

Multi2000 Specifications

<p>Acquisition</p>	<ul style="list-style-type: none"> - Software (Unlimited number) and Hardware acquisition gates. - Synchronization of gates. - Acquisition release on event (threshold, detected echo...). - Acquisition release on coder trigger (time, mechanical). - Choise of the elementary channels, and/or their related sum. - Real-time images display during the acquisition. - User-definable inspection configuration. - Public file format for parameters (XML) and data (binary). - Max. data flow > 30 MB/s Max. acquisition rate: 20 KHz.
<p>Phased array skills</p>	<ul style="list-style-type: none"> - Electronic focusing, electronic scanning, sectorial scanning. - Inspection mode: pulse echo or transmit-receive modes, DDF, with dynamic aperture. - Fast multiplexing of focal laws during the electronic scanning, thanks to laws stored on 32 MB hardware RAM. - Imaging adapted to the focusing modes. - Corrected views in the CAD component (linear, sectorial Bscan).
<p>Digitizer</p>	<ul style="list-style-type: none"> - Digitizing and real time summation on 8 channels boards. - Max. sampling frequency 100 MHz (adjustable: 100 to 6.6 MHz). - Range: 10 bits. Input impedance: 50 Ω. - Global delay: 0 up to 1.6 ms, step of 10 ns. - Delay laws at transmission/reception: 0 to 20 μs, step of 2.5 ns. - Digitising depth: up to 4000 samples per elementary channel, 50000 samples after summation. - Digital FIR filters.
<p>Pulsers</p>	<ul style="list-style-type: none"> - Adjustable voltage: 30 to 200V with 1V step. - Negative rectangulaire pulse, adjustable width: 30 ns to 1.2 μs, step of 2.5 ns. fall time < 10 ns (200V, 50 ns). - Max. PRF 30 KHz, with change of focal laws.
<p>On-line Processors</p>	<ul style="list-style-type: none"> - 2 CPU (PowerPC) on CPU board allow fast and exchangeable processing.
<p>Hardware Configuration</p>	<ul style="list-style-type: none"> - 16x64, 32x128, 64x256 (channels x pulsers) adjustable on a 8x32 channels basis.
<p>Receivers</p>	<ul style="list-style-type: none"> - Bandwidth: 0.8 to 20 MHz. - Adjustable gain on each channel from 0 to 80 dB. - Adjustable analogical DAC on 80 dB (max. 20 db/μs) synchronized on events. - Cross-talk between two channels: > 50 dB. - Max. input signal amplitude 1 Vpp.
<p>NDT Simulation</p>	<p>Simulation tools (CIVA software) integrated into Multi2000 software:</p> <ul style="list-style-type: none"> - Complete description of the testing configuration - Focal laws and related ultrasonic field computation
<p>Compatibility</p>	<ul style="list-style-type: none"> - CIVA software: data analysis and definition of NDT configurations. - MASERA and NDT kit: data analysis softwares.
<p>Computer</p>	<ul style="list-style-type: none"> - Software environment: Windows XP. - Usb2 link between Hardware and PC (desktop or laptop).

