http://www.smart-material.com

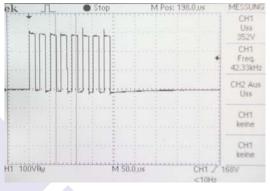
SmartPowerSonic 280-PW

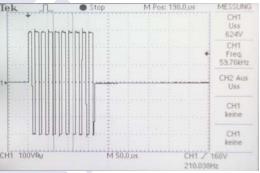


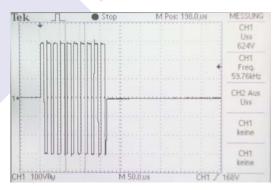


The SmartPowerSonic 280-PW power supply was designed to drive low frequency ultrasonic transducers with high capacitance loads which require voltages of up to \pm 280V. The SmartPowerSonic features a μ C controlled power pulser which generates bursts of square wave pulses with frequencies of maximal 100kHz. Burst signals are programmed and stored in the integrated flash memory and can have up to 100 cycles per burst and a refresh rate of a maximum of 100 cycles per second. The controller has an integrated RS232 serial interface to program the operational parameters, including frequency, pulse number, refresh rate, uni-/bipolar mode and shutdown time.

Wave form examples







Specifications

 $\begin{array}{lll} \mbox{Frequency range:} & \mbox{O-100kHz} \\ \mbox{Cycles:} & < 100 \mbox{ per burst} \\ \mbox{Refresh rate:} & 1-100 \mbox{ per second} \\ \mbox{Output voltage:} & \pm 280V \mbox{ at } > 30M\Omega \\ \mbox{Voltage modes:} & \mbox{unipolar, bipolar} \\ \end{array}$

Memory: 8 banks Control interface: RS232 Trigger In

Trigger Out

Input voltage, main: 12V AC, 40VA

Application areas for SmartPowerSonic

- High voltage power supply for Piezo ceramic and piezo composites
- Ultrasound transmitter driver for
 - Sonar/Hydrophones
 - NDT/NDE
 - Air Ultrasound
- Guided wave applications
- Piezo sound generator



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