

MTM Power at InnoTrans 2026

Power Supply Solutions for Modern Onboard Power Architectures

September 22–25, 2026 | Hall 17 | Booth 410

MTM Power Expands Portfolio for Modern Onboard Power Architectures

New DC/DC converters with an ultra-wide input voltage range, railway approval for 60 W AC/DC power supplies, and new developments for higher power levels and USB-C applications are among the highlights of MTM Power's presence at InnoTrans.

Schwarzatal, September 22, 2026 – The demands placed on the electrical infrastructure of modern rail vehicles continue to grow. Different onboard voltage levels, additional loads, and increasing digitalization require power supply solutions that can be flexibly integrated into a wide range of vehicle and system architectures. MTM Power is addressing these requirements with new products and targeted additions to its rail portfolio. At InnoTrans 2026, the company will showcase current solutions while also providing a preview of upcoming power classes and applications.

One DC/DC Platform for Different Onboard Voltage Levels

With the PURC60 and PCMDS60U-VT, MTM Power is introducing a new generation of DC/DC converters for rail applications. The ultra-wide input voltage range of 14.4 to 154 VDC enables operation across different onboard voltage levels and can therefore reduce the number of variants required for different vehicle platforms.

Both converters provide 60 W of output power and offer additional reserves for short-term load peaks with a Power Boost of up to 150%. Depending on the installation requirements, an open housing design and a version with thermoselective vacuum encapsulation are available.

The platform is also designed to cover additional power classes. The PURC200 and PCMDS200U-VT have already been announced as 200 W additions to the range. The PURC120 and PCMDS120U-VT are planned to close the gap between 60 and 200 W. In addition, a further 300 W version, the PURC300, is currently planned.



The new PURC60 and PCMDS60U-VT DC/DC converters cover different onboard voltage levels with an input range of 14.4 to 154 VDC and provide a Power Boost of up to 150%.

Railway Approval for the 60 W Power Class

With railway approval for the PMAT60 and PCMAT60, MTM Power is expanding the application range of its 60 W AC/DC power supplies. Both series meet the requirements of EN 50155, EN 61373, and EN 45545-2 and are designed for different installation requirements: the PMAT60 for PCB mounting and the PCMAT60 for chassis mounting.

The input voltage range of 90 to 264 VAC enables operation on different supply networks. For applications requiring higher power, the product family already includes railway-approved 100 W and 150 W versions.



The railway-approved 60 W PMAT60 and PCMAT60 power supplies are designed for PCB and chassis mounting, respectively, and meet the requirements of EN 50155, EN 61373, and EN 45545-2.

More Power Reserves and New Charging Functions

For applications with higher power requirements, the PWRC650 DC/DC converter provides up to 650 W of continuous output power. For short-term load peaks, its Power Boost provides up to 1,000 W. Based on the existing converter, MTM Power is currently developing an additional battery charger version, opening up another application area within rail vehicles.

At the same time, the company is expanding its portfolio with USB-C solutions. The PS-USBC15 and PS-USBC30 are the first corresponding charging modules for rail applications. Additional Power Delivery solutions with 65 W and 130 W are planned and are intended to enable fast charging of higher-power mobile devices such as tablets and laptops.



The PWRC650 DC/DC converter provides 650 W of continuous output power and up to 1,000 W for short-term load peaks with its Power Boost. A battery charger version is currently in development.



With the PS-USBC15 and PS-USBC30, MTM Power is expanding its portfolio with USB-C charging modules for rail applications. Additional 65 W and 130 W Power Delivery solutions are planned.

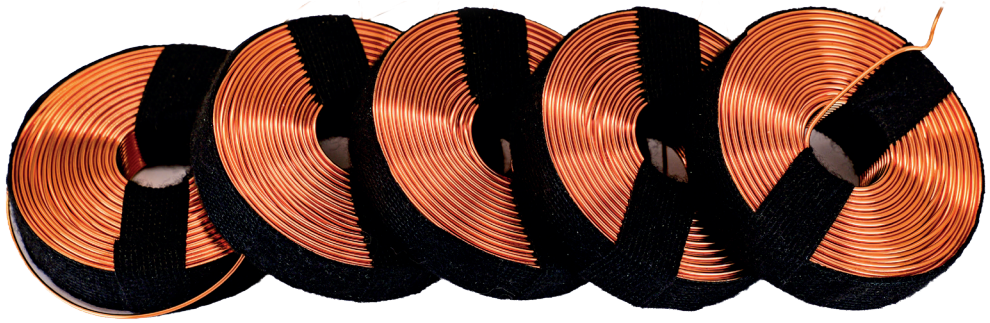
InnoTrans as a Platform for Current and Upcoming Developments

With the solutions presented at InnoTrans, MTM Power is continuing to expand its offering across different power classes, onboard voltage levels, and installation requirements. Alongside products already available, the company will also provide a focused preview of solutions currently in development or planning.

