



Powering Technology
Worldwide



Precise Power Solutions



Empowering Innovation



Customer-Centric Approach



Powering Technology Worldwide

Reliability

Over 25 years, MPD has established itself as a reliable partner, earning the trust of countless customers. We stand by our commitment to be there for you, offering products designed and built to deliver years of dependable service.

Diverse Supplier

We are a WBENC-certified, woman-owned company. This certification allows us to partner with companies seeking diverse suppliers, ensuring they fulfill their own commitment to responsible sourcing

Quality

Our products are manufactured using the highest quality materials and components, and they are rigorously tested to ensure they meet or exceed the most demanding industry standards.

Competitive Pricing

We offer our products at competitive prices, without compromising on quality or performance. We are confident that you will find the best value for your money at MicroPower Direct.

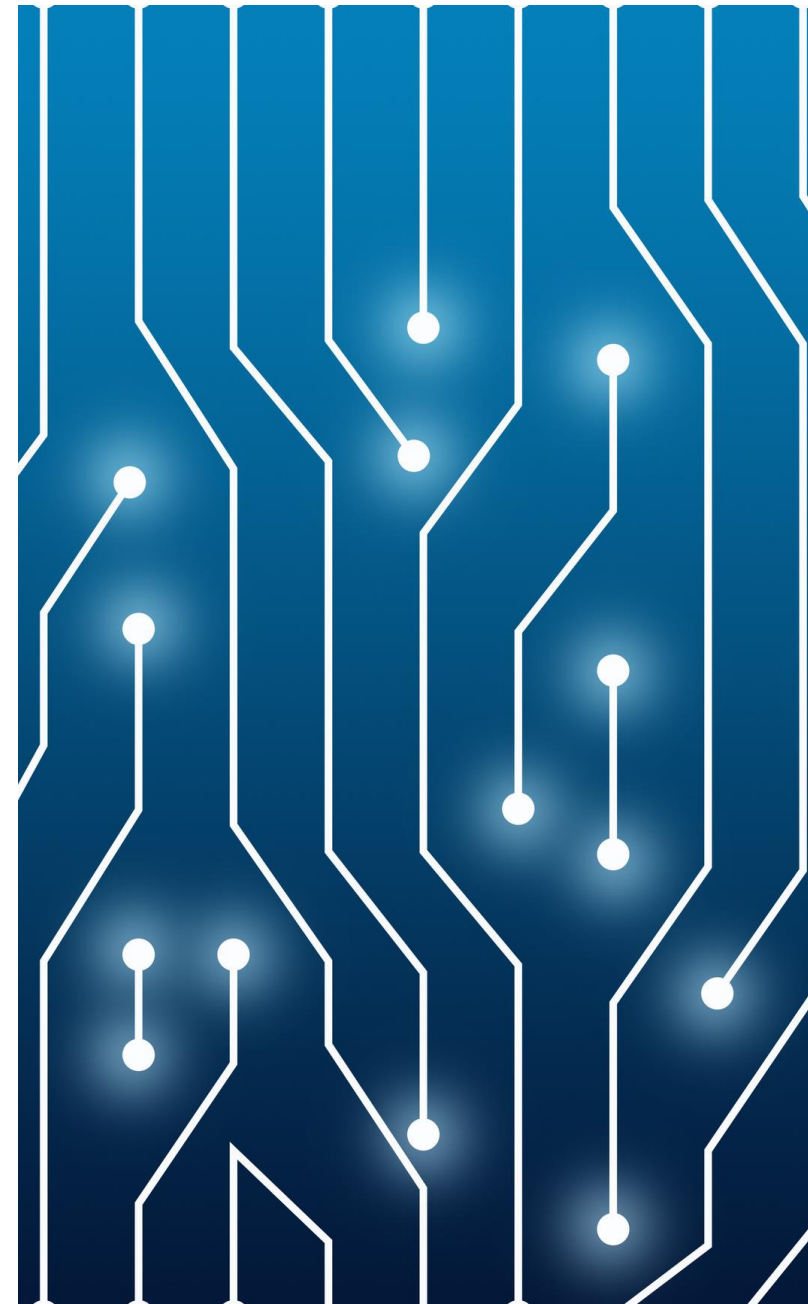


Expertise

Our experienced engineers are here to help you select the right power conversion solution for your application. We can provide you with expert advice on everything from product selection to system design.

We prioritize exceptional customer service. During business hours, you'll always speak to a knowledgeable representative for personalized service and technical support.

As a family-owned company, we prioritize building strong partnerships and exceptional customer care.



Satisfied Customers

- “It's hard to choose just one highlight – the combination of reliable products, competitive pricing, and exceptional support is truly unbeatable.”
- “Their team consistently demonstrated patience, kindness, and a willingness to answer any questions I had.”
- “What truly sets MPD apart from the competition, however, is their exceptional product parameters, comprehensive documentation, and a vast selection that catered to all my needs.”

