



# ENABLING HEALTHCARE INNOVATION

DESIGN-LED TECHNOLOGIES AND GLOBAL MANUFACTURING SOLUTIONS



## ELECTROMAGNETICS FOR SURGICAL NAVIGATION & IMPLANTABLES



Our miniature electromagnetic sensors and tracking systems enable sub-millimeter accuracy in minimally invasive surgery and implantable devices. In partnership with Radwave® Technologies, we manufacture an advanced electromagnetic tracking platform that provides precise, real-time navigation without line of sight - crucial for robotic surgery and minimally invasive procedures. From implantable devices to catheter-based solutions, our advanced electromagnetic technologies deliver targeted therapy with exceptional reliability and precision.

### Products:

- Air coil sensors
- Solid core sensors
- RF sensing coils
- EM tracking platform
- Implantable HV transformers

### Applications:

- Implant programmers & chargers
- Pacemakers & defibrillators
- Surgical navigation
- Cardiac rhythm management
- Neuromodulation



## OPTOELECTRONICS AND PASSIVE COMPONENTS

Available in both standard and custom designs, our optoelectronic sensors and passive components excel in demanding medical applications, specializing in high-precision fluid detection and power management. Our components integrate seamlessly into medical devices, delivering enhanced measurement accuracy and system reliability through non-contact sensing and flexible packaging options.



### Products:

- Optoisolators
- Hall effect sensors
- Fluid sensors
- Reflective sensors
- Slotted switches
- Current sense resistors
- Circuit protection resistors
- Power management resistors
- Potentiometers
- Encoders

### Applications:

- Defibrillators
- Ventilators
- Immunodiagnostic instruments
- Heart monitors
- Laboratory equipment
- CT and MRI machines
- Infusion pumps



## PCBA AND COMPLEX ELECTRONICS ASSEMBLY

We accelerate medical device innovation through a specialized NPI Center, delivering prototype PCB assemblies in just two weeks with concierge-level support. As an FDA-registered manufacturer with ISO 13485-certified cleanroom facilities across North America and Asia, we excel in low-volume, high-mix production for complex medical devices and laboratory equipment. Our vertically integrated capabilities enable seamless transition from prototype to sustained production while meeting the most stringent regulatory requirements.

### Manufacturing Services:

- Engineering and NPI
- PCB Assembly
- Cable Harness
- Testing Solutions
- Box build and HLA
- Supply Chain Management

### Certifications:

- ISO 9001
- ISO 14001
- ISO 13485
- IPC-A-610D
- J-STD-001
- FDA Registered
- Cleanroom Facilities

### Locations:

Cleveland, US   Mexicali, MX   Kuantan, MY   Suzhou, CN



## MEDICAL GRADE POWER SUPPLIES

Our product portfolio includes AC/DC switch mode power supplies, desktop and wall-mounted units, as well as enclosed and encapsulated options. We offer modified and customized solutions through a dedicated team of experts, who provide world-class support in engineering, testing, product approval, and regulatory compliance.

### Products:

- 1 Watt to 2kW
- Open frame
- Enclosed
- U-Channel
- Wall mount
- Encapsulated
- Modified/Custom

### Custom and Modified Options:

- Non-standard output voltages
- Alternate connectors
- Alternate pin-outs
- Extended temperature ranges
- Enhanced EMI filtering
- Peak power capability
- Decreased leakage current
- Custom enclosures
- Additional safety approvals



## HELPING SHAPE THE FUTURE OF HEALTHCARE

At TT Electronics, we engineer and manufacture electronic solutions that enable a safer, healthier and more sustainable world. We operate from 20 locations with over 4,000 employees.



### North America

Boston, US  
Cleveland, US  
Dallas, US  
Denver, US  
Juarez, MX  
Kansas City, US  
Mexicali, MX  
Minneapolis, US

### Europe

Abercynon, UK  
Barnstaple, UK  
Bedlington, UK  
Eastleigh, UK  
Fairford, UK  
Manchester, UK  
Nottingham, UK  
Sheffield, UK  
Woking, UK

### Asia

Kuantan, MY  
Singapore  
Suzhou, CN

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