ELSIT Expands Expertise in Custom Inductive Components

With ELSIT Sp. z o.o., the MTM Power Group will present inductive components at InnoTrans 2026 for the first time. Based in Gliwice, Poland, the specialist develops and manufactures transformers, chokes, coils, and antennas to individual customer specifications – from prototypes to automated series production.

Inductive components often need to be precisely matched to specific electrical, mechanical, and design parameters. ELSIT therefore manufactures components according to customer specifications or designs them specifically for the task at hand. The portfolio ranges from low- and medium-power transformers based on EE/EI ferrite and steel cores to PCB chokes, EMC suppression chokes, various coils, and antennas. Different configurations and encapsulation options allow the components to be adapted to the respective operating conditions.



From Prototype to Series Production

One of ELSIT's key strengths is the rapid implementation of new projects. ELSIT supports these projects from development and prototype production through flexible series manufacturing. Automated winding and manufacturing processes provide the basis for reproducible results, even at higher production volumes.

Selected exhibits at InnoTrans demonstrate the breadth of this expertise. These include 868 MHz helical antennas developed for smart metering and IoT, as well as coil assemblies for wind turbines in the 3 to 18 kW power range. These product groups are among the key areas ELSIT will showcase in Berlin.

Development for Rail Applications

This development approach can be transferred to a wide range of use cases. For the rail sector, the focus is therefore not on an existing catalog of standardized rail products, but on the ability to design inductive components specifically for a particular application. Electrical parameters, form factor, materials, and manufacturing processes can be tailored to the individual project from the outset.

This expands the MTM Power Group's capabilities for future rail projects.

Additional Manufacturing Expertise within the MTM Power Group

ELSIT was founded in 1992 and has been part of the MTM Power Group since November 2025. At its Gliwice site, the company combines more than 30 years of winding technology experience with development and flexible manufacturing.

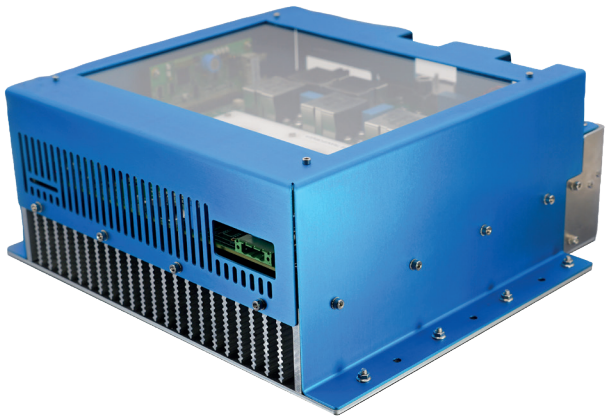
ELSIT complements MTM Power's existing expertise in inductive components for power electronics in the frequency range from 10 to 500 kHz. Together, the Group is expanding its development and manufacturing capabilities for magnetic components.

MTM Power Expands Expertise in High-Voltage and High-Power Applications

With the HVC1400/HVC2000, MTM Power is presenting a new high-voltage power supply for rail applications at InnoTrans. Developed by TEMES Engineering, the solution will be presented under the MTM Power name and also represents the planned long-term cooperation between the two companies. The focus is on higher voltage and power classes as well as additional software and system expertise.

Up to 2 kW from the High-Voltage Supply

The HVC1400/HVC2000 converts input voltages of 600 or 750 VDC into output voltages of 24, 28, 37.5, or 48 VDC required by loads and onboard power systems.
The HVC1400 provides 1.4 kW of output power, while the HVC2000 with fan unit delivers 2 kW. A Power Boost of 125% provides additional reserves for short-term load peaks. The integrated CAN interface provides control and communication functions. The converter is capable of a black start when the high voltage is switched on.
For existing vehicles using other bus systems, industrial bus converters can be used. Planar transformer technology enables a compact, robust design with optimized heat dissipation. Approvals in accordance with EN 50155, EN 50121-3-2, and EN 45545-2 are currently in preparation.



The HVC1400/HVC2000 converts 600 or 750 VDC into onboard voltages from 24 to 48 VDC and provides 1.4 or 2 kW of output power, depending on the version.