Sample of Current Customers



MicroPower Direct Product Line

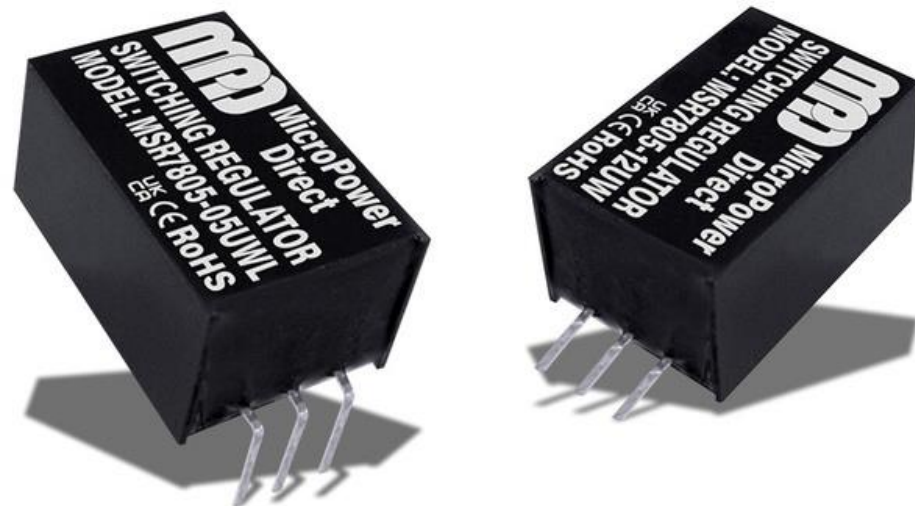
Our product line includes over 5,000 DC/DC converters, AC/DC power supplies, IGBT and SiC DC/DC's and POL's. Features include wide input ranges, high efficiency, a variety of package choices (modules, U-channel, open frame, SIPs, DIPs and DIN Rail), high MTBF's, safety approvals and constant power ratings from 0.5W to 600W.

We pride ourselves on our high quality products, technical expertise and exceptional customer service.



Our Portfolio

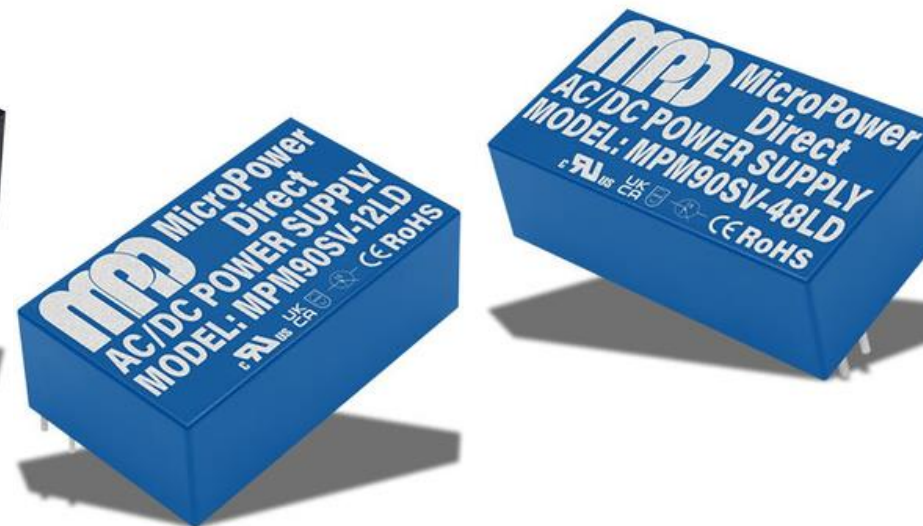
POL Regulators



Includes switching regulators for surface mount applications and linear regulators in through-hole packages.

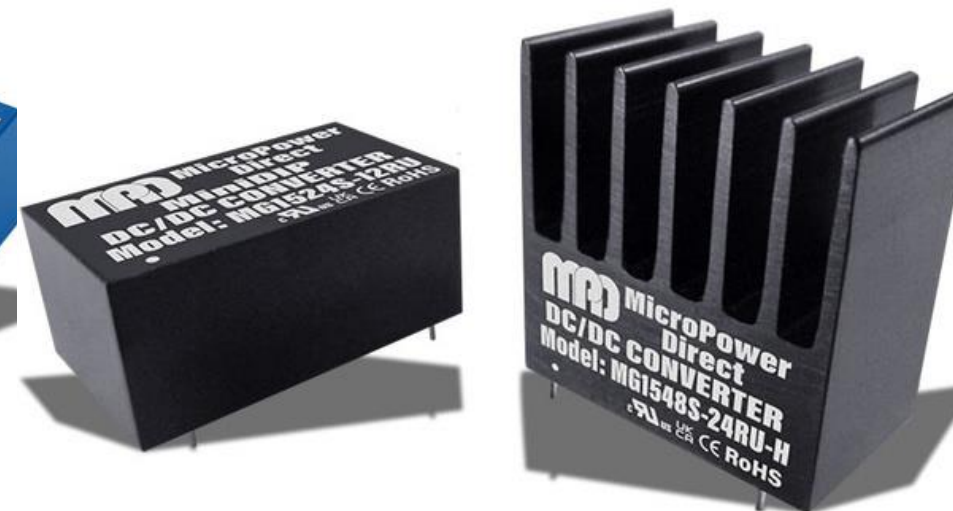
These compact solutions provide precise voltage regulation for powering various electronic circuits on your board.

AC/DC Power Supplies



From compact and efficient 1W options to open frame designs delivering up to 500W. These versatile power supplies cater to various applications, ensuring optimal performance and compliance with safety standards.

DC/DC Converters



A wide range of DC/DC converters are offered with features like high efficiency, miniature sizes, and wide input ranges, suitable for various applications requiring reliable power conversion.

