

Wall Industries, Inc.

Your Source for:

AC/DC Power Supplies
DC/DC Converters
Custom Power Solutions



Contents

- About Wall Industries and our Manufacturing Facility
 - Research and Development
 - Quality Assurance
 - Engineering Capabilities
- Industries Served
- Custom Solutions
- Standard AC/DC Supplies and DC/DC Converters
- Modified Standards
- Questions



About Wall Industries

- Founded in 1960, Privately Held
- US Based Company Headquartered in Exeter, New Hampshire
- Subsidiary of Continental Resources, a \$450MM company and certified Women-Owned Enterprise
- ISO 9001 Registered Manufacturer
- Design, Manufacturing, and Sales Facility for AC/DC Power Supplies, DC/DC Converters, and Custom Power Solutions
- Team of Skilled Engineers Offering Power Solutions Across a Number of Industries: Medical, Military, Aerospace, Railway, Electric Vehicle, High Tech, Lighting, Industrial, Robotics, and Vehicle Power



Manufacturing

Facility with Modern Equipment to Keep Your Projects Up-to-Date

- Three state-of-the-art MYDATA SMT component placement machines and Heller convection re-flow oven
- MPM, Aqueous technology, Quadronics no-clean wave solder operation
- Magnetic coil winding department in-house
- MRP/ERP manufacturing software
- ESD protection throughout plant; including humidity control
- Mirtec Automated Optical Inspection System (AOI)
- Statistical Process Control (SPC) data available
- Robots improve manufacturing Quality, Efficiency and Consistency for our Customers



Research & Development

Innovative Ideas Tested for Your Projects

- Utilizes Relex Reliability Software, P-Spice Simulation Software, PADS, AUTOCAD, SolidWorks, and Pro Engineer for CAD/CAM
- Environmental Chambers for Extensive Temperature and Life Testing
- HALT/HASS Testing Capabilities
- In-House Design Engineering Team from a Variety of Backgrounds Providing Analog, Digital, and Mechanical Packaging Expertise







Quality Assurance

Up-to-Date Standards to Ensure Your Projects are Compliant



- 100% AOI Inspection Capabilities
- Certifications/Standards Include ISO, IPC, SPC, UL, EN
- Thorough Contract and Specification Review Prior to Release to Engineering
- Employees Certified and Trained to IPC-610 Workmanship Standards
- 100% Final Electrical and Hi-Pot Testing
- Safety Agency Testing Performed at Exeter Facility to Expedite Approvals
- Testing Performed with Automated Test Equipment
- In-Process Inspection Including Automated Optical Inspection on 100% Surface Mount Converters







Engineering Capabilities

Knowledgeable Team that Works Alongside You

- Highly Capable & Professional Design Engineering Team
- Emphasis on Power Conversion and Mechanical Packaging
- Design Integrity and Quality From the Start:
 - ISO Registered
 - Internal component de-rating guidelines and designed verification report
 - · State of the Art Burn-in Facility
 - HALT and HASS Available
 - In-house EMI & EMC Testing Capabilities
- Design for Manufacturing
 - New designs are greater than 95% automated assembly
 - 100% automated optical inspection for SMT components
 - Magnetics 100% tested for inductance and turns, utilizing automated equipment
- Mechanical integrity, thermal integrity, ruggedness, expertise, and ease of assembly obtained through electrical and mechanical packaging



Industries

Power Solutions for Your Industry



Military

- Products Ranging from 5 600 Watts
- Available Package Types Include Through Hole, Chassis Mount, Desktop, Quarter Brick and Full Brick
- COTS Military Power Supplies are Designed to Support MIL Specs
- Any Product Can be Modified to Meet Specific Needs or MIL Specs
- Long History of Designing and Manufacturing Custom Military Power Supplies



Medical

- Products Ranging from 1 600 Watts
- Available Package Types Include Open Frame, U-Chassis, Enclosed, DIN Rail, PCB Mount, Desktop, and Wall Mount
- Products Meet 60601-1
- Some Products are Level VI Compliant
- Custom Solutions or Modified Standards Available to Meet Exact Specifications



Industries Cont.

