

iSONIC PULSE GEN A

Digital ultrasonic generators



SONOTRONIC
ULTRASONICS TECHNOLOGY

Digital ultrasonic generators

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Features, operation and technical data

The high-performance device iSONIC PULSE GEN A is a 20 kHz generator offering an output power of up to 4,000 W in a very compact format including active cooling. The generator was designed for the increased requirements and high power in the ultrasonic high performance range.

The iSONIC PULSE GEN A can be used for the entire application range of ultrasonic technology in plastics processing. Whether ultrasonic welding, cutting, punching, riveting and embossing of thermoplastics, films or textiles, it finds areas of application in all industries.

Advantages

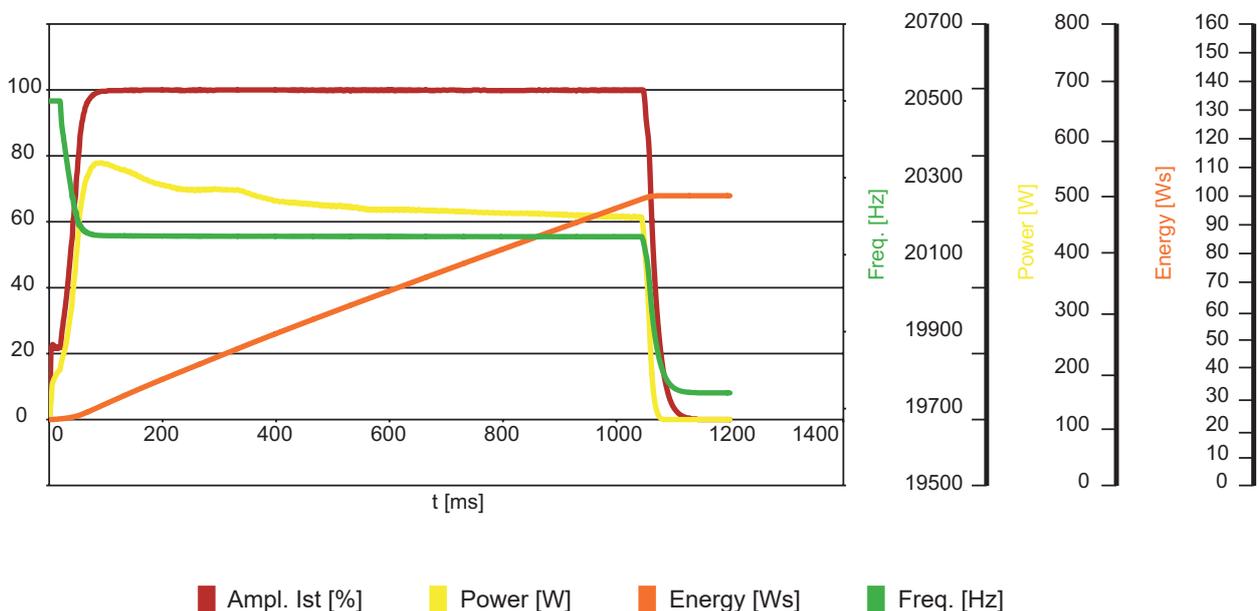
Software-supported commissioning by the ultrasonic Diagnostic System (UDS).

Data collection and transfer through Profinet interface.

Integration into the machine control unit through the Profinet interface.

Optional remote access via router on the machine side and UDS to the generator possible.

Application example: Visualization of welding curves with data from the PROFINET interface



Functional characteristics

- Frequency tuning for every welding process
- Amplitude stabilization or power stabilization during the entire process
- Repeatable oscillation buildup performance
- External hardware start for the synchronization of multiple generators possible
- Programmable post-sonic signal
- Optional parameterizable control of the energy setpoints (thermal correction) in the event of external material and/or machine heating

Welding process

- Start signal
- Time
- Energy
- Contact

Monitoring process

- Time
- Power
- Energy
- Contact

Case

- Closed stainless-metal casing, IP20, for installation in a control cabinet
- Active cooling system
- All connecting cables from the front of the housing supplied

Hardware features

- Fully digital control with FPGA technology
- Power supply unit with monitoring of undervoltage and phase errors
- Temperature and overcurrent monitoring of the power module
- Profinet
- JTAG interface for service maintenance



- 1 SONOTRONIC service port
- 2 Status LEDs
- 3 RJ45 bushing for Profinet
- 4 USB connector
- 5 Start, contact shut-off, emergency stop
- 6 24 V PLC, 0 V PLC
- 7 Power connection 3 x 400 V ~ + N + PE
- 8 HF connector
- 9 ON/OFF switch



Infos online

Technical data

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Technical data	
Working frequency [kHz]	20 (+/-500 Hz)
Output power [W]	3,000 / 4,000
Mains voltage [V], mains frequency [Hz]	3 x 400 (L1-L3, N, PE), 50/60
Rated current [A]	3 x 7.5 / 3 x 11
Mains fuse [A]	3 x T 12.5 (internal)
Switch-on duration	100 % / 75 %
Case dimension without mounting plate (w x h x d) [mm]	183 x 322 x 271
Case dimension with mounting plate (w x h x d) [mm]	183 x 322 x 370
Weight [kg]	13.5

Subject to technical changes.

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