IGBT / SiC Drivers



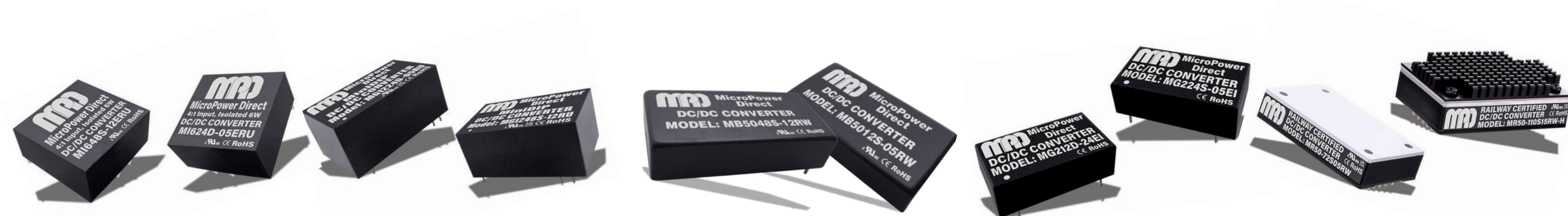
These units feature asymmetrical outputs. Units are available that provide the specific output levels required to control a wide variety of high speed IGBT and SiC semiconductors.

DC/DC Converters

DIP, SIP, SMT and Module packages available in .25W to 50W
Railway/Photovoltaic and Medical also Available

Features Include

- Reinforced Insulation
- Short Circuit Protection
- Remote On/Off
- Tape & Reel Available on some Models
- 4.2kV Isolation
- Efficiency up to 91%
- Miniature Case
- Wide Input
- 2:1 to 4:1 Input
- Single and Dual Outputs
- High Isolation
- Safety Certifications



AC/DC Converters

Module, Enclosed, U-Channel and Din-Rail packages
available in 3W to 1000W
Medical Grade also Available

Features Include

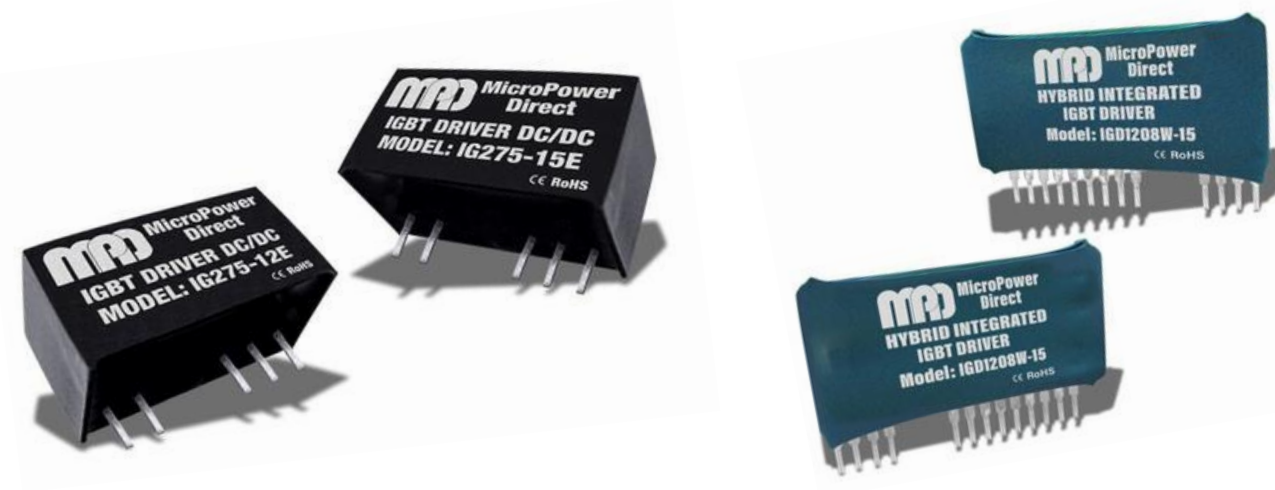
- Compact Cases
- Wide Temperature Ranges
- Low Leakage Current
- Power Factor Correction
- Fans (Internal or end/top available)
- Dual/Single Outputs
- Efficiency up to 92%
- Active PFC
- Chassis & Din-Mount Packaging
- 2xMOPP (Medical)
- Low Cost
- Safety Certifications



IGBT Drivers, SiC DC/DC's and POL Regulators

IGBT Drivers

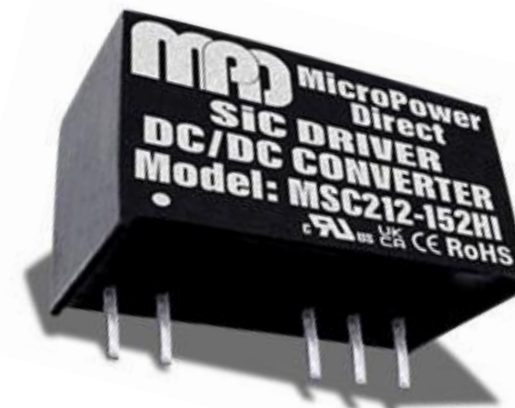
- 3 to 5 kVDC
- Miniature Cases
- Efficiency up to 87%
- Wide Temperature Ranges
- Low Cost
- Safety Approvals



