

Fanless Mini - Intel 15th Gen Mobile - IP51

Compact Edge System

Fanless • Passively cooled

IP51

Our 15th Gen Rugged PC is engineered to perform reliably in the most demanding environments



Product Overview

Our rugged fanless mini PC harnesses the power of Intel's latest 15th Gen Core Ultra processors, using U5-225H and U7-255H processor, to deliver exceptional performance in a compact, durable form factor. Designed for industrial, IoT, and embedded applications, the fanless architecture ensures silent, reliable operation with no moving parts, ideal for extreme temperatures, dusty environments, or space-limited deployments. With lower power consumption and efficient performance.

Key Specifications

- Processor: Intel Core Ultra 5 225U - Intel Core Ultra 7 255U
- Operating Range: -10C to 60C
- Dual 1GbE LAN
- Encryption: fTPM 2.0 (Intel PTT)
- Maintenance free

Key benefits of FANLESS and RUGGED computers



No fans obviously means no noise, but it's not the only benefit!



No fans allow an important decrease in power consumption, making our products more sustainable!



A fanless computer eliminates the risk to draw in dust and dirt from the environment, the cause of potential failures and costly downtime.



The absence of moving parts enable our products to resist shocks and vibrations, for an increased reliability.



They are built to withstand harsh and constrained working conditions.



High Ingress Protection (IP) rating, indicating the protection level of products against both solid and liquids in electrical enclosures.



The in-house designed and milled aluminium chassis is optimized for efficient passive cooling and durability. Its conception proved their reliability in extended operating temperatures.



The aluminium used for the chassis production is repurposed and recycled, and the production waste is recycled too!

SOLUTION FAMILY

Tranquil IT - Compact Edge Systems

This platform is delivered within the Tranquil IT solution family by 2CRSi Edge. Configuration options including OS imaging, software preload, and customer branding are available without altering the certified platform baseline

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I/O Rear

DC-In 12-19V, 2x RJ45 for LAN, 2x USB3.2, 1x Display Port, 1x HDMI, 1 x 3.5mm Audio-Out, 1 x 3.5mm Mic-In, Sim Slot

Technical Specification

Processor	Intel Core Ultra 5 225U - 12 Core / 14 Thread - up to 4.80 GHz -12MB Smart Cache Intel Core Ultra 7 255U - 12 Core / 14 Thread - up to 5.2 GHz -12MB Smart Cache		
Memory	Slots: 2x SO-DIMM Slots MAX Capacity: 96GB Type: DDR5 5600 MHz SO-DIMM ECC Support: No	Storage	Storage 1 Max: 4TB M.2 NVME 2280 Storage 2 Max: 8TB 2.5" SATA SSD
Graphics Controller	Intel Arc Graphics Ultra Core	Graphics Interface	1 x HDMI 2.0 - 4096 x 2160 @ 60Hz 1 x DisplayPort 4096 x 2160 @ 60Hz
Network Interface	I219-V - 1 x RJ45 - 10/100/1000 Mbps RTL8111H - 1 x RJ45 - 10/100/1000 Mbps	Network Options	RTL8821CE Wi-Fi 5 IEEE 802.11 b/g/n/ac - 2.4GHz/5GHz + Bluetooth 4.2 AX210 - Wi-Fi 6E IEEE 802.11 b/g/n/ac/ax - 2.4GHz/5GHz/6GHz + Bluetooth 5.3, 4G/5G option
Network Feature	Wake-On-Lan PXE	Remote Management	remote switch machine intelligent
Hardware Monitoring	Watchdog On-Board	Supported OS	Windows 10 Windows 11 Linux
Encryption	fTPM 2.0 (Intel PTT)		
Power Input	2.5 x 5.5mm DC Jack		
Input Voltage	12V-19V		
Consumption	84 - 120w		

Physical Specification

I/O Front	Power switch	LED Front	Power
LED Rear	Network Uplink/Activity	COM Port Option	RS232/RS422/RS485 (Optional)
Operational	-10C to 60C (14F to 140F)	Storage Temp	-20C to 60C (-4F to 140F)
Maximum relative humidity	5% to 95%	Cooling Type	Passive Cooling
Size	51 x 177 x 208 mm	Weight	2.4 KG
Accessories	Power Supply, power cord	Optional Accessories	Wireless Antenna, VESA/WALL mount
Certifications	CEUKCARoHSFCCWEEE	Warranty	3 Years

Configuration options (OS, branding, software preload) are available and do not alter the certified platform baseline. For bespoke requirements requiring engineering change, enquire about Tranquil Studio.