



MEDICAL HMI SOLUTIONS

USER EXPERIENCE - INTERFACE - CONTROL



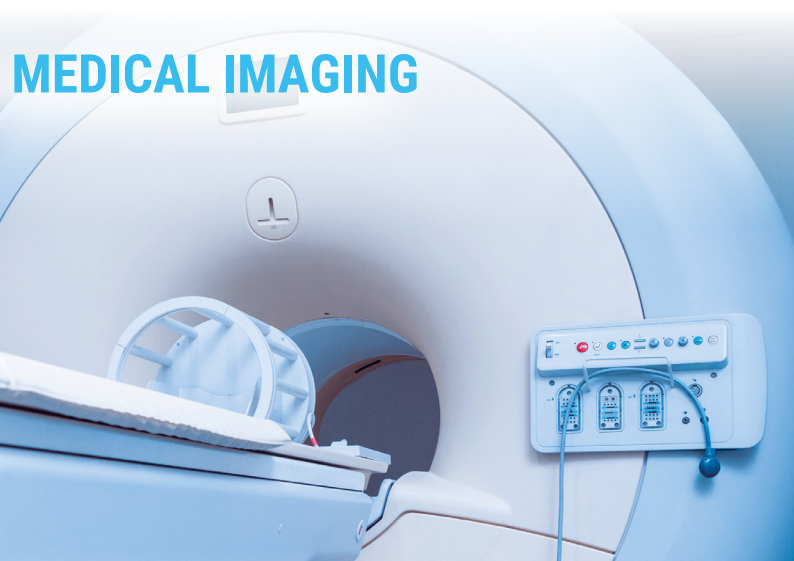
YOUR TRUSTED HMI PARTNER

TT Electronics provides design-led Human Machine Interfaces (HMI), integrated electronic technologies and manufacturing solutions for medical and healthcare applications.

IMPROVE FUNCTIONALITY AND USER EXPERIENCE

TT Electronics has led the market in customised HMI technologies for more than 30 years, partnering with customers to deliver solutions that improve user experience, enhance communications and boost productivity. With a long history of developing innovative solutions for the most demanding environments, including patented thin film backlighting, capacitive touch technology, integral RFI screening and flexible illumination techniques, the company is a trusted value-added partner.

APPLICATIONS



CAPABILITIES

Our in-house design and engineering team can work with you to develop innovative and functional designs. We provide manufacturing solutions including PCBA, integration and assembly full build. Fully managed from concept to delivery, we provide full certification and qualification testing.

PRODUCT DEVELOPMENT AND NPI

- Early design involvement
- Program management
- Mechanical and electrical engineering
- Rapid prototyping
- Verification and validation
- Product certification

TESTING SOLUTIONS

- Reliability testing (life-cycle testing, EMC evaluation)
- Safety Testing (UL, TUV, CE and CCC)
- Environmental testing (shock, vibration, drop, temperature, humidity and water ingress)

HMI ASSEMBLIES

- Membrane switches (tactile, non-tactile, sealing to IP65, IP67 and IP69K)
- Mechanical switches
- Capacitive switches
- Capacitive keyboards
- Thin film backlighting
- Complete control panel solutions incorporating sliders, joysticks, trackballs

INTEGRATION

We provide the entire HMI assembly including:

- Display (Consumer, commercial, pseudo industrial or industrial display)
- Projected Capacitive (PCAP) or resistive touchscreen (custom sizes range from 5" to 30", multi-touch, gesture recognition, glove-operated with latex and leather gloves)
- Sensor (laser and chemical etched)
- Touch controller module
- Cover material such as glass (thickness up to 10mm), film, polycarbonate plastic
- Lamination (optical and perimeter bonding)
- Front bezel with peripheral controls, including mechanical buttons, tactile switches, encoders, slide switches, e-stop buttons
- Rear housing
- Connectivity (Wired, Wireless, Bluetooth)
- Power supply
- PCB assembly



WHY CHOOSE TT FOR YOUR HEALTHCARE HMI?

- Flexible and agile
- Design expertise
- 30-year experience
- Global supply chain management
- Technology integrations
- Global manufacturing locations
- ISO 9001:2015, ISO 134485

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