



ULTRASONIC GENERATORS

COMPACT. RELIABLE. MADE BY HERRMANN.

Perfect for the automotive industry

Ultrasonic generators by Herrmann

What does an ultrasonic generator do?

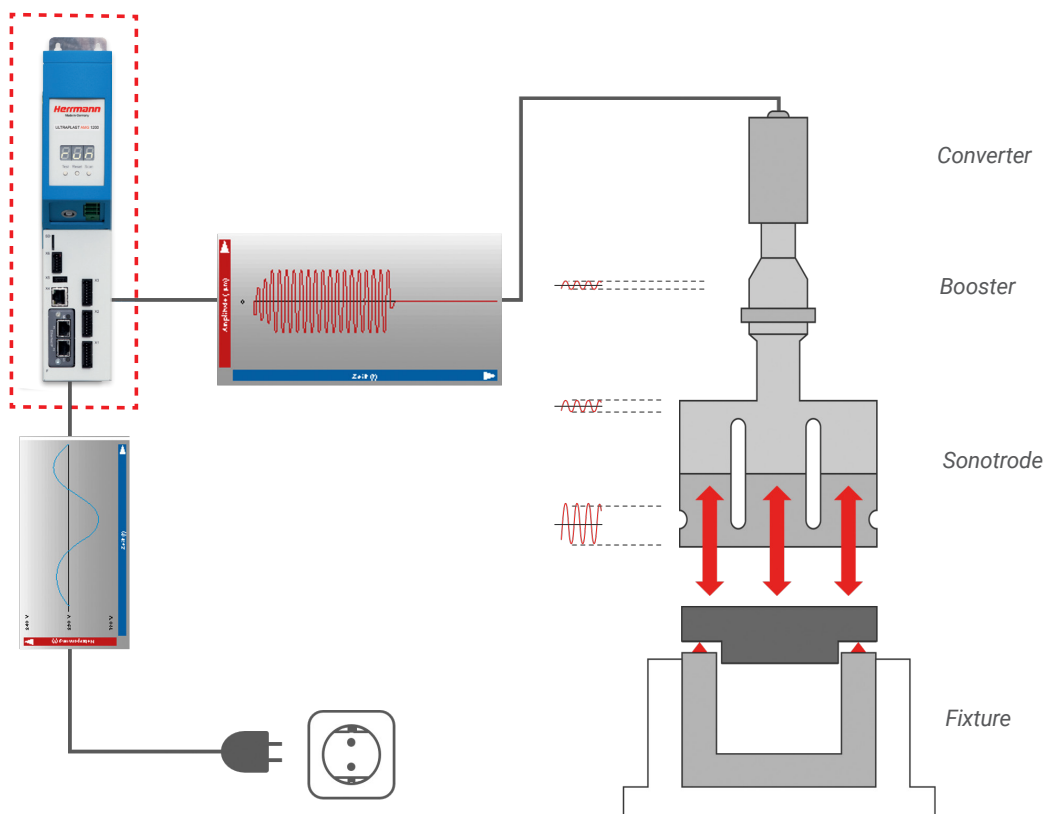
The generator is the heart of the ultrasonic welding system. It converts low-frequency supply voltage into the high frequency required for the welding process. Precise control technology ensures a constant amplitude, guaranteeing a stable welding process.

The digital ultrasonic generators ULTRAPLAST AMG and SMART AMG digital from Herrmann Ultraschall are precisely tailored to the needs of the automotive industry and perfectly suited for automated production processes. They are particularly interesting for machine manufacturers who focus on building special ultrasonic welding machines with multihead or robotic systems.

Thanks to the platform strategy, the generators can be configured to meet specific requirements and offer maximum customer benefit.

This way, the ultrasonic generators meet important requirements for Industry 4.0: suitable interfaces for secure communication, network-ready with intelligent sensors, and easy troubleshooting.

Integrated into the complex control processes of the machine manufacturer, the generator series ULTRAPLAST AMG and SMART AMG digital are no longer a simple ultrasonic source, but a central, intelligent network participant within the ultrasonic welding machine.



COMPACT DESIGN

Space-saving assembly ensures maximum freedom in planning and design. Thanks to its compact type, the generator fits into any 300 mm standard electrical cabinet models. State-of-the-art coolplate technology enables a sustainable cooling concept.

MODULARITY

The wide variety of generators with different welding frequencies, variants, and application-specific auxiliary functions enable customized device configuration. Wide power range: 1,200 to 1,700 watts.

EASY TO USE

Easy installation, quick setup, simple operability—handling the generators is incredibly easy. Software updates can be easily carried out via the USB interface.

