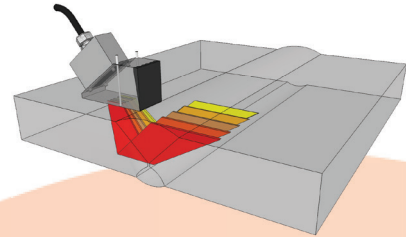


# GEKKO<sup>o</sup>

**cutting-edge.** Gekko is the first phased-array system able to drive matrix arrays and real-time custom Total Focusing Methods (TFM). Gekko also handles most UT inspection techniques, and benefits from the latest CIVA features natively implemented.

*matrix arrays | CIVA-fueled software | real-time Total Focusing Methods (TFM) | 3D imaging | flexible arrays*



**rugged.** Touch-screen, IP54 and battery operated, the Gekko is designed for field use.

*touch screen | dust & water resistant | portable | battery operated | hot swap*



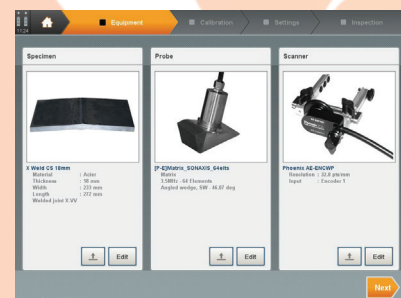
**adaptable.** Gekko offers the most advanced UT tools to customize your application. Use it as expert or operator, or through a third-party software.

*custom UT made simple | expert & operator modes | 64-channel parallel | Pulse-echo | Pitch-catch | TOFD | DDF*



**user-friendly.** The Gekko software has been developed for all-level operators. The step-by-step interface simplifies the menus and reduces the risk for errors.

*all-level operators | application & calibration wizards | automatic probe detection | reporting tools*



## software

all-level operators, application wizards, analysis, reporting	inspection modes: pulse-echo, TOFD, TANDEM, DDF, CIVA-fueled expert mode
real-time imaging A-Scan, B-Scan, S-Scan, C-Scan	CIVA fueled phased-array calculator, full compatibility with CIVA
Total Focusing Methods (TFM), images & 3D display	

## phased-array

matrix and linear probes	automatic probe detection, smart-flexible-array compatible
electronic scanning, sectorial scanning	16400 phased-array laws

## pulsers

### 64 phased-array channels

negative rectangular pulse, width: 30ns to 500ns  
10 to 100V with 1V step  
max. PRF: 10kHz

### 4 conventional UT channels

negative rectangular pulse, width: 30ns to 500ns  
10 to 200V with 1V step  
max. PRF: 10kHz

## receivers

### 64 phased-array channels

from 0,5 to 15MHz bandwidth  
max. input signal: 1.2 Vpp  
TCG (experimental, simulated)  
cross-talk between two channels < 50 dB

### 4 conventional UT channels

from 0,5 to 25MHz bandwidth

## digitizer

digitizing and real-time summation on 64-channels	resolution: 12bits, processing: 16bits
FIR filters	max. sampling frequency 100 MHz
input impedance: 50 Ω	digitizing depth up to 65000 samples

## acquisition

hardware acquisition gates, synchronization of gates	acquisition trigger on event (encoder), acquisition on external trigger
A-Scans/Peaks data recording	Full Matrix Capture (FMC)
max. data flow 150 MB/s on a 128Go SSD hard drive	

## hardware

FPGA and CPU boards	10,4" touch screen – resolution 1024x768
4 hours batteries, hot swap	

## I-O

1 IPEX connector for phased array	4 LEMO 00 connectors for conventional UT
3 encoders input	1 external trigger
compatibility with smart flexible probes	3 USB2
3.5mm jack audio	Ethernet, wireless
VGA output	

## general

L x W x H: 390mm x 280mm x 120 mm	Weight: ~6,2kg (including battery)
operating temperature range: from 0 to 40°C	IP54