High-Voltage Generator & Analyzer



High-voltage Generator & Analyzer is a device, intended for different materials characteristics investigation with piezo-mesh-modules. This device is controlled from PC or laptop with easy to use graphical user interface (GUI). GUI allows user to control and display all necessary parameters and graphs according to the following table:

| Modes of operation | Manual Mode |
|---|-----------------------------------|
| | Frequency Tracking Mode |
| Controls from the Laptop/PC via Software GUI | Carrier Signal Frequency |
| | Modulating Signal Frequency (Hz) |
| | Output Voltage (Vpp) |
| | Enable/Disable Modulation (bool) |
| | Manual Mode/Frequency |
| Parameters and Graphs displayed on Software GUI | Current over Time (graph) |
| | Voltage over Time (graph) |
| | Impedance (numeric value) |
| | Carrier Frequency (numeric value) |

Device is designed and developed based on the following technical requirements:

| Number of output channels | 1 |
|-----------------------------------|--|
| Carrier Frequency Range | 100 kHz – 200 kHz |
| Modulating Signal Frequency Range | 100 Hz – 50 kHz |
| Modulation Type | AM |
| Modulation Depth | 100 % |
| Modulating Signal Type | Sine Wave |
| Output Voltage Range | 30 Vpp – 100 Vpp (minimum of 0 Vpp will be considered during the design phase) |
| Output Power | Typical: 1-2 W |
| | Maximum: up to 5 W |

