CASE STUDY

Driving Miniaturization in Patient Monitors with AE's Low-Profile LPP200

INDUSTRY	SOLUTION	APPLICATION
Patient Monitoring	SL Power LPP200 Series	Multi-Function Monitor

CHALLENGE

A medical device company manufacturer set out to design their next-generation multi-function patient monitor. They had two requirements for their new monitors:

- **Mobility and Compact Design** - Reduce size and weight to allow mobility within the hospitals and clinics
- **Enhance Patient Experience** - Improve patient experience by reducing the amount of clutter in patient rooms caused by numerous previously bulky devices.

The technical requirement is for a single output AC-DC power supply that will fit within the limited space behind the monitor screen while delivering reliable power for multiple integrated features. As speed to market was critical, the customer wanted to avoid a custom solution to accelerate time to market.

Key requirements:

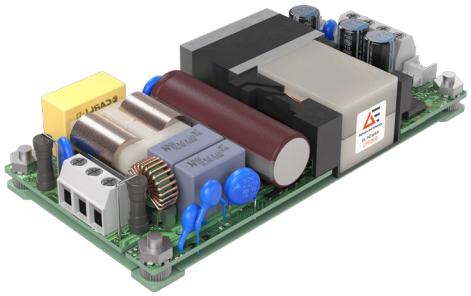
- 24 V at 100 W output
- Convection cooled to keep audible noise to a minimum contributing to positive patient experience
- Less than 0.8" height
- Universal input to allow global use of their device
- High reliability and long life
- Short lead-time for samples and short development time for qualification to hasten total system validation

SOLUTION

The LPP200S24K model of Advanced Energy's new low profile LPP200 Series was the perfect fit for this application.

This standard product already carries the necessary attributes the customer was seeking:

- 0.75" height, the low profile preserves the monitor's slim design
- 120 W convection cooled output power rating
- Fully compliant with IEC/EN/cUL60601-1 medical safety standards
- Standard off-the-shelf product readily available for immediate deployment



RESULTS

Initial samples of the LPP200S24K power supply were provided to the customer by Advanced Energy (AE) within a few weeks of contact. By choosing the SL Power LPP200 series, the customer's engineering team was able to quickly find a power supply for their device that satisfied their requirements.

As a result of the fast turnaround of samples, the customer accelerated the development cycle and attained regulatory approval.

BENEFITS

AE and the LPP200 series offer these benefits to critical medical device designers:

- Off-the-shelf, medically certified low-profile (0.75" height) power solutions
- Global expert technical support for seamless integration
- Fast sample turnaround and collaborative approach for future needs

CONCLUSION

AE's SL Power LPP200 series enabled this medical device innovator to achieve its miniaturization goals without compromising performance or compliance.

The short lead time and exceptional technical support enable an accelerated development cycle and improved speed to market. With its broad portfolio of highly reliable medical solutions, AE is the partner of choice to meet all high and low voltage application requirements.

Advanced Energy

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