SERIES HU

HU 1*i*

CONVERTERS FOR INDUCTION HEATING PROCESSES

High-frequency converters
1 kW / 1,0 - 3,0 MHz



HIMMELWERK
Leading Induction

INDUCTION
AT A GLANCE

Induction is economic

Due to its high efficiency, induction delights with lower energy costs

Induction is high-quality

Perfect reproducability and smart controls lead to lower defect rates

Induction is climate friendly

Lower energy consumption, higher yields and the option to use green electricity assure a considerably smaller carbon footprint

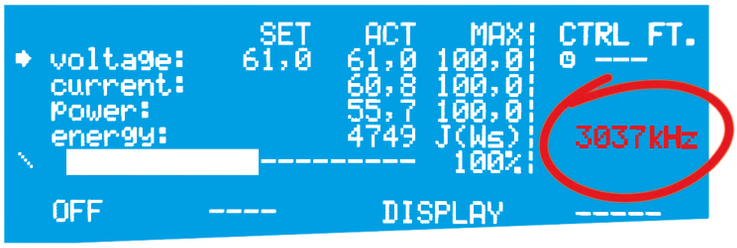
APPLICATIONS OF INDUCTION

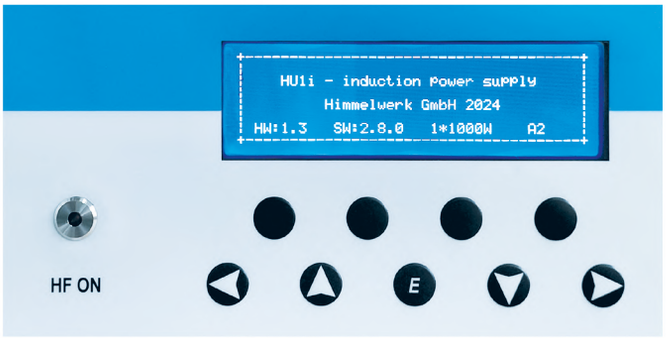
- Heat treatment (hardening, annealing, tempering)
- Brazing and soldering
- Joining (shrinking)
- Forming and forging
- Surface treatment (drying, preheating)
- Indirect heating
- Melting
- Sealing
- Special solutions (glueing, plasma generation, crystal growing, nano particles, materials measuring etc.)
- And many more!



The HU 1i fills the gap left by the declining availability of tube-based ultra-high-frequency generators. Applications which rely on the Megahertz frequencies, such as crystal growing or the heating of ultra-thin foils, have recently had few alternatives but to keep their processes alive with tube spare parts continuously getting more scarce and consequently more expensive.

At a frequency of 3 MHz the HU 1i already reaches penetration depths broadly comparable to those of tube-based converters. Consequently, the majority of these processes can be realized using a significantly more cost-effective, transistor-based unit without compromising the performance.





The robust user interface and a range of industry standard connectivity options (e.g. Ethercat, Profibus, Profinet etc.) allow for smooth operation and deep integration for process automation and production lines.

And with its quick boot time of just two seconds the device is immediately ready for use.

MEGAHERTZ. HU 1i



Connection option for footswitches and external potentiometer control

Connection Option for emergency stop switch

Smart cooling circuit with integrated flow sensor

Power and control connection with quick-lock mechanism for easy replacement.

Analog interface for seamless integration with your process control

Options such as Profibus, Profinet, or EtherCAT enable digital Industry 4.0 integration.

Hard wired ON / OFF power switch guarantees 0 watts offline power usage

WHY HU 1*i*?

Highest Frequency
Delicate Workpieces
100% Duty Cycle

The HU 1i is a processor-controlled high-frequency generator for inductive heating in the Megahertz frequency range.

Thanks to state-of-the-art transistor technology, the HU 1i operates at frequencies between 1 and 3 MHz. The use of premium components ensures a continuous 100% duty cycle – even at the full 3 MHz.

Its high-frequency range makes it ideal for heating the smallest and most delicate components, such as battery or sealing foils, electronic and medical products, or for use in semiconductor manufacturing processes.

Especially in the sub-millimeter range – where most devices lack the precision needed for accurate control – the HU 1i stands out by delivering the necessary finesse.

TECHNICAL DATA

HU 1*i*

OUTPUT	
HF-Power	1,0 kW
Frequency	1,0 - 3,0 MHz

COOLING WATER	
Flow rate	3 l/min
Input pressure	< 6 bar
Pressure difference	> 3,5 bar
Temperature	18 - 30 °C

INPUT	
1,1 kVA	Mains Power
230 V +/- 10% + PE	Mains Voltage
50 / 60 Hz	Frequency

WEIGHT	
15,0 kg	Converter
6,0 kg	Outer circuit

DIMENSIONS (W x H x D) in mm*	
380 x 180 x 370	Converter
120 x 120 x 250	Outer circuit

*Housing dimensions without handles and connectors

Converter





Outer circuit

ANY QUESTIONS REGARDING THIS PRODUCT?
FEEL FREE TO CONTACT US. WE ARE HAPPY TO HELP.

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