



Cutting Edge Technology
Intuitive User Interface
Upgradeable Design

- I-PEX Connector (Industry-Standard)
- 32 Active Channels
- Multiplexing over 128 Elements
- 4 Mono-Channels for UT/TOFD
- 200 Volt Pulsing for Deeper Penetration
- 30 kHz for Ultra-Fast C-scan Imaging
- 92 dB Analog Gain
- ACG and TCG Control
- 125 MHz Sampling (PAUT)
- Up to 1 GHz Sampling (UT)
- 16-bit A-scans
- 2.0ns Beamforming for Hi-Res Imaging
- Full Control over 2048 Beams
- 2-Axis Encoder Input
- Robust Aluminium Body
- Fanless Design for IP66
- Ready for FMC, TFM and Excitelet™

General:

Phased Array (PAUT)	32 active channels, multiplexed on 128 elements
PAUT Connector	I-PEX 200 pins, compatible with other brands
Conventional/Mono (UT)	4 independent channels, allowing any TX/RX combination
UT Connectors	4x LEMO_00
Encoders and IOs	1x LEMO 9 pins

Pulsers:

High-Voltage Supply	Adjustable from 30 to 200 Vpp
Pulse Width	Adjustable from 20 to 1000 ns
Pulse Shape	Bipolar Square Wave
Output Impedance	Less than 30 Ohms
Trigger	Free-running or on encoder position

Receivers:

Input Impedance	50 Ohms
Analog Gain	Adjustable from 0 to 92 dB (also for TCG)
Analog Bandwidth	0.5 to 30 MHz (-3 dB)
Element Calibration	Relative gain for each probe element
Angle-Corrected Gain (ACG)	Relative gain for each beam (focal law)
Time-Corrected Gain (TCG)	Up to 16 points, per beam (focal law)

PAUT Beamforming:

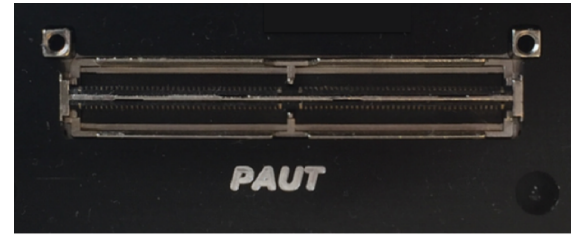
Type	Standard Delay-and-Sum Ready for FMC, TFM and Excitelet™ (options)
Delay Resolution	2.0 ns in TX and RX
Scan Type	Sectorial and Linear
Number of Beams (Focal Laws)	Up to 3000 total
Number of Beamsets (groups)	Up to 16
Active Elements	Up to 32, contiguous
Total Elements	128, on up to 8x probes (with adaptors)

Data Acquisition:

Digitizing Frequency	125 MHz (PAUT), up to 1 GHz (Mono)
Sampling Quantification	12 bits per channel
Max Rate	30 kHz (C-scan)
Number of Data Points	Max 16,535 per A-scan
Real-Time Averaging	2 to 64
Rectification	RF, Full Wave, Half Wave +, Half Wave -
Filtering	Digital filter (fully adjustable), 5x presets
Video Filtering	Optimal Decimation

Environmental:

Dimensions & Weight	120 x 190 x 68 mm (WxHxT) (4.7 x 7.5 x 2.7 in.) 1.0 kg (2.4 lbs)
Operating Temperature	-10 to +45 C (14 to 113 F) typical
Storage Temperature	-20 to +70 C (-4 to 158 F)
Relative Humidity	0 to 90% noncondensing Designed for IP66 and MIL-STD-810G 507.5
Rain and Sand Proofness	Designed for IP66 and MIL-STD-810G 506.5/510.5
Shockproof Rating	Designed for MIL-STD-810G 516.6



The cartridge features an I-PEX connector with standard pinout, offering PAUT probe compatibility with other brands.

200 Volts



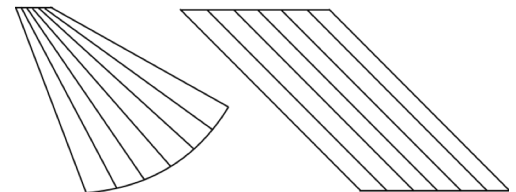
Our state-of-the-art bipolar square-wave pulser is adjustable up to 200 Volts. That extra power sends more ultrasound energy in the material, to improve sensitivity or penetrate deeper.

Up to 1 GHz



The 4 independent mono-channels can sample up to 1 GHz, which allows for high-frequency transducers and new applications.

Up to 3000 Beams (focal laws)



The beamformer can execute up to 3000 beams (focal laws) at a rate up to 30 kHz, which allows for super high-resolution imaging and/or extended volume coverage. It also provides a strong backbone for more advanced beamforming capabilities like FMC, TFM and Excitelet™ (options).