



CASE STUDY

Global Manufacturer of Computer Server Cabinets Requires Multiple EMI Shielding Vents

THE CHALLENGE

A manufacturer of commercial electronics requires vents in two locations on an OEM cabinet enclosure. Both vents required high air-flow and mid-level EMI shielding. A unique requirement for this application was the frame complexity required to properly mate with the customer's chassis.

DESIGN REQUIREMENTS

- Achieve shielding of 40-50 dB
- Unique frame complexity
- Highly custom gasket configurations

KEY CUSTOMER REQUIREMENTS

- Two vent locations
- Good EMI shielding
- High air flow
- Cost effective
- Engineering design and support

CONCLUSION

Parker Chomerics designed a STREAMSHIELD style frame featuring a single layer of 1/8" cell aluminum honeycomb which allowed for airflow to be maximized.

A second layer was not necessary to meet shielding requirements. A full frame, with EMI gasket and honeycomb media was proposed as a single assembly. This allowed us to add custom reliefs in the metal frame to properly mate to the customer's chassis, as well as offer the customer a single part number to meet their requirements.

THE SOLUTION

Parker Chomerics's experienced CAD designers were able to work with the customer's chassis models and come up with a STREAMSHIELD vent frame with 1/8in cell aluminum honeycomb with an EMI gasket.

Without this internal engineering effort and experts, Chomerics would not have been able to successfully design the customized frame and offer the value added, framed assembly as one easy to order part number.

