

# SONIC-digital



**NEW!**

**Modern ultrasonics brought up-to-date**

- Cleaning
- Welding
- Special applications

Ultrasonics

# We are setting new standards in ultrasonics

## SONIC-digital – the innovation

The new series of **SONIC-digital** generators developed by us combine our total experience and all our technical know-how in a completely new concept.

Digital frequency generation, the possibility to separate the generator from the front panel and the completely new cooling system, they all add up to a technical breakthrough in ultrasonics. The costly protective systems of the **SONIC-digital** generators achieve a high degree of operational safety and at the same time safeguards the connected transducers.

### Digital control of all parameters to achieve the best possible precision and stability.

With the traditional analogue techniques it was not possible to achieve the best possible precision and stability.

Temperature and component variations as well as the aging factor inevitably caused deviation from the originally selected values.

All these problems have now been overcome by the new digitalised generator series **SONIC-digital**. They achieve frequency- and amplitude stability and output which was not obtainable by the traditional analogue method.

For welding the amplitude is of critical importance.

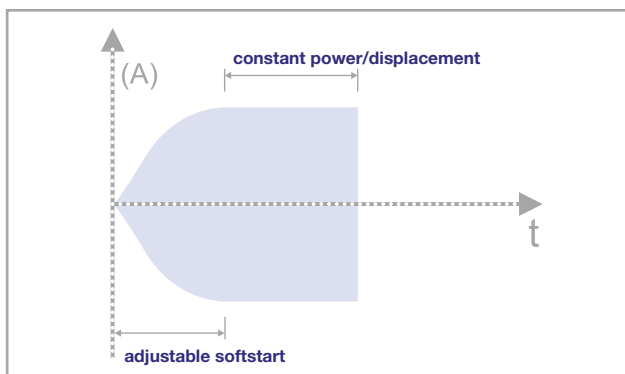
The new digital system largely eliminates the effect of component and voltage variations.

The new "SONIC-digital" generators achieve a reproducibility unimaginable hitherto.

Carefully selected components of the highest quality incorporated in extremely stable circuits achieve an exceptional operational safety.

### Highest flexibility through a completely new operational concept.

The ultrasonic generators **SONIC-digital** are characterised by technical progress with maximum flexibility. By separating the front-panel from the power unit, the power unit may be located at a convenient place while the space saving control panel can be mounted at an easily reachable position in the console of the machine. The length of the connecting cable between control panel and power unit can be up to 50 m. A further option is a radio-controlled remote control.



Generator with detachable front panel

## Safety and reliability – digitally controlled.

The generators **SONIC-digital** are protected by a number of safety features. A new circuit protects the power semiconductors during a short-circuit condition and thus prevents a break-down. The adjustable softstart feature ensures a very gradual start-up of vibration, of importance especially in welding applications. This protects transducers and sonotrodes from harmful transient effects.

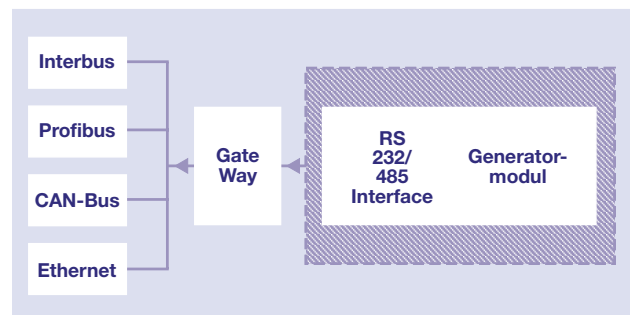


## Reliable and user friendly

The generators **SONIC-digital** have been designed for rough industrial use. They are protected through many protective and monitoring systems. A further safety feature in the new intelligent cooling system are temperature sensors which start up the integrated fan only when the temperature of the internal heatsink exceeds a pre-set limit. The amount of cooling air is thereby substantially reduced which in turn minimizes the soiling of the generator. At the same time, a constant working temperature is maintained which prolongs the durability of the components and consequently the reliability of the system.

## Multiple control options with the multifunctional interface

A multifunctional interface ensures many different control options. In addition to a RS 232/485 interface, gateways for all industrial busses are available. This opens up many new options for the control and monitoring of the generators.



