

Data Center

Weidmuller Accelerates Data Center Deployment

Efficient. Reliable. Scalable.

Data Centers power the digital world – driven by AI, Cloud and ever-growing data volumes. To keep pace, they must deliver speed, reliability and scalability, ensuring critical processes run without interruption. The key? Robust infrastructure and integrated redundancy.

With proven expertise in power distribution, connectivity and automation, Weidmuller helps build high-availability data centers — maximizing uptime and enabling secure, scalable growth.



Approvals



Accelerate Builds, Simplify Maintenance

Expertise in power distribution, connectivity, automation and energy monitoring systems



Energy Monitoring

Versatile portfolio of energy measurement, monitoring and analysis solutions for efficient, safe and reliable insights that optimize Data Center performance



Infrastructure Intelligence

ResMa: the smart resource management software designed for seamless integration and effortless data acquisition across your entire system

Data Center Solutions

Core tasks in data centers



Cost Center Management

Co-location facilities require clearly defined cost centers and accurate monthly energy metering. Using MID-certified energy counters such as the EM 122-TCP-MID, operators can precisely record consumption for individual racks or rental areas. These values can be allocated to cost centers for accurate and transparent accounting.



Energy Efficiency

Power Usage Effectiveness (PUE), along with key metrics such as Energy Performance Indicators (EnPIs) and Key Performance Indicators (KPIs), can be accurately analyzed using ResMa — our ISO 50001/50006-certified energy monitoring software. ResMa provides reliable insights for optimizing energy efficiency and compliance, helping operators make data-driven decisions for sustainable performance.



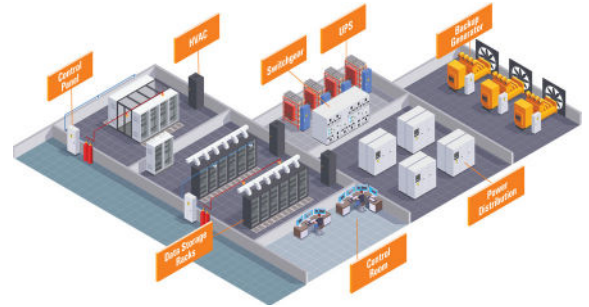
Fire Protection

Protection of mission critical assets is essential. To ensure safety and reliability, the functionality of TN-S systems can be continuously monitored and logged using a comprehensive Residual Current Monitoring (RCM) solution — providing early fault detection and enhanced operational security.



High Availability

Measurement technology is vital for ensuring high availability in data centers. By detecting anomalous events early, operators can prevent costly damage and operational disruptions. To achieve this, power quality must be monitored in compliance with international standards such as EN 50600, EN 50160, IEC 61000-2-4:2002, IEEE 519 and ITIC (CBEMA) — providing a reliable foundation for safety and performance.



Products & solutions

Energy management in data centers must go beyond simple meter readings. Stringent requirements for energy efficiency, safety and high availability demand a comprehensive approach to monitoring the entire energy supply — ensuring transparency, reliability and optimized performance.

Selection of Energy Measurement Devices

Type	Description	Order no.
EM 122-TCP-MID	Energy monitor and MID energy counters	3145600000
Energy Analyser 550-230	Multifunctional network analyzer for energy monitoring, residual current monitoring and power quality analysis	2525500000
Energy Analyser 750-230	Multifunctional network analyzer for energy monitoring, residual current monitoring and power quality analysis (class A)	2534130000

Supporting products for data center solutions



Pre-Engineered Modular Systems

Modular, ready-to-install solutions simplify field installation and reduce on-site labor by up to 50%.



Automated Panel Building

Control panel wiring is often a bottleneck in construction. Our automated panel building tools drastically reduce build time and error.



Digital Twin & Design Automation

Weidmuller Configurator, the digital engineering software for panel building, enables faster, error-free design. Get it right the first time.

Discover the future of data center infrastructures

Contact us today at weidmuller.com/sales to learn more about how our energy management solutions can help you achieve your data center goals.



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