



# TRIAD

M A G N E T I C S

**Medical Capabilities Brochure**

# TRIAD MAGNETICS IN THE MEDICAL EQUIPMENT INDUSTRY

Since launching more than 75 years ago, Triad Magnetics has become a global leader in the manufacture of magnetic components. Today, we employ a team of highly skilled engineers, maintain fully ISO certified facilities, and operate fully modernized testing laboratories — all in the name of creating inductors, transformers, and power supplies of the highest possible quality.

Due to the very nature of medical equipment, the industry has a complex, multifaceted, and ever-changing regulatory landscape. Especially in electrical applications, there may be hazards for patients and operating personnel alike. Triad recognizes the responsibility that comes with designing and manufacturing for the medical industry, and we develop products that not only meet but exceed the strictest safety regulations.

Our engineers have the knowledge and proven expertise to create safe, reliable, high-quality components, while meeting our client's performance specifications to deliver efficient and cost-effective products. Transformers for medical equipment, isolation transformers for medical applications, and other medical grade transformers are all designed for risk-free and economical operation.

## Custom Medical Solutions

With the goal of providing an optimized design for our customer's application, Triad's engineers provide extensive custom design services with rapid design, prototyping, and testing from our U.S. Design Center located in Perris, CA. We have the ability to design a completely custom solution or modify an existing product to meet the needs of any application.



## Applications



**MRI  
machines**



**Hospital  
beds**



**Lab  
Equipment**



**Dental  
Equipment**



**Doctor's Office  
Equipment**



# Toroidal Medical Transformer Series (VPM)

The toroidal construction of the VPM Series Power Transformers inherently reduces stray fields, increases efficiency and minimizes size compared to traditional EI transformers. The addition of a flux band further reduces the remaining stray fields. The shield between the primary and secondary improves safety, reduces common mode signals, and minimizes leakage current. They are built with a Class F (155°) insulation system. A 140° self-resetting thermal switch is included in the primary.



## Specifications

- 49 Standard Models
- Primaries: 100, 120, 208, 220, 240V 50/60 Hz
- Secondaries: 6V to 240V
- Dielectric Isolation (Pri-Sec) 4000 Volts
- Safety:
  - UL: File E122529, UL 60601-1/(R) 2012 Medical Electrical Equipment - Part 1 with 2 MOPP
  - cUL: C22.2 No. 60601-1:14, Medical Electrical Equipment - Part 1
  - CE: ES 60601-1 (IEC 60601-1:2005, MOD)
  - CB: Certified

For more information on our products - Visit [www.triadmagnetics.com](http://www.triadmagnetics.com)

# Medical Grade Isolation Transformer Devices (MD)

These medical grade isolation boxes are built with toroidal transformers that inherently help reduce stray fields, increase efficiency, and minimize size compared to traditional EI transformers. They are built with a Class F (155°) insulation system. The enclosure is made of steel and is powder coated white.



## Specifications

- Max Power: 250 – 2400 V-A (depending on model)
- Input: 120 – 240 V (depending on model)
- Output: 120 V
- Efficiency: 92-94% typical at full load (depending on model)
- Safety: Medical isolation transformer box is certified to UL60601-1, 2nd edition medical standard and CSA-C22.2. No. 601.1M90, 2005 UL: (E352717), UL60601-1, 2nd edition and CAN/CSA22.2 No. 601.1M90, 2005



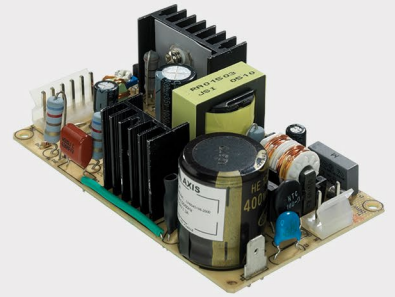
Current Sense Transformers



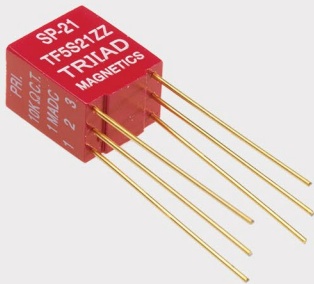
Wall Plug In Transformers



Power Transformers



Power Supplies & LED Drivers



Audio Transformers



Inductors and Chokes



High Frequency Magnetics



Engineering Kits and Custom Solutions



951.277.0757



[www.triadmagnetics.com](http://www.triadmagnetics.com)

460 Harley Knox Blvd | Perris, CA 92571