SiC DC/DC's

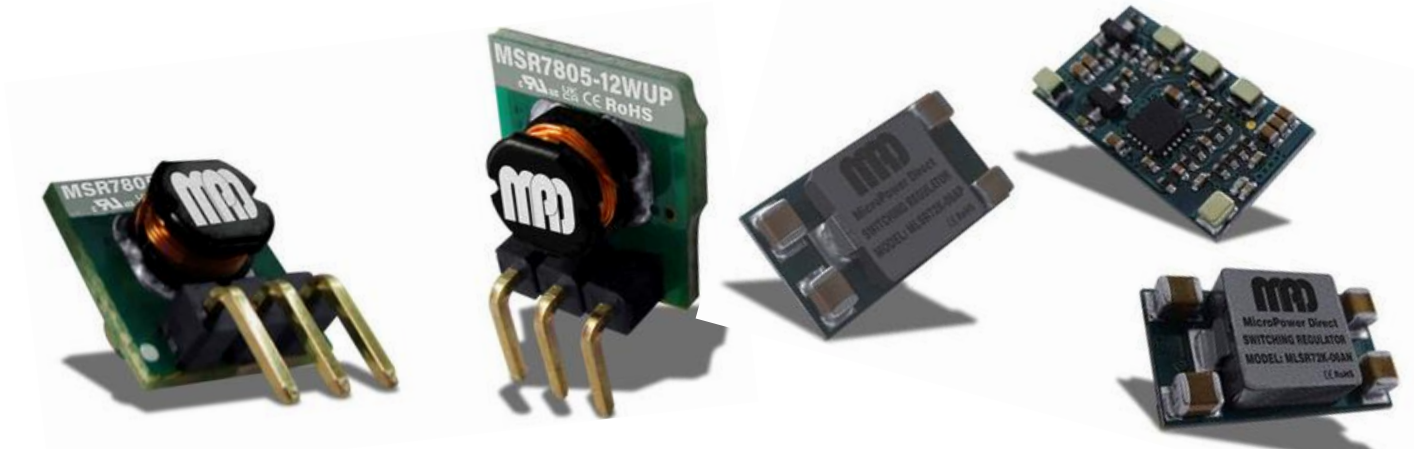
Features Include

- Miniature Cases
- Reinforced Insulation
- Ultra-Low ISO Capacitance
- Short Circuit Protection
- Wide Temperature Ranges
- Low Cost

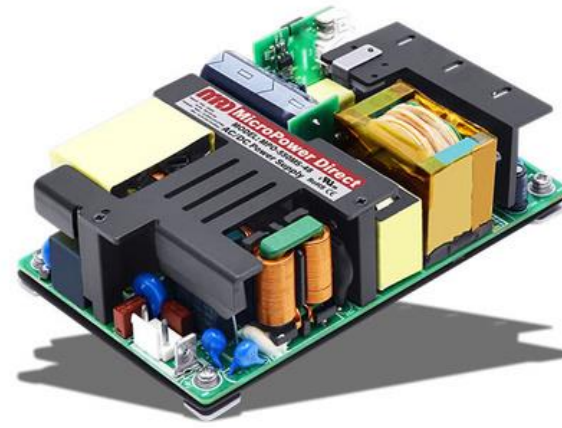


POL Regulators

- Board & SMT Mount
- High Efficiency
- Low Loss
- Short Circuit Protection
- Positive or Negative Output Voltage
- Safety Approvals



Featured New Products



MPO-550MS

- 550W Output Power
- Low Cost
- UL 62368 Approval
- Very Small Size



MDR-120SIF

- 120W Output Power
- Din Rail
- Compact Metal Case
- Very High Efficiency



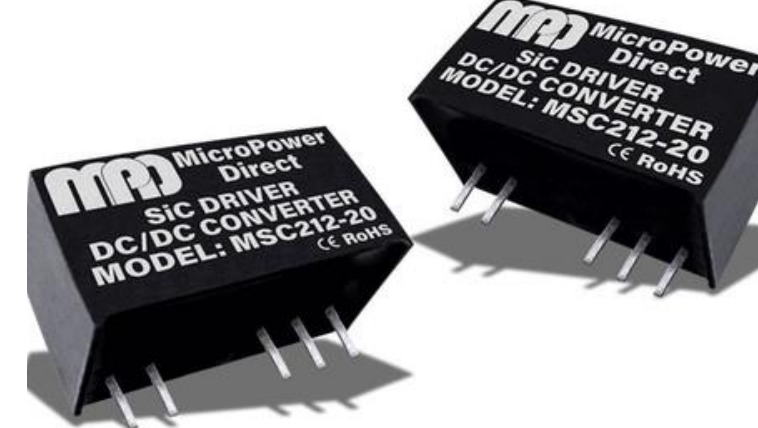
MR50SRW

- 50W Output Power
- Designed for Railways
- Wide Input Range
- Optional Heat Sink



MG1500RU

- 15W Output Power
- Compact MiniDip Case
- 4:1 Input Range
- High Efficiency



MSC200HI

- SiC Mosfet Driver
- 5, 12, 15, 24 VDC Inputs
- EN62368 Approved
- Asymmetrical Outputs

Industrial



Industrial Applications Demand Unyielding Power Supplies

- Power Supply Efficiency
- High power density and compact size
- Reliability and safety is critical

