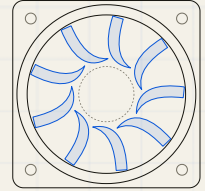


THERMAL SYSTEMS · PATENT-PENDING DEEP-TECH

# Hubless Rim-Driven *Cooling Fan*

A rim-driven axial cooling fan with **no hub, no shaft, and no wear** — with the potential to cut cooling-energy cost by up to **50%**. Engineered to cool high-density AI data centres and aircraft, in a drop-in server-standard form factor.



● ~50% LOWER COOLING ENERGY

● PROTOTYPE — IN TESTING

● PATENT PENDING · PROVISIONAL FILED JUN 2026

● DESIGN REGISTRATION FILED 2026

THE BREAKTHROUGH — THREE LOSSES OF LEGACY FANS, ELIMINATED

01

## Hubless open core

Blades are driven from the outer rim inward, leaving the centre fully open — no hub blockage, unobstructed airflow across the whole aperture.

02

## Rim-integrated blades

Each blade is continuous with the rim, sealing the tip-leakage gap that bleeds pressure and creates noise in conventional fans.

03

## Contactless suspension

A self-acting air-film bearing suspends the rotor with no physical contact — nothing to wear, nothing to lubricate.

ENGINEERED TARGETS — VALIDATED ON A WORKING PROTOTYPE NOW IN BENCH TESTING

<b>80<sub>mm</sub></b> DROP-IN SERVER ENVELOPE	<b>≥500<sub>Pa</sub></b> STATIC PRESSURE · GPU RACKS	<b>≥45%</b> TOTAL-T0-STATIC EFFICIENCY	<b>70k<sub>h+</sub></b> MAINTENANCE-FREE LIFE	<b>0</b> EXPOSED ROTATING BLADES	<b>Smart</b> PMBUS / I <sup>2</sup> C TELEMETRY
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DEVELOPMENT ROADMAP



STRATEGIC FIT — WHERE THE ADANI GROUP IS ALREADY BUILDING

## Hyperscale data centres

AdaniConneX is scaling gigawatts of green data-centre capacity. Cooling is a top energy load — a more efficient fan directly cuts PUE, cost and carbon.

## Defence & aerospace

Contactless, wear-free, enclosed-blade cooling is tailor-made for avionics — a natural adjacency to Adani Defence & Aerospace.

## Semiconductors · Make in India

High-performance cooling is a strategic import today. This platform is an Atmanirbhar answer — designed, protected and buildable at home in Gujarat.

ONE CORE TECHNOLOGY, MANY MARKETS

### Avionics

No wear, no FOD hazard — for airborne electronics where a failed fan grounds an aircraft.

### AI & GPU racks

High pressure in a standard 80 mm slot with smart telemetry — a drop-in upgrade.

### Edge & telecom

Maintenance-free life suits unattended edge nodes, 5G radios and cabinets.

### Power electronics

Efficient forced convection for EV inverters, chargers and energy systems.