CASE STUDY

# High-Density, High-Efficiency, Scalable Power for Advanced Burn-In Systems

| INDUSTRY | SOLUTION | APPLICATION |
| --- | --- | --- |
| Instrumentation | Evergreen™ Vento™ FCM30K and FCM10K | High-Power Device Burn-in with Test |

## CHALLENGE

A leading provider of burn-in test applications required critical features, such as specific input and output ranges, compliance with SEMI-F47 standards, and digital communication support with Modbus RS485 for control, monitoring, and configuration.

## SOLUTION

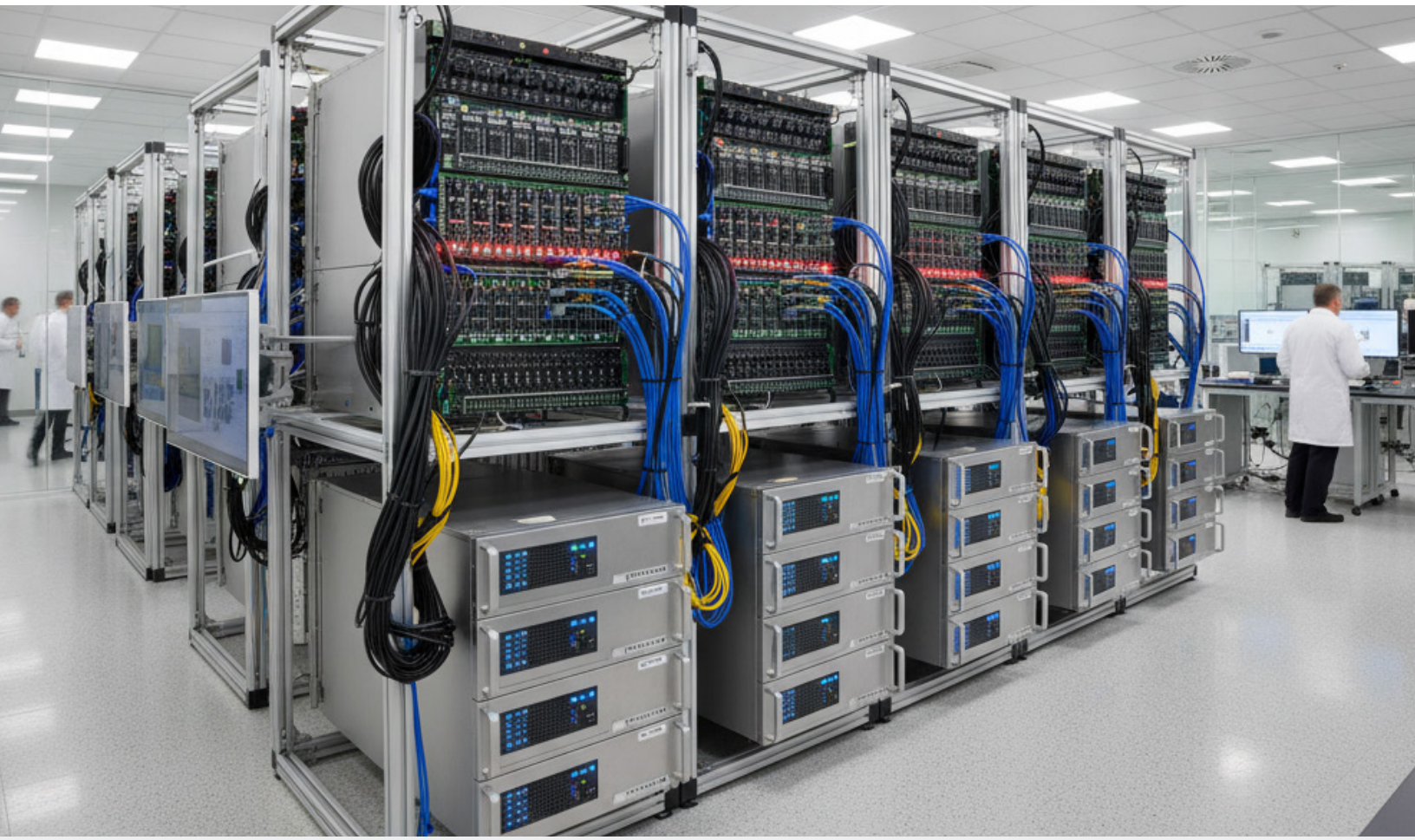
Advanced Energy (AE) proposed a combination of the Evergreen™ Series FCM30K shelf and FCM10K module. These modular solutions enable quick configuration and power scaling with plug-in, hot-swappable modules and no derating due to input line voltage. By choosing Evergreen, the customer benefits from higher power density up to 38 W/in$^3$, up to 95% efficiency, and 0.98 power factor correction, all while taking up less space. Additionally, the Evergreen Series comes with comprehensive industrial safety approvals and certifications.

## RESULTS/ CONCLUSION

The customer selected the Evergreen solution for several reasons, including:

- Faster recovery time
- Consistent rise time and overshoot response
- Fault reporting with error codes
- Input connector
- Protection when expected

The Advanced Energy engineering and support team maintained frequent contact with the customer, offering local support from an FAE team member. AE proactively addressed all customer pain points, including utilizing a Modbus TCP option for communication instead of native Modbus and proposing output busbar adaptors to support the desired wire gauge. This solution fulfilled the customer's specific requirements, while providing the personalized support they needed for a successful implementation.



Advanced Energy

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