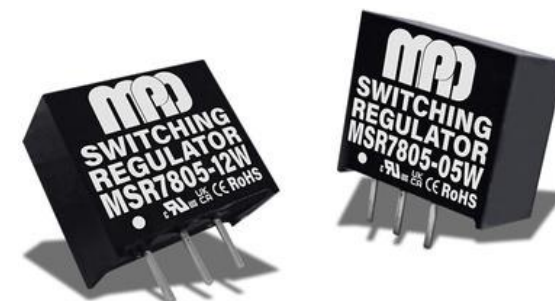
MPM-05SVLD

High Performance, 5W, Ultra-Wide AC/DC



MSR7805W

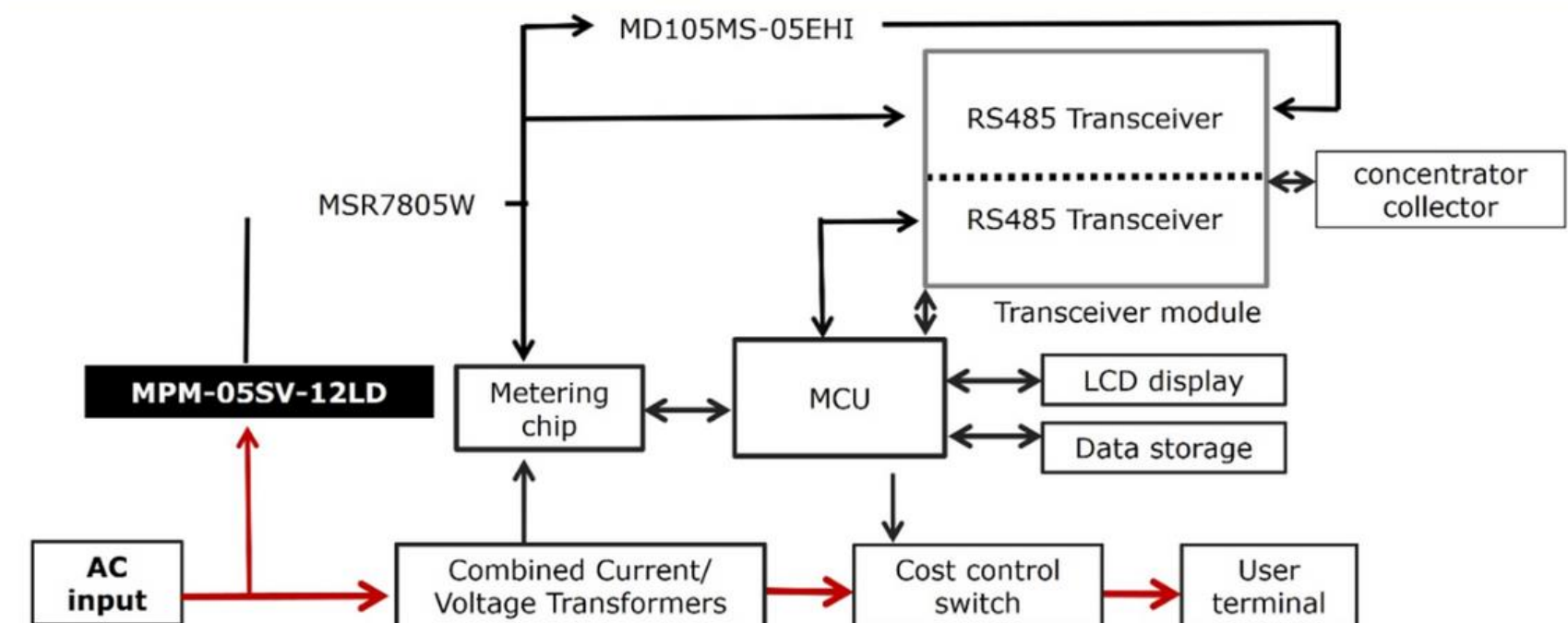
Non-isolated Wide Input POL Switching Regulator



Application

Smart Meters

Smart metering systems enhance energy management in homes. A converter is needed to ensure that the electronic systems are supplied with regulated and constant power. AC/DC converters, such as MPM-05SV-12LD, support the intelligent metering infrastructure.



Medical

Meeting the Critical Needs of the Medical Sector

- Uncompromising Safety
- Uninterrupted Performance
- Unwavering Reliability
- Enhanced Patient Safety

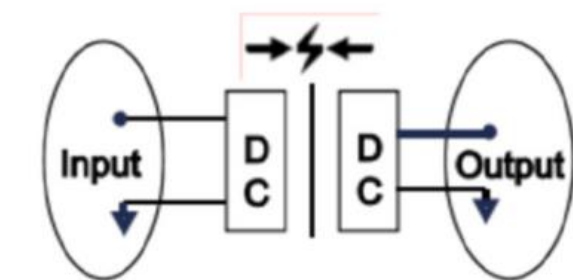
MPO-MS

A compact, efficient, reliable and economic solution. Available from 120W to 550W and ideal for BF medical system equipment.

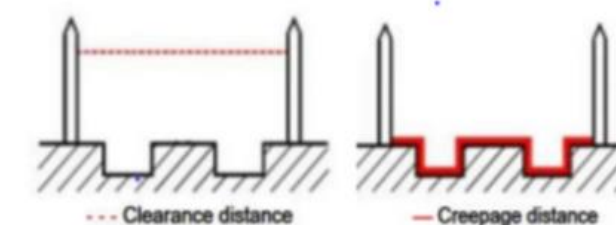


Requirements

Standard features of our medical products include a reinforced insulation barrier (2 x MOPP), low leakage current (typically <0.1 mA), and high efficiency. All medical products meet the latest safety standards (ES 60601-1 and IEC/EN 60601-1 3rd edition). With a connection to PE all models meet Safety Class I.



