

# Providing Innovation with SLB1000 for System Upgrades

**INDUSTRY**

Medical

**SOLUTION**

SLB1000 Series

**APPLICATION**

Life Science System Peripheral

**CHALLENGE**

A life sciences company redesigning a peripheral for their flagship chemical diagnostic equipment was reviewing options to replace their legacy power supply while minimizing modifications to the mechanical design of the device. To satisfy system level power needs, the power supply needed to provide up to 800 W input voltages as low as 90 VAC and include integral fans for cooling. Ensuring compliance with Class B emissions at the system level is essential for meeting regulatory standards and maintaining performance integrity.

The original unit was bulky compared to newer options, and backward compatibility was non-negotiable. The company was looking for potential suppliers who could provide value-added engineering to maintain consistency for both new production and field services.

**SOLUTION**

After a thorough review of the customer's system power requirements, the Advanced Energy (AE) engineering team recommended the SLB1000S24K enclosed, fan cooled power supply. To ensure a seamless fit, the team customized the unit with brackets replicating the original footprint and tailored input/output cabling.

As the original unit required an input line filter to enable system level compliance to class B emissions, the AE team proposed a smarter alternative: adding a ferrite to the input cable. Rigorous customer testing confirmed that this approach not only met but exceeded Class B radiated emissions standards.



## RESULTS AND CONCLUSION

By delivering a right-sized, value-engineered solution utilizing the SLB1000S24K power supply, AE helped the customer avoid a full redesign and accelerate integration.

In addition, by using the SLB1000S24K power supply and a cable mounted ferrite, the customer was able to reduce cost by eliminating the need for a costly line filter. AE's team was able to address the customer's needs efficiently and cost-effectively, proving how AE's technical insight translates into real-world value.



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