

UTxx 16/32 Ch.-MUX

UTxx 16/32 Ch.-MUX is a versatile ultrasound electronics platform for industrial Nondestructive Testing (NDT) applications, testing machines, and on-line systems.



Technical Specifications

Configurations

Up to 16 multiplexed channels with TCG and BEA, Pulse/Echo or Through-Transmission, per module

Up to 32 multiplexed channels Pulse/Echo per module

Up to 64 (4x16) or 96 (3*32) channels in a rack

Multiple rack configuration possible

Pulser

Min. 130 V negative spike pulse in a 50 Ω load

Adjustable width 40 ns to 600 ns in 20 ns steps

Max. PRF 20 KHz

Adjustable delay up to 116 μ s in 1 ns steps

Receiver

5 V pp input voltage

0.2 - 14 MHz bandwidth

80 dB dynamic range

75 dB gain control, adjustable in 0.1 dB steps

75 dB TCG with 20 dB/ μ s slope

Digitizer

Sampling frequency of 50 MHz

10 bits amplitude

5000 μ s long A-Scan

Signal Processing

Programmable digital filter (0.1 MHz to 25 MHz)

A-Scan compression

ALOK (Multi-peak/TOF detection)

Adjustable reject level

A-Scan envelope with adjustable persistence

Evaluation

4 gates including Interface trigger gate

2 alarm levels per gate with noise suppression

10 ns TOF resolution

Backwall tracking gate

Interfaces

External PRF input, external acquisition trigger input

12 alarm outputs

USB2 or Ethernet interface between hardware and PC