

Multix

product line

Fast. The MULTIX product line's fully parallel architecture provides uncompromised performance. Ideal for driving 2D probes and optimize inspection speed. MULTIX systems are based on 8-channel boards.



acquisition	hardware acquisition gates , software gates, synchronization of gates acquisition trigger on event (threshold, echo, etc.), acquisition on user-specified trigger (e.g., time, coder) choice of data (e.g., RF, peaks, elementary A-Scan), real-time imaging , user-specified configuration public file format for parameters (XML) and data (binary), max. data flow 30 MB/s
phased-array	customized focusing , electronic scanning, sectorial scanning , full matrix capture (FMC) smart flexible probe (TCI)*, surface-adapted ultrasound (SAUL)* inspection modes : pulse-echo and transmit-receive modes, DDF with dynamic aperture 32MB hardware RAM (enabling fast multiplexing), corrected images (e.g., sectorial B-Scan, C-Scan)
pulsers	adjustable voltage : 30 to 200V with 1V step, negative rectangular pulse adjustable width : 30 ns to 625 ns, step of 2.5 ns, rise time < 10 ns (200V, 50 Ω), max. PRF: 30 KHz
receivers	bandwidth : 0.8 to 20MHz, adjustable gain on each channel from 0 to 80 dB adjustable analog DAC on 80 dB (max. 40 dB/μs) synchronized on events, FIR filters cross-talk between two channels > 50 dB, max. input signal amplitude: 0,8 Vpp
digitizer	digitizing and real-time summation on 32-channel boards, range : 10 bits max. sampling frequency : 100 MHz (adjustable from 100 MHz to 6.6 MHz) 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 digitizing depth : up to 50,000 samples (4,000 samples max. per elementary channel)
embedded processors	2 CPU (PowerPC) on CPU board
hardware configuration	parallel architecture: 32-, 64- and 128-channel
NDT simulation	CIVA subset into Multi2000 software, complete description of the inspection configuration focal-laws and associated ultrasonic field computation
compatibility	CIVA, NDT kit / ULTIS
platform	Windows-based PC, USB2 link between Hardware and PC (desktop or laptop)
dimensions	(32, 64) : L x W x H : 342mm x 316mm x 177mm - Weight : ~8,8 kg (128) : L x W x H : 449mm x 435mm x 177mm - Weight : ~13.7 kg
I-O	2 Hypertronix connectors, 8 encoders input, 2 external triggers 1 USB2, 16 analog inputs, 4 LEMO connectors (type 00)

*optional