATX	
Dimensions	4 HU, dimensions (W x D x H): 480 mm x 445 mm x 176 mm	
CPU/Processor	Intel® Xeon® E-2176G, 3.7-4.7 GHz, 12 MB smart cache, 6 cores/12 threads	
Mainboard	ATX mainboard, Intel® C246 chipset, 4x DDR4 dual-channel	
Expansion slots	7 available PCIe slots: - PCIe (x16): 1x PCIe (x16) **or** 2x PCIe (x8) **or** 1x PCIe (x8) and 2x PCIe (x4) - PCIe (x4): 2x PCIe (x4) - PCIe (x1): 2x PCIe (x1)	7 available PCIe slots: - PCIe (x16): 1x PCIe (x16) **or** 2x PCIe (x8) - PCIe (x4): 2x PCIe (x4) - PCIe (x1): 3x PCIe (x1)
Memory	64 GB, DDR4 ECC	
Power supply	400 W industrial power supply 100...240 VAC	
Housing fan	3x (2x housing, 1x Shuttle SATA)	
Operating temperature	0...40 °C	
Hard drive	512 GB, 2.5" SATA SSD	
Shuttle SATA	3.5" clip-on frame for 2x 2.5" SSD	
Security	TPM 2.0 integrated	- CANoe RT Rack variant: TPM 2.0 not available - Industrial PC variant: TPM 2.0 integrated
External interfaces	Back side: 1x VGA, 1x HDMI, 2x DisplayPort, 3x Gbit LAN, 6x USB 3.1, 2x USB 2.0, 1x PS/2, Audio (Line In/Out, Mic In) Front side: 2x USB 2.0	Back side: 1x VGA, 1x HDMI, 1x DVI, 2x Gbit LAN, 4x USB 3.1, Audio (Mic In, Line Out) Front side: 2x USB 3.0
Operating system variant CANoe RT Rack	Modified Windows 11 IoT (64 bit)	
Extended Real Time (ERT)	No	Partly: - Yes: with operating system variant CANoe RT Rack, Windows 10 IoT - No: Windows 11 IoT
Operating system variant Industrial PC	Windows 11 IoT (64 bit)	