Reinforced insulation design



Enough safety distance

EV Chargers/Vehicles



DC/DC Converters Offer

- Bidirectional Operation
- Voltage Step-Up and Step-Down
- Compatibility w/Renewable Energy Sources

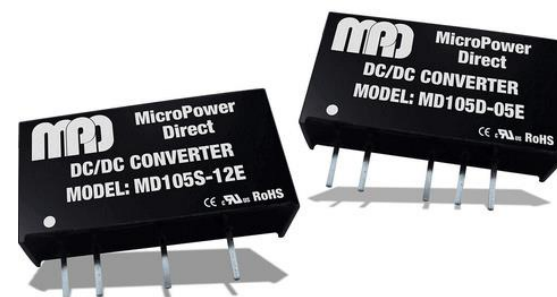
MPL-05SVT

Mini, Wide Input 5W, SIP AC/DC



MD112D-15E

1W SIP, Single & Dual Output DC/DC



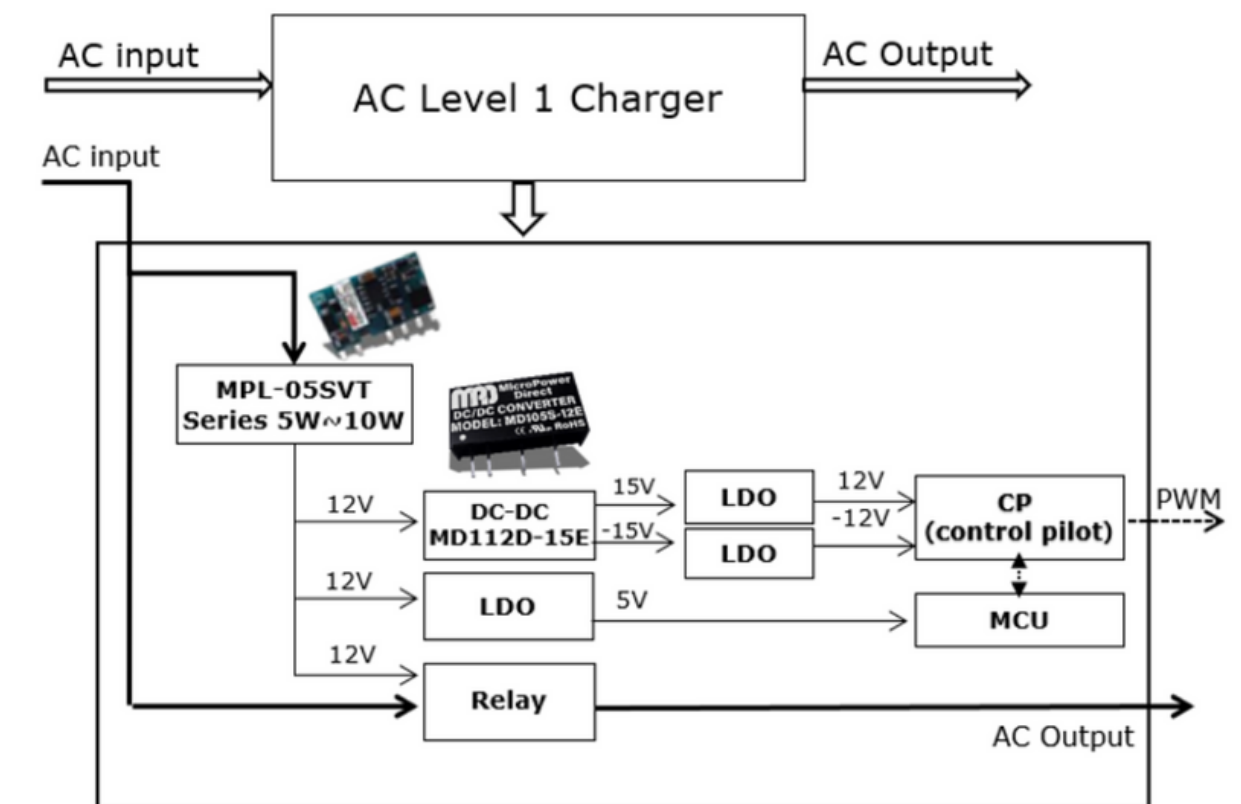
AC/DC Power Supplies Offer

- Voltage Compatibility and Grid Integration
- Bidirectional AC/DC Conversion
- Cooling and Thermal Management

Application

Level One Fast Charging

Portable chargers are compact and produced in large quantities. Requirements include low cost, small size and a wide operating temperature range.



Railway



Why DC/DC Converters for Trains?

