NOVA R680E

Industrial PC for Machine Control

Thanks to its numerous connections, including 10 USB ports and 4 LAN ports as well as two PCIe slots, the NOVA can be used in a wide range of applications in the fields of machine learning or big data.

In addition to a temperature range from -10°C to +50°C, the system also has a wide range current input from 8V to 48V.

Technical Data

To the white paper "AI at the Edge"!

System

CPU	Intel® Core i5-14500T (FCLGA1700, 6 Performance Cores, 8 Efficiency Cores)
CHIPSET	Intel® R680E
GPU	Intel® UHD Graphics 770 (integrated) Nvidia® RTX A2000 (12GB DDR6), Nvidia® RTX 2000 (16GB DDR6), Nvidia® RTX 4000 (20GB DDR6) (optional)
RAM	16 GB SO-DDR5 (optional up to 64GB)
SSD / HDD	512 GB M.2 PCIe 4.0 NVMe (optional up to 2TB) 2 x 2.5? SATA3 SSD/HDD

I/Os

Front	1 x DC-IN via PIN + Phoenix Plug 4 x 2.5 Gbps LAN RJ45 GbE 2 x HDMI 2.0 // 4096×2340@60Hz 2 x DisplayPort 1.4a // 4096×2340@60Hz 2 x COM RS232 2 x COM RS232/422/485 1 x MIC-In 1 x LINE-Out 8 x USB 3.2 Gen 2×1 1 x GPIO 8-bits (4 x GPI; 4 x GPO), 5~35V, isolation 1.5KV
Back	2 x USB 3.2 Gen 1×1

Environment / Mass

Dimensions (W x D x H)	217 mm x 127 mm x 240 mm
Ambient temperature (operation)	-10° to +50°C
Cooling	passive at 0.7 m/s air flow rate

Environment / Mass

Idle power consumption in W	25
Wall bracket	inclusive

Extensions

M.2	KeyM 2280 (occupied)
PCIe	2 x (x16 slot with x8 connection each)

Miscellaneous

Operating system	Windows 10 / 11 / Linux
PSU	8V – 48V DC Power Input
Standards & Certificates	CE, FCC Class A, RCM, BSMI, VCCI, UKCA, IC, IEC 62368: CE(LVD) / BSMI
Special features	The temperature range changes with an additional GPU.
Class A warning	The device is intended for use in industrial environments. Operation of this device may cause radio interference in residential areas.
Warning for 802.11a use	If you want to use the WLAN module according to 802.11a in the 5 GHz range: Use in the 5150 MHz – 5350 MHz frequency range is only permitted indoors!