

MEDICAL IMAGING

TYPICAL APPLICATIONS

MRI

PET

CT

Microscopy

Ultrasound

X-ray



CHALLENGES

Medical equipment suppliers need to design medical imaging products with higher resolution, reduced size, increased reliability, and accurate detection.

Medical imaging equipment with high speed rotors present a unique challenge where any devices mounted to the rotating elements will be exposed to very high G-Forces. Power solutions should be designed with low profile components with low centers of gravity to minimize mechanical stress. Power supplies that operate without fans will have much higher reliability in these applications.

The choice of power supply is critical when designing sensitive imaging equipment.

A high voltage power supply with poor stability and high ripple can impact accuracy, resolution, and repeatability.

OUR SOLUTIONS

Advanced Energy's broad high and low voltage power supplies are ideal for use in medical imaging equipment ranging from 0.1 W up to 20 kW.

Our high voltage products enable fast switching time for extremely precise control and provide high resolution and low ripple over the entire output range delivering regulation, control, and stability. With incredibly low ripple levels down to 2 ppm, we provide the ultimate performance for critical high accuracy applications.

The design requirements to meet the demands of harsh operating environments

may be more complex, however, our high and low voltage power supplies are ruggedized to withstand extremes in shock and vibration. Our fanless solutions ensure sensitive system electronics are not subjected to vibration and air disturbances, while also improving the power supply's ability to withstand the significant G-Forces in CT systems.

Our compact fanless solutions eliminate fan noise, allowing for a better patient experience, especially in smaller settings and portable equipment.

BENEFITS OF USING ADVANCED ENERGY

- Low ripple outputs for improved image resolution
- Isolated outputs for system voltages and imaging components
- Ruggedized for vibration protection

RECOMMENDED PRODUCTS

Low Voltage

■ CoolX® Series

UtiliMod

LCM

■iHP

■ uMP

■ iMP

■ iVS

■LLC600

■ AIF/AIT/AIQ (DC-DC)

High Voltage

■ C Series

■ A Series

AA Series

Advanced Energy's CoolX 1800



Advanced Energy's Artesyn iHP Series



Advanced Energy's A Series

WHAT WE POWER

Low Voltage

■ Motors

■ Control Electronics

■ Distributed DC

High Voltage

Detectors

Generators



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PRECISION | POWER | PERFORMANCE

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