

iHP Series to provide LED Lighting grow facilities

INDUSTRY

Lighting

SOLUTION

iHP

APPLICATION

LED Lighting for Algae Growing

CHALLENGE

A leading producer of high-quality blue dyes sought to optimize its algae growing process. The goal was to enhance the efficiency of nutrient harvesting for both animal and human food sources while ensuring zero waste. Additionally, they aimed to qualify as a carbon credit operation to support global hunger relief efforts by lowering the prices of their end products.

SOLUTION

Advanced Energy's iHP Series was the perfect solution for the customer's needs. Designed to cater to a wide variety of applications, including LED lighting and horticulture, the iHP Series offers bulk high voltage current sources. This eliminates the need for individual LED array drivers, significantly reducing installation and operating costs. The iHP power system also boasts industrial safety approvals and meets the SEMI F47 voltage sag tolerance standard for semiconductor processing equipment.

Additional key features of the iHP Series include:

- 100% digital control
- Fast current slew rate up to 200 Hz
- Outputs parallel up to 1600 A
- Outputs series up to 1000 V
- Semi F47 compliance
- Standard 19" rack



RESULT / CONCLUSION

The implementation of the iHP Series brought numerous benefits to the end-customer:

- A user-friendly GUI for easy configuration and dashboard creation
- Detailed scheduling and control software for horticulture applications
- Remote digital control and monitoring capabilities
- Centralized DC power source, simplifying wiring and control
- More balanced AC phase utilization
- Excellent technical support

By leveraging the advanced features of the iHP Series, the customer successfully optimized their algae growing process, contributing to their sustainability goals and supporting global hunger relief efforts.





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