High Voltage Meets Software and System Expertise

Through its cooperation with TEMES, MTM Power is expanding its capabilities beyond its existing product portfolio. TEMES has many years of experience with power supply systems in high voltage and power classes and develops its own control and regulation software in addition to power electronics. This provides the basis for solutions in which power supply, communication, and the analysis of operating data are more closely integrated. Software-based functions can support condition monitoring, for example, and may provide the foundation for future predictive maintenance concepts. At the same time, TEMES contributes experience from applications and markets that complement MTM Power's existing business.

From Individual Loads to Onboard Power Supply

One advantage of connecting directly to the high-voltage supply becomes particularly relevant when modernizing existing vehicles. If an air-conditioning system is retrofitted, for example, the existing low-voltage onboard power system may not have sufficient power reserves. The HVC allows the additional load to be supplied separately from the high-voltage supply without placing additional demand on the existing onboard power system. The concept is not limited to individual loads, however. Multiple units can be operated in parallel, with load sharing handled via CAN. This makes it possible to scale the available power and use the HVC as a building block for more extensive onboard power supplies in locomotives and multiple units.

MTM Power and TEMES are currently engaged in advanced discussions regarding a long-term strategic partnership. Both companies share the goal of combining their technological expertise, development resources, and manufacturing know-how to offer customers an even broader and more capable portfolio of solutions for demanding power supply and system applications in the future.

The close technical exchange already taking place today, along with joint project initiatives, underscores the strategic alignment between the two companies and provides a promising foundation for further cooperation.

About MTM Power

MTM Power develops and manufactures power supply solutions for applications where reliability and long-term availability are critical. Founded in 1991, the company today employs around 250 people and serves more than 3,000 customers worldwide. Around 300,000 new MTM Power converters are added to applications in the field each year. Development and manufacturing are primarily based at the company's headquarters in Schwarzatal, Germany.

The portfolio includes AC/DC power supplies, DC/DC converters, inductive components, modular power supplies, and custom solutions. In addition to rail applications, MTM Power products are used in automation, energy technology, industrial and special-purpose vehicles, measurement and sensor technology, mechanical and plant engineering, as well as marine, aerospace, and defense applications.

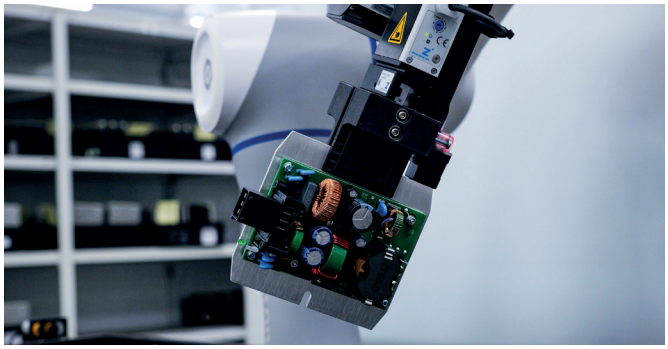
Development, Testing, and Manufacturing from a Single Source

MTM Power supports projects ranging from adapted standard products to completely custom developments. Electrical safety, electromagnetic compatibility, and performance across the specified temperature range are tested in the company's own laboratory. In manufacturing, MTM Power combines flexible production volumes with complete traceability.

For demanding environmental conditions, MTM Power uses technologies including thermoselective vacuum encapsulation, which protects electronics against moisture and condensation and increases their resistance to vibration. Independently of this, Base Plate Cooling enables efficient heat dissipation and supports high power densities with reduced cooling requirements. Depending on the product, rugged designs are also available for decentralized applications and demanding operating environments.



Automated processes support the flexible and reproducible manufacturing of power supply solutions at MTM Power's headquarters in Schwarzatal, Germany.



MTM Power's headquarters in Schwarzatal, Thuringia, Germany, where the company's development activities and a large share of its manufacturing are based.

More Than 25 Years of Experience in Rail

MTM Power completed its first rail project in 1998, supplying power solutions for 170 rail vehicles. In 2006, Plant 3 in Unterweißbach was established as a dedicated production site for rail applications, followed in 2009 by the establishment of an in-house test laboratory for rail applications. Today, rail is one of the company's key markets. Products for railway technology vehicles are developed and tested, depending on the application, in accordance with requirements including EN 50155, EN 50121-3-2, EN 61373, and EN 45545-2.

Four Locations, Additional Expertise

In addition to development and manufacturing in Schwarzatal, MTM Power operates an international sales office in Frankfurt am Main and a development site in Wilhelmshaven with hardware and software expertise. Since 2025, ELSIT Sp. z o.o. in Gliwice, Poland, has also been part of the Group, adding further development and manufacturing expertise in inductive components.

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