



## SONOSYS® Megasonic System with Slim Line Generator for Single Nozzle 1 MHz / 2 MHz / 3 MHz / 4 MHz

### Function

The transducer in the Megasonic Nozzle generates a Megasonic wave, which is transmitted through a flowing liquid (e.g.: DI-water) to the surface of the substrate. The Megasonic energy is concentrated on a small point of 4 mm.

This tankless Megasonic Nozzle system provides advanced non contact cleaning processes.

### Application

Cleaning of Single Wafers, Masks, LCD's, Substrates and Micro Electro Mechanical Systems (MEMS).

### Technical data modular Megasonic Generator Slim Line

#### Electrical data

|                                 |  |
|---------------------------------|--|
| <b>Output power:</b>            | 35 Watt / <b>MLM 1</b><br>70 Watt / <b>MLM1 &amp; MLM 2</b><br><b>MLM = Megasonic Low Power Module</b> |
| <b>Output power adjustment:</b> | Approx. 20 % - 100 %   |
| <b>Frequency:</b>               | 950 kHz to 1.05 MHz / 1.95 MHz to 2.05 MHz<br>2.95 MHz to 3.05 MHz / 3.95 MHz to 4.05 MHz              |
| <b>Mains voltage:</b>           | 110 VAC or 230 VAC; 50 – 60 Hz   |
| <b>Option:</b>                  | RS 232 Interface, CAN open   |

#### Mechanical data

|                    |                                       |
|--------------------|---------------------------------------|
| <b>Housing:</b>    | 19" enclosure 3/4 SU                  |
| <b>Dimensions:</b> | 28 HP; approx. 165x185x329 mm (WxHxD) |
| <b>Weight:</b>     | Approx. 5.2 kg                        |

#### Operational conditions

|  |                    |
|--|--------------------|
| <b>Ambient temperature:</b>  | + 10 °C to + 40 °C |
| Condensed moisture is to be prevented! Protected from humidity, dirt and aggressive vapours. |                    |

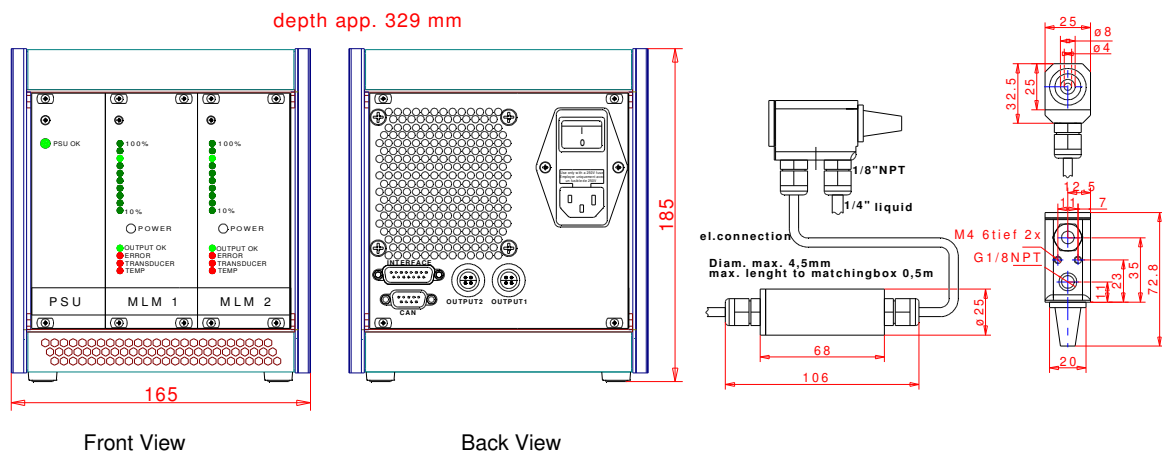
## Technical data Megasonic Single Nozzle

### Electrical data

|   |  |
|---|--|
| <b>High Frequency Input:</b>                        | 35 Watt / 1 MHz / 2 MHz / 3 MHz / 4 MHz        |
| <b>Transducer Element:</b>                          | Special PZT-Piezoceramic                       |
| <b>HF-Cable:</b>                                    | Screened; Length: 3 m; Ø4.5 mm; Material: PTFE |
| <b>Cable length between nozzle and matchingbox:</b> | Standard 20 cm; Maximum 50 cm                  |

### Mechanical data

|   |  |
|---|--|
| <b>Weight:</b>  | Approx. 0.25 kg  |
| <b>Supply for Liquid Medium:</b>  | 1/8" NPT   |
| <b>Amount of Liquid Medium Flow:</b>                                    | min. 1.0 l / minute - max. 1.6 l / minute<br>(max. Pressure 5.5 bar) |
| <b>Liquid temperature:</b>  | Approx. 20°C – 50°C  |
| <b>Distance between the nozzle output and the object to be cleaned:</b> | 5 mm to 20 mm  |



## Order data Megasonic Generator 35 Watt

| Order Number | Mains Input Voltage | Frequency |
|--------------|---------------------|-----------|
| 13401-060    | 230 VAC             | 1 MHz     |
| 13405-060    | 230 VAC             | 2 MHz     |
| 13407-060    | 230 VAC             | 3 MHz     |
| 13406-001    | 230 VAC             | 4 MHz     |

## Order data Megasonic Single Nozzle

| Order Number | Material                | Effective Diameter | Frequency |
|--------------|-------------------------|--------------------|-----------|
| 13790-018    | PTFE / Quartz glass tip | 4.0 mm             | 1 MHz     |
| 13792-002    | PTFE / Quartz glass tip | 4.0 mm             | 2 MHz     |
| 13791-050    | PTFE / Quartz glass tip | 4.0 mm             | 3 MHz     |
| 13794-001    | PTFE / Quartz glass tip | 4.0 mm             | 4 MHz     |

| Data sheet: | Revision:                  | Date:      |
|-------------|----------------------------|------------|
| Vers. 1.1   | First Edition Original GER | 05/05/2010 |