## The main operating advantage

- User friendly with ergonomic menu control
- Good readability of power, frequency and all other parameters
- Large illuminated LCD-display
- Easy to maintain through exchangeable printed circuit boards
- Change of generator modules without removal of transducer connectors
- Transducer Connection is compatible to all of our previous generator module systems as well as those of the competitors.

# Technical features:

## Digital cleaning generators – Cleansonic Digital „SD“ or „TD“

Type	Power	Outputs	Frequency*
WU 300 „SD“ or „TD“	300 W <sub>eff</sub> / 600 W <sub>peak</sub>	1	25,30 and 40 kHz
WU 600 „SD“ or „TD“	600 W <sub>eff</sub> /1200 W <sub>peak</sub>	1	25,30 and 40 kHz
WU 1000 „SD“ or „TD“	1000 W <sub>eff</sub> /2000 W <sub>peak</sub>	1	25,30 and 40 kHz
WU 1200 „SD“ or „TD“	1200 W <sub>eff</sub> /2400 W <sub>peak</sub>	1	25,30 and 40 kHz
WU 1500 „SD“ or „TD“	1500 W <sub>eff</sub> /3000 W <sub>peak</sub>	1	25,30 and 40 kHz
WU 2000 „SD“ or „TD“	2000 W <sub>eff</sub> /4000 W <sub>peak</sub>	1	25,30 and 40 kHz
WU 3000 „SD“ or „TD“	3000 W <sub>eff</sub> /6000 W <sub>peak</sub>	1/2	25,30 and 40 kHz
WU 4000 „SD“ or „TD“	4000 W <sub>eff</sub> /8000 W <sub>peak</sub>	2	25,30 and 40 kHz
WU 4000 „SD“ or „TD“	4000 W <sub>eff</sub> /8000 W <sub>peak</sub>	4	25,30 and 40 kHz
WU 6000 „SD“ or „TD“	6000 W <sub>eff</sub> / 12 kW <sub>peak</sub>	2	25,30 and 40 kHz
WU 6000 „SD“ or „TD“	6000 W <sub>eff</sub> / 12 kW <sub>peak</sub>	3	25,30 and 40 kHz
WU 6000 „SD“ or „TD“	6000 W <sub>eff</sub> / 12 kW <sub>peak</sub>	4	25,30 and 40 kHz

## Digital welding and special applications – Multipurpose Digital „MD“ Frequency 20, 30, 35 and 40 kHz

Type	Power	Outputs	Frequency*
WU 400 „MD“	400 W <sub>peak</sub>	1	30, 35 and 40 kHz
WU 600 „MD“	600 W <sub>peak</sub>	1	20 kHz
WU 800 „MD“	800 W <sub>peak</sub>	1	20, 30, 35 and 40 kHz
WU 1000 „MD“	1000 W <sub>peak</sub>	1	20 kHz
WU 1200 „MD“	1200 W <sub>peak</sub>	1	30, 35 and 40 kHz
WU 1500 „MD“	1500 W <sub>peak</sub>	1	20 kHz
WU 2000 „MD“	2000 W <sub>peak</sub>	1	20 kHz
WU 3000 „MD“	3000 W <sub>peak</sub>	1	20 kHz

## Ultrasonic converter Frequency 20, 30, 35 and 40 kHz

Type	Power	Outputs	Frequency*
WU 400 „WK“	400 W <sub>peak</sub>	1	30, 35 and 40 kHz
WU 600 „WK“	600 W <sub>peak</sub>	1	20 kHz
WU 800 „WK“	800 W <sub>peak</sub>	1	20, 30, 35 and 40 kHz
WU 1000 „WK“	1000 W <sub>peak</sub>	1	20 kHz
WU 1200 „WK“	1200 W <sub>peak</sub>	1	30, 35 and 40 kHz
WU 1500 „WK“	1500 W <sub>peak</sub>	1	20 kHz
WU 2000 „WK“	2000 W <sub>peak</sub>	1	20 kHz
WU 3000 „WK“	3000 W <sub>peak</sub>	1	20 kHz

„SD“ – Sonopush Digital®-version  
 „TD“ – Digital immersible- and plate-transducer version  
 „MD“ – Multipurpose Digital generators for welding and special applications

\* For high frequency generators there is a separate brochure available.



Ultrasonic welding converters series „WK“



Types of housings GTE 28, 42 and 84

### Types of housings/Dimensions

Type	width/mm	height/mm	depth/mm
GTE 84	449	222	411
GTE 42	236	222	411
GTE 28	168	180	410