- Voltage Regulation
- Compatibility with Various Power Sources
- Efficiency Optimization
- Electromagnetic Interference Mitigation
- Adaptation to Voltage Fluctuations

MR1011SRU

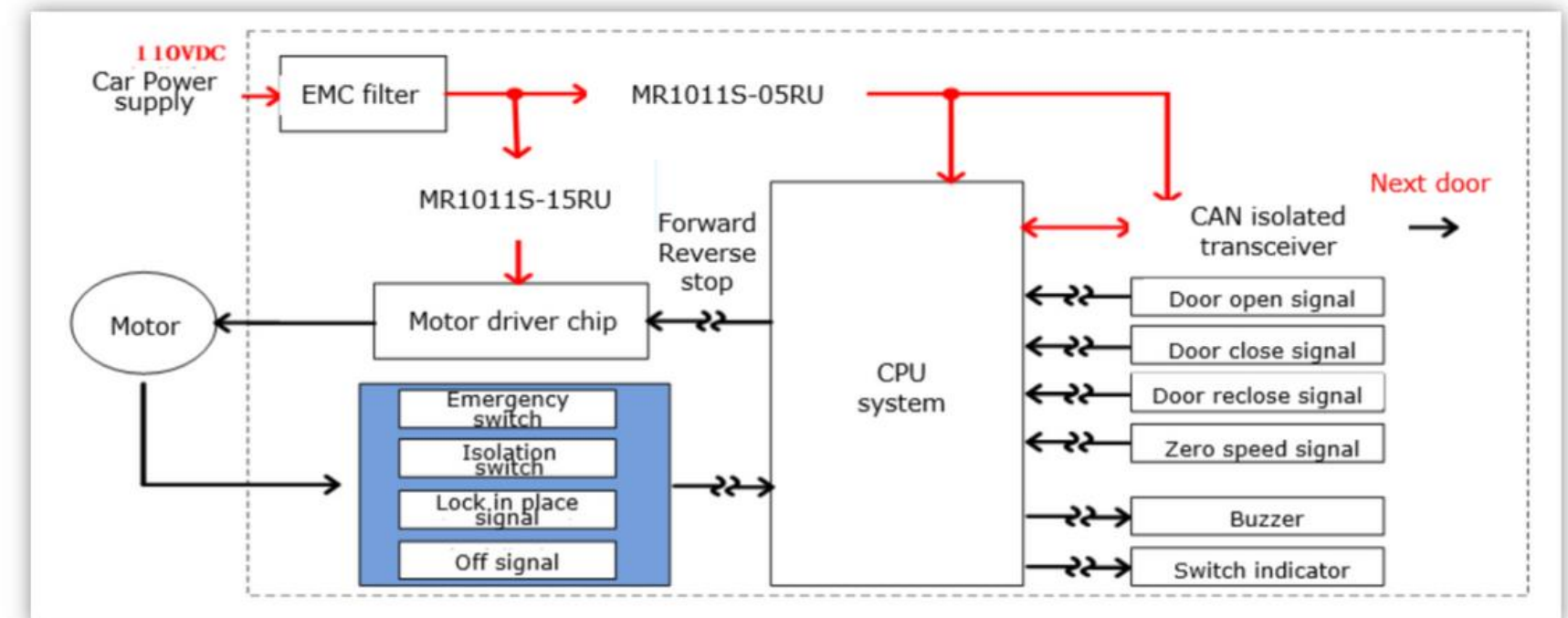
- Ultra-Wide 10W Railway DC/DC Converter



Application

Gate Control System Applications

Gate control systems include electromechanical components such as CPU systems, transceivers, motors, motor driving chips, and electronic control units. For these control units to work properly, they need steady, regulated power.



Block Diagram for Gate Control System application

Smart Homes

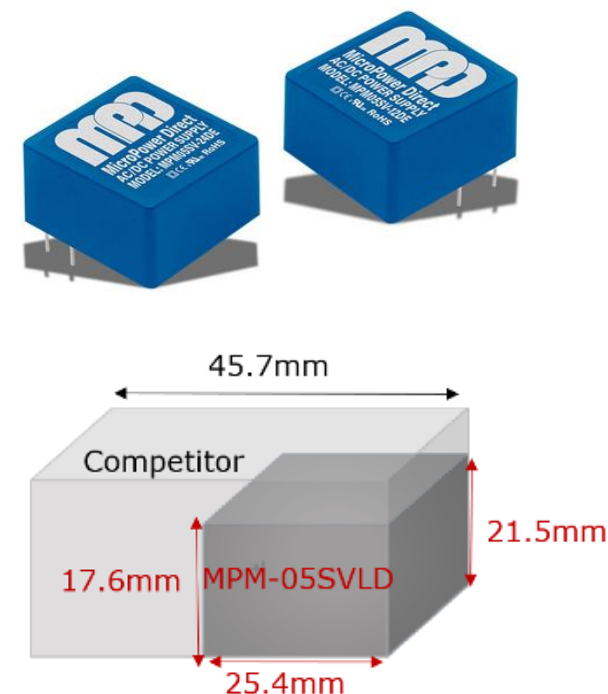


Smart Homes Require Smart Power Supplies

- Efficient Power Management
- Compact Design
- Compatability with Existing Designs
- Wide Operational Temperature
- High Isolation

MPM-05SVLD

High Performance, 5W, Ultra-Wide AC/DC Power Supply. More compact than the competition.



Application

Smart Curtains

An electric curtain is shown where the sensor senses light intensity, and the MCU initiates action to move the curtain according to a program fed into its memory. The AC/DC converter is receiving AC input power and delivering DC output power.

