

AI Infrastructure for Studios, Broadcasters, and Live Production



Executive summary

Modern media workflows demand extraordinary compute. Render farms, VFX pipelines, real-time graphics for volume stages, and live streaming now run on dense GPU infrastructure processing teraflops per second. But the environments where this work happens, from sound stages and edit suites to mobile production vehicles and broadcast control rooms, were never designed to house it.

The Iceotope KUL BOX is a compact, self-contained, liquid-cooled AI inferencing cluster built for exactly these constraints. It runs in near silence, requires no facility water or dry chillers, and delivers peak GPU performance in virtually any production environment.

The emerging infrastructure challenge

Content production is compute-hungry in ways it wasn't a decade ago. VFX workflows that once ran overnight now process frames in near real time. Volume stages built around Unreal Engine require sustained GPU throughput to keep virtual environments responsive under camera. Streaming platforms run continuous AI inference for transcoding and quality optimization. Hardware demands keep climbing.

Production environments haven't kept pace. Sound stages and edit suites are built around acoustics, not 10-50kW GPU racks. Mobile production vehicles, also known as OB trucks, carry no room for cooling infrastructure. Traditional air-cooled servers compound every one of these problems. They run loud, throw heat, and require facility support that simply isn't available on a production floor.



For distributed workflows spanning multiple sites, the challenge scales with every node added. Retrofitting each location for data center-grade cooling is expensive, disruptive, and impractical.

Iceotope KUL BOX: A modern infrastructure approach



KUL BOX was built for environments where thermal management, acoustic performance, and compute density are all non-negotiable at once. This turn-key, liquid-cooled AI inferencing cluster integrates compute, cooling, networking, memory, and storage into a compact 24U or 48U footprint supporting up to 24 or 48 NVIDIA GPUs. It requires no dry chillers, facility water access, or HVAC upgrades.

Iceotope Precision Liquid Cooling captures nearly all the heat the system generates and rejects it through a liquid-to-air cooler, with no server or infrastructure fans involved. The result is operation at under 40dB, quiet enough for 24/7 use in sound stages, edit suites, and broadcast environments where background noise affects the work.

KUL BOX deploys almost anywhere. A post-production facility. An OB truck. An on-set volume stage. A distributed streaming node. Wherever production needs to run, KUL BOX brings the AI infra to meet it.

Business impact

For production executives and facility managers, KUL BOX translates directly into operational and financial outcomes:

Faster deployment

No facility retrofits, cooling plant upgrades, or specialized floor design. KUL BOX ships as a turn-key solution ready to operate in existing spaces with no construction timelines.

Lower operational costs

Iceotope Precision Liquid Cooling reduces energy consumption by up to 40% and water use by 96% compared to traditional air-cooled infrastructure, cutting utility costs and sustainability footprint.¹

Uninterrupted production uptime

The sealed, fanless, liquid-cooled server chassis eliminates the contaminants, heat stress, and vibration that cause component failure, keeping GPU systems at peak performance.

No compromise on environment

At under 40dB, KUL BOX operates without intruding on acoustically sensitive spaces. Sound stages, edit suites, and control rooms stay quiet.

Scalable across locations

For studios and broadcasters running infrastructure across multiple facilities, KUL BOX offers a consistent, repeatable deployment model that scales without custom facility solutions at each site.

Get in touch

Is your production infrastructure ready for the compute demands ahead? Talk to Iceotope about deploying KUL BOX in your studio, broadcast environment, or distributed production network.

KUL BOX by the numbers

<40dB
operation

96%
drop in water use

40%
reduction in
energy consumption

24-48
NVIDIA GPUs supported

0
disruption to operators