DIAGNOSTICS

Due to its graphical display, the diagnostics and operating software AMGsim ensures fast and easy understanding of the weld process without the need for expert knowledge. The Ethernet network provides access to all process data during ongoing production so that users can individually perform optimization processes.

COMMUNICATION

The Herrmann Communication Interface (HCI) offers a simple interface based on standard Ethernet. In addition, fieldbus modules are available for integration into the ultrasonic welding machine. These ensure the exchange of all relevant process parameters in real time.

CONNECTIVITY

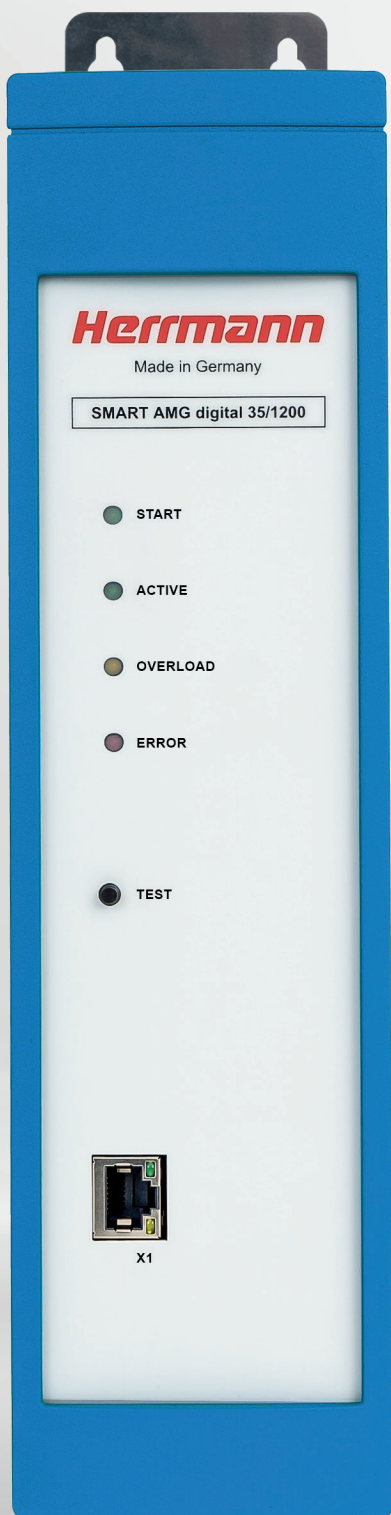
In addition to many practical interfaces, an analog interface allows direct connection of a measuring sensor and reduces the load on the machine controller. Thanks to the modern position measuring system, the welding depth can be measured directly via the generator and shown graphically. All common fieldbus modules are available for connection in industrial network environments.

DIGITAL CONTROL TECHNOLOGY

During the welding process, the generator regulates precisely at the operating point determined before. Influences from fluctuations in external conditions are balanced highly dynamically. This ensures consistent welding results throughout the entire production period, even with high-speed welding processes.



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SMART AMG digital



ULTRAPLAST AMG MX

Technical data of our ultrasonic generators

TYPE DESIGNATION	SMART AMG digital	ULTRAPLAST AMG MX
Width/height/depth [mm]	76/286/274	60/285/274
Frequencies [kHz]	35	30, 35
Power values [W]	1000, 1200	1200, 1700
Operating modes	Time, Energy	Time, Energy, Power
Distance ABS	-	○
Number of memories	16	16
USB interface	-	●
Standard Ethernet interface	●	●
Herrmann Communication Interface (HCI)	-	●
Diagnostics software	●	●
Analog I/O interface	●	●
Digital I/O Schnittstelle	●	●
Fieldbus interface	○ **	○ *

* PROFIBUS, PROFINET, DeviceNet, EtherNet/IP, EtherCAT, Sercos III, Modbus-TCP.

** SMART AMG digital only available with PROFINET

○ Option ● already included



Why Herrmann?

- 60+ years of ultrasonic experience
- 1500+ applications solved per year
- Worldwide service and support

Robust ultrasonic components at competitive prices: Thanks to our many years of experience in the automotive industry, we offer the right solutions for all common applications.

With us as your partner, you benefit from reliable support—anywhere, anytime. **27 locations in 20 countries** form a globally networked service network that guarantees you fast response times and competent support—for safe, efficient, and economical manufacturing.

Start your project with us

Find the right ultrasonic components

Let our trusted advisors consult you to find the right ultrasonic components for your requirements and products. Contact us today!



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REQUEST QUOTE

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