

Product Capability Overview A Product Brief

Mars International provides custom electrical and mechanical assemblies and final products for various industries including Building Automation Systems, Fitness & Recreation, and Healthcare. Services include electrical and mechanical design, embedded software development, manufacturing engineering, and product delivery management.

Mars International designs and manufactures control boards, sensor and display devices, monitors, safety and security devices, RF and IR communication modules, internetworking devices, intelligent energy management and lighting controls, access controls, and many other products.

Product Applications

Mars is well positioned to support the needs of HVAC, lighting, security, irrigation, fitness equipment, pool & spa, and digital healthcare products; however our capabilities can be leveraged in many industries. Our products can also be found in the Transportation, Industrial, and Consumer market. Key manufacturing and development capabilities provide the infrastructure and the service to benefit the following product solutions and more.

Building Automation Systems

- Energy management systems
- HVAC-R controls
- Lighting controls
- Security systems
- Irrigation systems
- Access controls
- Daylighting controls
- Jan San
- Garage door openers
- Sensors
- Displays

Digital Health

- Vital sign monitors
- Blood analyzers
- Medical management systems
- Motion detectors
- Occupancy sensors

Fitness & Recreation

- Pool and spa control panels
- Fitness equipment consoles
- Personal fitness devices

Wireless Control

- Handheld remotes
- Wireless switches

Key Manufacturing Capabilities

- Total product assembly
- Printed circuit board assembly
- Molded plastics enclosures, buttons, switches, etc.
- Precision metals casings, machined parts, etc.
- Electro-mechanical assembly
- Wiring assemblies
- Clean room environment

Key Development Capabilities

- Mixed signal design
- Printed circuit board layout
- Optimized embedded software
- Tooling design and construction
- Molding simulation and analysis
- Test procedure definition
- In-house UL andFCC pre-certification

Key Technologies

- μProcessors / μControllers
- Transmitter / Receiver technology
- RF and IR communications
 –Z-Wave, Zigbee, WiFi (802.x)
- LAN communication protocols
- USB connectivity



Product Capability Overview

Product Examples

Z-wave home automation gateway



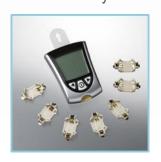
Wireless fluorescent lighting dimmer



Wireless boat lift controller



Blood analyzer



Window covering motor controller



HVACR humidity transmitter



Programmable steam bath controller



Rowing machine monitor

