

USB ULTRASONIC PROGRAMMABLE PC BOARD 1 CHANNEL WITH A/D CONVERTER AND MONITOR



- * USB2 compliance.
- * 1 complete UT channel for fast measurements
- * 1 pulser and receiver on one board
- * A/D converter with large BUFFER SIZE
- * Suitable for applications and development in industrial and medical domains :
 - On line weld inspection
 - Thickness measurement
 - Transducers combination
- * Comes with software ready to use on Windows XP , Windows 7
- * Microsoft C libraries and Windows DLL available
- * **Ideal for OEM applications,**

SFT 4001USB

PULSER SECTION

Type : negative square pulse
 Amplitude : 200 V max.
 Repetition frequency (PRF) : up to 10 KHz programmable (single shot under software control)
 Pulse width : 50 ns to 1 μ s (10 ns step) at 50 % amplitude
 Connectors : 2 LEMO size O
 Damping : 50 Ω or 500 Ω programmable
 selectable

RECEIVER SECTION

Bandwidth : 0.9 to 15 MHz at -6dB
 Gain : 6 dB to 80 dB (0.3 dB steps) real gain
 Dynamic range 74 dB

Analog signal processing : RF and video full rectified on card
 Suppression (0 to 10 % of full screen) programmable.

MODE : Pulse echo or transmission programmable.

SIGNAL PROCESSING: 8 bits A/D converter 100 MHz

TRIGGER : Post trigger 0 to 6553 μ s in 100 ns step

BUFFER MEMORY : 1 Kb to 512 Kb buffer fully addressable per channel readable during new acquisition
 Real time operation – Directly processed in FPGA device
 Data transfer at 50 Mb/s (average)

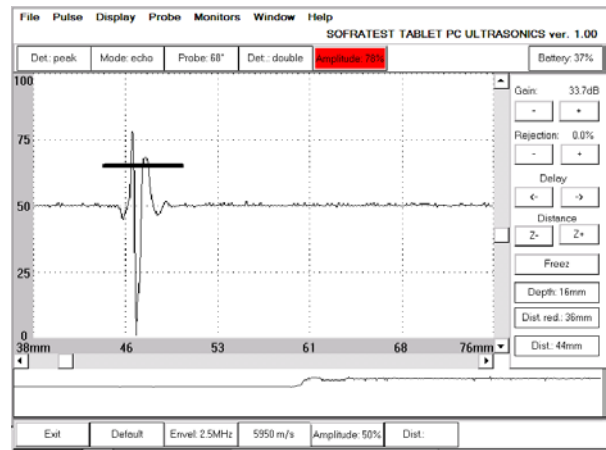
MONITOR : 2 individual gates per channel programmable separately
 Delay 273 μ s in 10 ns step
 Width 273 μ s in 10 ns step

: Peak value in each gate 8 bits
 Position value of peak in each gate 14 bits

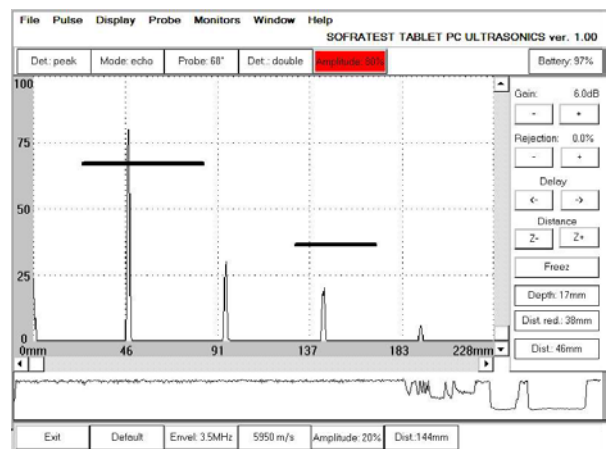
POWER SUPPLY +5V
 supplied with a dual USB cable

SIZE solid aluminium enclosure
 ext dimensions:
 LxWxH 225x105x30 mm

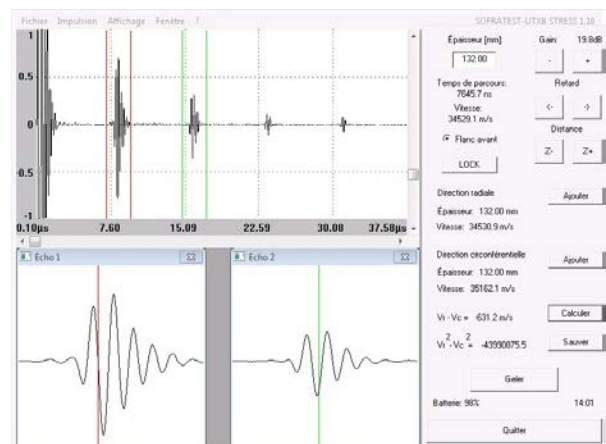
OPERATING TEMPERATURE : 0 to 40°C



UTXB software RF mode



UTXB software Video mode with 2 gates



UTXB dedicated software for residual stress measurement

Specifications subject to change
 KCU018AA