



# **INTRODUCING THE NEW PAUT 16/128 CARTRIDGE**

16-CHANNEL PHASED ARRAY NDT  
BEAMFORMER FOR PORTABLE  
APPLICATIONS

**PRAGMA**

NDT  
IN BLACK AND WHITE

## ONE CARTRIDGE PER TECHNOLOGY:

<b>UT</b>	Standard flaw detection and C-scanning
<b>TOFD</b>	B-scan imaging with encoder for improved sizing accuracy
<b>PAUT</b>	Linear and Sector scan imaging for improved speed and POD
<b>EMAT</b>	Pulse-Echo, Guided Waves and High-Temperature without the need for couplant
<b>ECT</b>	Surface inspection with multi-frequency and multi-channel solutions for tube, pencil and rotary probes

**Ideally suited for inspection companies, consultants and training schools.**

### BEST IN CLASS

The state-of-the-art beamformer features 16 active channels, multiplexing over 128 elements, 100 MHz sampling per channel, 16-bit A-scan and many other advanced features.

### HIGH-POWER

The square-wave pulsers are running at 180 Volts peak-to-peak and feature a special circuitry to maximize the transfer of piezoelectric energy.

### ADAPTIVE

Each beam signal (A-scan) can be calibrated with: Static Focusing (SPAF), Dynamic Focusing on Reception (DFR), Distance-Amplitude Correction (DAC), Time-Corrected Gain (TCG), and Angle-Corrected Gain (ACG).

### ENCODED

The pulsing and data acquisition can be running at fixed PRF or triggered by position with 1 or 2 quadrature encoders.

### PAUT 16/128 CARTRIDGE

#### PULSERS

Channels	16 actives, 128 Multi-plexed
Pulser	+/- 100V (200 Vpp) Bipolar Square Wave
Burst	Up to 5 cycles
Max. Pulse Repetition	5 to 4000 Hz, manually
Pulse Width	40 to 1000ns
Pulser Delay	0 to 10.2 us, 5.0 ns step

#### BEAMFORMING

Max. Nb of Laws	128 (S-scan) 256 (L-scan)
Amplitude Calibration	Static per probe element Dynamic per beam (ACG)
Dynamic Focusing	Up to 5 zones

#### CONNECTORS

PAUT Probe	I-PEX 30046 (Omniscan)
Encoders, Input/Output	LEMO 9-pin model FGG.0B.309

#### RECEIVERS

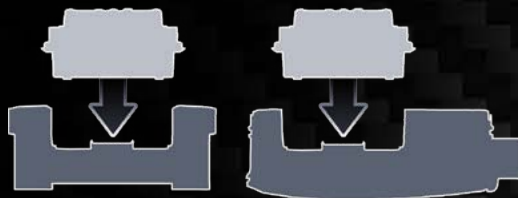
Channels	16 actives, 128 Multi-plexed
Max. Input Signal Amplitude	625 mVpp
Input Impedance	50 Ohms
Input Bandwidth	0.5 to 25 MHz @ -3 dB
Gain	0 to 80 dB (with TCG)
Receiver Delay	0 to 10.2 us, 5.0 ns step
Digitizing	100 MSPS, 12 bits per channel
Digital Filters	6 presets, user adjustable
Rectification	Full, unipolar +/-, RF

#### GENERAL

Dimensions	160 x 200 x 45 mm (6.3 x 7.8 x 1.9 in.)
Weight	0.45 kg (1.8 lbs)
Operating Temperature	-10 to 40 C (14 to 104 F)



Easiest GUI, quick access buttons and expert menu



Snaps on PragmaLite and PragmaPod platforms

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IPEX PAUT connector,  
2 pulser-receivers and  
Encoders (I/Os)

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