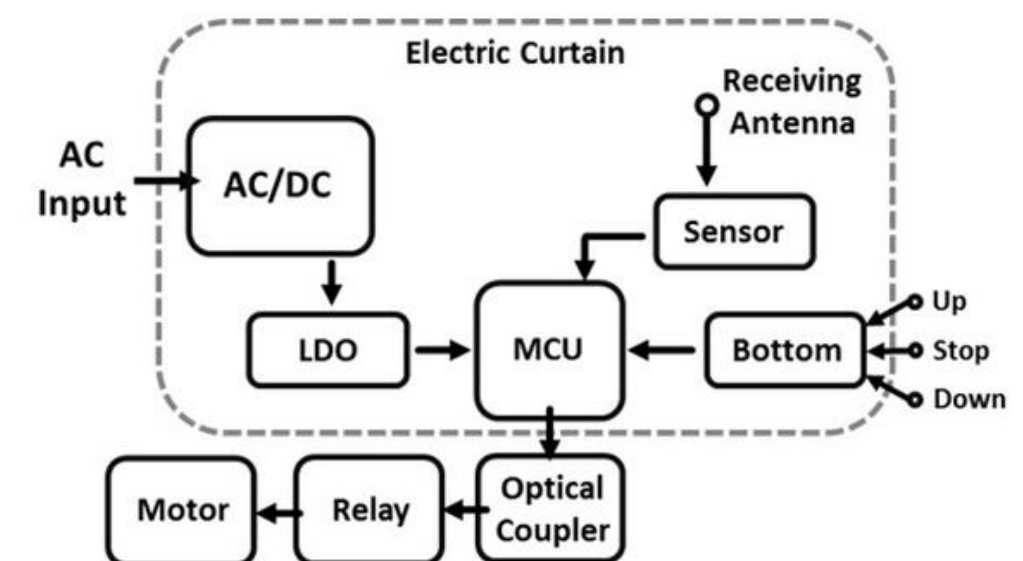


Figure 3: Block Diagram of an Electric Curtain

Other Industries

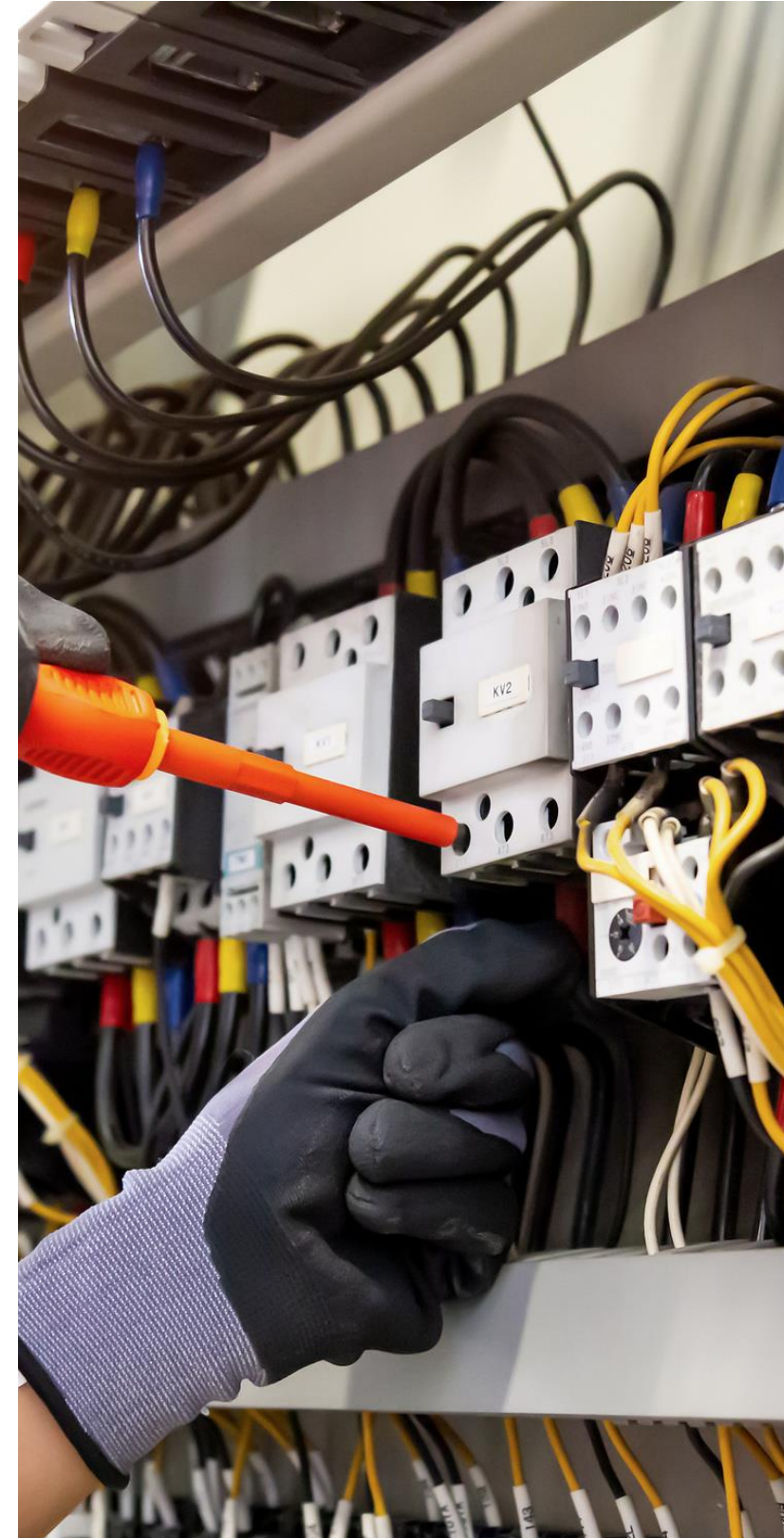
IOT



Renewable Energy



Industrial Control



Metering





THANK YOU

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