

AirJet® PAK 3C

Designed to complement the NVIDIA Jetson Orin Nano/NX to unleash AI Performance.

- Fully self contained, plug and play thermal solution that includes mulitple AirJet chips and drive circuitry
- Mounts directly on NVIDIA's Jetson Orin Nano/NX Modules
- Autonomous operation
- Thin, silent, vibration free, dustproof and water resistant
- Supports up to 80 TOPS on NVIDIA Jetson
- Dissipates up to net 24 W of heat @ 25°C ambient, T_J 115°C

Heat is the biggest bottleneck in computing, but cooling is the only aspect of modern day computing that still uses century old technology. The need for vastly improved cooling to enable the massive processing required by AI is increasing rapidly, and with the forecast demand for Edge AI estimated to increase by over 300% by 2030, it will not slow down anytime soon.

The **AirJet PAK**, the world's first solid-state active cooling solution for Edge AI, leverages the revolutionary active cooling AirJet chip. The **AirJet PAK 3C** is a fully self contained active heat sink module.

Powerful Heat Removal - AirJet PAK 3C removes net 24 W of heat at a silent 26 dBA, while consuming a maximum of 4 W of power, when integrated into a compute platform with a spreader temperature of 90°C, outperforming fans in compact Edge AI devices.

Unleashing AI Performance - Designed to complement the NVIDIA Jetson Orin Nano, NX and AGX Orin modules, the **AirJet PAK 3C** is just 6.5 mm thick. This ultra-slim profile opens up new possibilities for manufacturers catering to customer demand for higher performance in more compact, silent, vibration free, and dustproof devices.

AirJet®PAK 3C

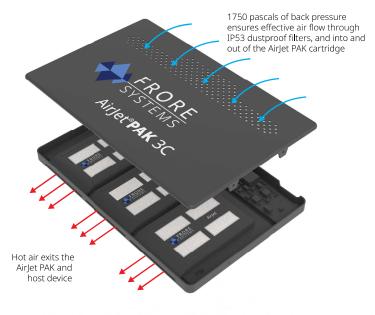
Total net heat dissipation (@ 25°C ambient, TJ 115°C)	24 W
Maximum noise (at 50cm)	26 dBA
Maximum power consumption	4 W
Back pressure	1750 Pa
Dimensions (width x length x thickness)	100 x 65 x 6.5 mm
Weight	70 g

AirJet PAK	NVIDIA Jetson	TOPS	Power
AirJet PAK 3C	Orin NX 16GB (@ 25°C ambient, TJ 95°C)	80	20 W
2x AirJet PAK 3C	Orin NX 16GB (@ 25°C ambient, T _J 95°C)	157	40 W

Device Thickness

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Each AirJet PAK 3C contains 3 AirJet Chips - the world's first solid-state active cooling chip.



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Sustained Performance and Reliability

The **AirJet PAK** generates 1750 Pascals of back pressure, ensuring effective air flow into and out of the cartridge, even when the air vents are covered with IP53 dustproof and water resistant filters. This, together with the **AirJet PAK**s intelligent self-cleaning capabilities, maximizes reliability and ensures the sustained thermal performance of the **AirJet PAK** and, as a result, the sustained high performance of the dustproof host device.

Driven autonomously, the **AirJet PAK** can independently sense the surrounding temperature using Thermoception, an innovation that allows the **AirJet PAK** to optimize its performance, maximizing heat removal without relying on temperature sensors in the host device. All the **AirJet PAK** needs to enable exceptional processor performance is a nominal power source from the host device.

In today's devices, what often determines performance is the capability of the thermal solution, not just the sophistication of the processor.

Thanks to **AirJet PAK 3C**, compact Edge AI electronic devices can now deliver on the promise of cutting edge AI technology. **Do more.**

Cross Section of AirJet®PAK Cartridge Inside Host Device



Designed to work seamlessly with the NVIDIA Jetson Orin Nano and NX Modules inside host devices