Power Solutions for Your Industry



Industrial

- Products Ranging from 0.86 1500 Watts
- Available Package Types Include Open Frame, Enclosed, Desktop, Full Brick, Quarter Brick, Through Hole, Surface Mount, PCB Mount, and POL
- Different Case Options Available Like Heatsink and 90 Degree Bent Pins Available for Certain Series
- Custom Industrial Supplies Available to Meet Exact Specifications



Lighting

- Products Ranging from 6 550 Watts
- Available Package Types Include LED Switching Supplies and LED Drivers
- · Products Designed for Harsh Environments and Include Ratings Like IP67



Robotics

- Products Ranging from 1 600 Watts
- Available Package Types Include Through Hole and Surface Mount
- CAN Isolation Transceiver Modules also Available



Industries Cont.

Power Solutions for Your Industry



Railway

- Products Ranging from 6 1000 Watts
- Available Package Types Include Quarter-Brick, Half-Brick, and Full-Brick
- Wide Input Voltage Ranges
- Case Options like Heat Sink, Terminal Block, and Conformal Coating Available for Certain Series



Vehicle Power

- Products Ranging from 50 600 Watts
- Available Package Types Include Through Hole, Chassis Mount, and Full Brick
- 12Vin or 24Vin Input Voltages
- Products for Buses, Rovers, and Trucks



EV

- Products Ranging from 3.3 3600 Watts
- Through Hole, Enclosed, Bi-Directional Converters, and Bulkhead Mount Chargers Available
- High Efficiency, Low Noise, High Isolation, and Wide Temperature Ranges
- Products for Electric Cars, Electric Scooters, Electric Bikes, Charging Stations, and other EV Applications



Custom Solutions

Unique Power Solutions for Any Complex Specs You Have

- Fully Custom Power Design Capabilities
- Comprehensive Burn-In and Design Verification
- Some of the Standards our Custom Designs can Meet:
 - UL60601-1
 - EN60601-1
 - FCC Part 15
 - CISPR Specifications
 - Mil-Std-704 Aircraft Power Standards
 - Mil-Std-1399 Shipboard Standards

- Mil-Std-1275 Military Vehicle Standards
- Mil-Std-461 Electro Magnetic Emissions Requirements
- Mil-Std-217 MTBF Standards
- Mil-Std-810 Environmental Testing
- Mil-Std-202 Standardized Test Methods
- Thorough Design Process Used to Create Best Custom Solution for Any Project





DC/DC Converters



- DC/DC Converters available from ½ to 1,500 Watts
- Types of DC/DC Converters:
 - Encapsulated
 - PC Board Mount
 - Surface Mount
 - Chassis Mount
 - Through Hole
 - Open Frame
 - Bulkhead Mount

Features:

- TUV, CE & CB
- Up to 12:1 Input Range
- Single or Multiple Outputs
- Remote On/Off
- Remote Sense
- Output Trim Options
- High Efficiency
- Six Sided Shielding
- Fixed Frequency
- Short Circuit Protection
- Thermal Shutdown



AC/DC Converters

- AC/DC Converters available from 1 to 3,600 Watts
- Types of AC/DC converters:
 - Open Frame
 - Air-Ventilated Enclosed
 - U-Frame
 - Encapsulated
 - DIN Rail
 - Enclosed with Fan
 - Wall Mount
 - Wall Mount with Interchangeable Plugs
 - Desktop
 - Chassis Mount
 - LED
 - Bulkhead Mount

Features:

- TUV, VDE, CE & CB, Energy Level VI
- Medical Approvals
- Universal Input
- Current Sharing
- Remote Sense
- Parallel Operation
- Programmable Output Voltages
- Single to Multiple Outputs
- Power Fail Detection





Modified Standards Also Available

Our hallmark is our ability to modify standard power devices and deliver high performing custom power solutions in the quantities you require. With complete design and engineering services, short turn-around times and a genuine eagerness to help you, we can help you power your next design.



THANK YOU!

Contact us Today! Wall Industries 37 Industrial Drive Exeter, NH www.wallindustries.com sales@wallindustries.com (603) 778-2300





