KARIS technologies

product spotlight

Making the most of your situation!

According to the Weather Channel, “Lake effect snows occur when a mass of sufficiently cold air moves over a body of warmer water, creating an unstable temperature profile in the atmosphere.” This unstable temperature profile maximizes the effect of the difference in temperature between the cold-air and the warm water.

While there is no water or moisture in the data center, this localized meteorological phenomenon in which air flow helps to maximize the concentrated effect of accelerated temperature differences is the basis for Karis’ Lake Effect™ Thermal Enclosure.

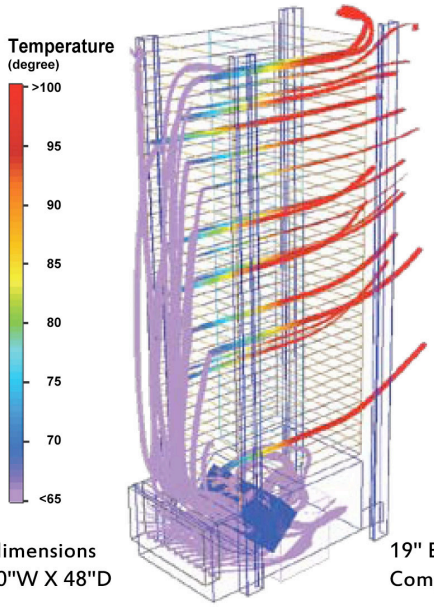
Karis’ Lake Effect™ (LE) Enclosure provides an even flow of low temperature air to the front intake face of the servers and electrical equipment mounted inside the cabinet. The intake fans accelerate the air at its lowest (and traditionally its coldest) point in the data center and direct it within a pressurized plenum chamber to the equipment and their internal fans in order to more efficiently cool the equipment.

FEATURES

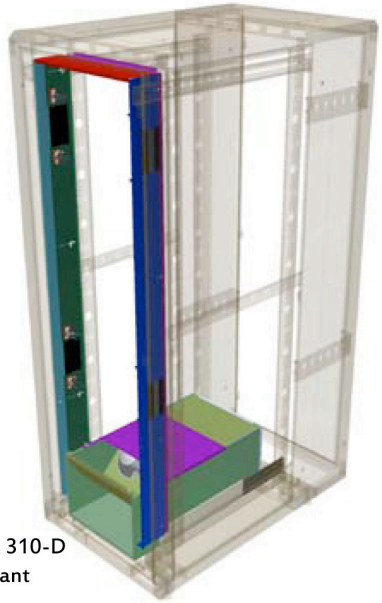
- Lake Effect™ base unit with two pairs of powder coated 19” universal M6 rails and M6 hardware shipping pallet, and two sets of power strip brackets.
- Plexi contour door with lower bottom mesh & locking easy latch handle.
- Mesh contour door with locking easy latch handle (front)
- Pair of solid lift-off side panels
- Solid top panel
- Vertical cable management tray (2)
- Lake Effect™ fan box kit Patented
- Plenum kit Patented

Part No.	Description
Gl840le-3048	84"H x 30"W48"D, 44 rMu, 2000 lb. weight capacity.

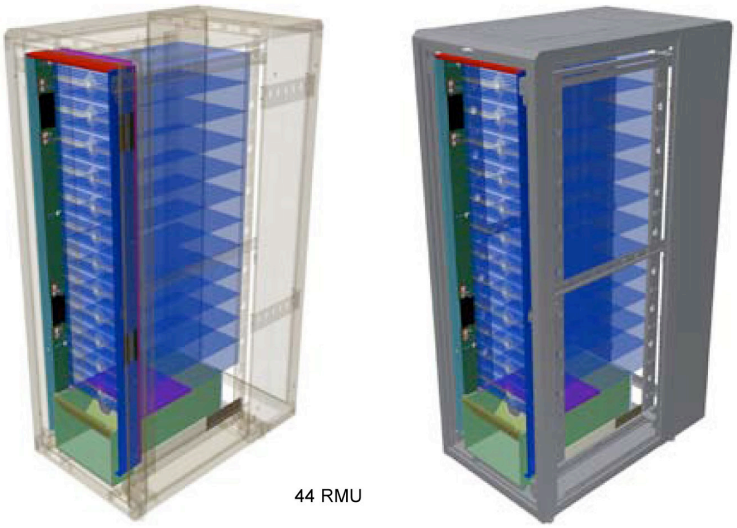
Lake Effect™ Enclosure



Cabinet dimensions
84"H X 30"W X 48"D



19" EIA 310-D
Compliant



44 RMU

The Lake Effect™ Thermal Enclosure utilizes the proprietary concept of accelerated ambient cooling to provide an even flow of low temperature air to the front intake face of the server's inside. This air is used by the computer's internal fans to cool the equipment. The number of servers that can be placed in an enclosed cabinet is directly related to the amount air available to cool the equipment. The temperature available at the base on the fan box is limited to the ambient temperature associated with CRAC output or base room temperature.

3D Computational Analysis was independently tested and verified by Flomerics using Flotherm software. Computer models were coupled with powerful fluid dynamic software that predicts airflow and heat transfer in and around electronic equipment. Model includes thirty-six 1RMU servers dissipating 10,000 watts total, 10KW equipment load, even temperature across equipment intakes, intake ambient air: 65°f, 1224 CFM @ 1/8" in H2O static pressure.

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