

Performance

Parameter		PA Module	Conventional UT
Configuration	Receiver / Pulser	32/128	2 / 2
	Range	9900μs	9900μs
	Velocity	635-15240m/s	635-15240m/s
	Test mode	PE / PC	PE / PC / TT / TOFD
Pulser	Voltage	50V / 100V	100V / 200V / 400V
	Pulse shape	Negative square wave	Negative square wave
	Pulse width	30-500ns	30-500ns
	Rise time	<8ns	<8ns
	PRF	20KHz	20KHz
	Delay	10μs/2.5ns	10μs/2.5ns
	Gain	0-80dB	0-110dB
Receiver	Bandwidth	0.5-20MHz	0.5-20MHz
	Delay	10μs/2.5ns	10μs/2.5ns
	Sampling rate	100MHz	100MHz
Data Acquisition	ADC resolution	10bit	10bit
	Maximum Ascan length	8192	8192
	Focal law numbe	1024	NA
	Focus type	True depth/half sound path/projection/any surface	NA
	Detection	FW/HW+/HW-/RF	FW/HW+/HW-/RF
	Synchronization	Initial pulse or gate	Initial pulse or gate
Scan/Display	Type	Sectorial/linear scan	NA
	Display mode	A/B/C/S,PA-TOFD	A/B/C,TOFD
	Unit	mm/inch	mm/inch
TCG	Points	16	
	Dynamic range	40dB	
	Max gain slope	40dB/μs	
Report		HTML	
Data Storage		Storage devices	U disk /SD card
Display Screen	Size	10.4 inch	
	Resolution	800*600pixel	
	Type	TFT LCD touch screen	
I/O Port	USB3.0	3	
	Internet	1000Mb/s	
	Video output	DVI/VGA compatible	
	Encoder	Support	
Language		English / Chinese	
Power Supply	DC supply voltage	15V DC 4A	
	Battery type	Lithium battery	
	Continuous working time	6Hours	
Case	Size	325mm×230mm×130mm	
	Weight	4.5Kg(Without battery)	

PAUT DETECTOR **DOPPLER**

PHASCAN

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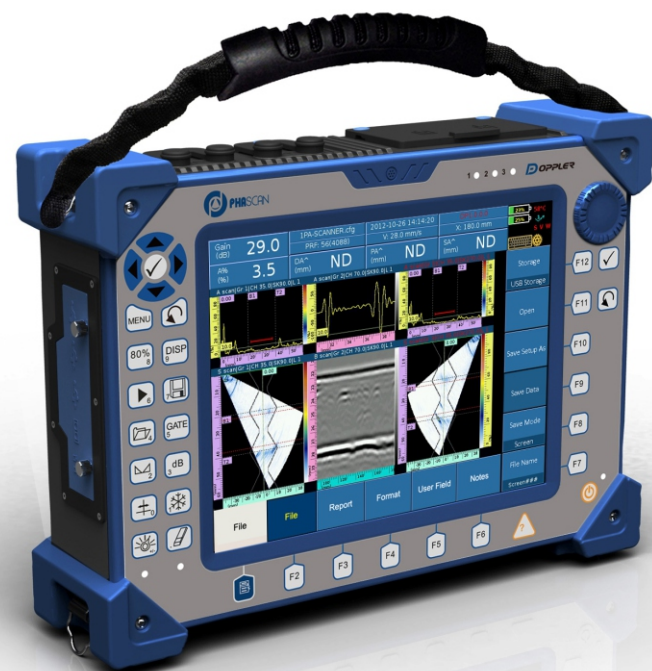
# PhaScan PAUT Instrument

Phascan is a high-level portable phased array ultrasonic detector independently developed by Doppler. It has stronger practicability because of its independent 128 hardware transmission channels, supporting 1024 focal laws, powerful data analysis software and "ultrasonic simulation calculator". It is the first choice for the research and application of phased array ultrasonic detection technology.

## Futures

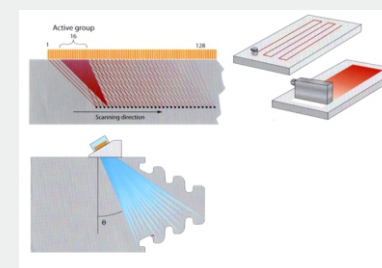
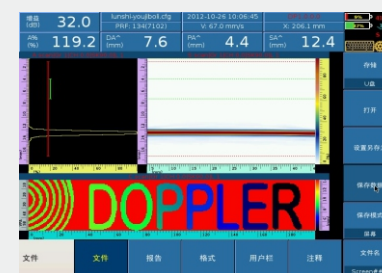
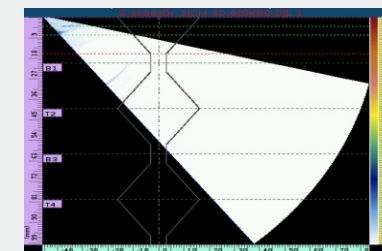
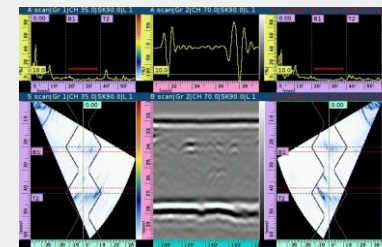
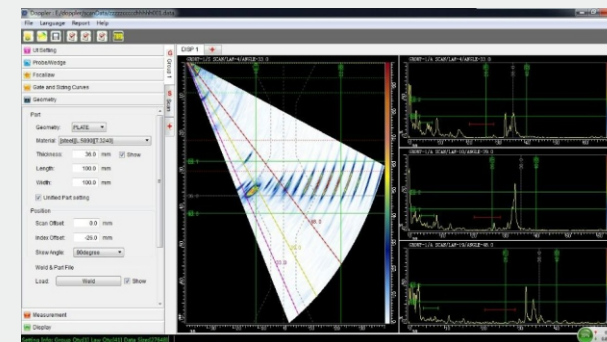
- 16/64; 32/64; 32/128; 32 / 128PR four models are optional
- 128 independent hardware transmission channels, supporting 1024 focal laws
- PA + TOFD detection and conventional ultrasonic detection can be carried out at the same time
- Fast calibration of sound velocity, delay, sensitivity, TCG, etc. to meet the requirements of the new standard in advance
- The pulse repetition rate can reach up to 20kHz, perfectly supporting the needs of rapid detection
- 10.4 "TFT LCD touch screen, fine image and convenient operation
- Including AutoCAD module to quickly and intuitively determine defects
- A / B / S / C / TOFD / off-line 3D and other display modes, recorded by full data encoder
- Newly upgraded offline data analysis software with more powerful functions

New Upgrades  
Support **AutoCAD** Import Function!



## Offline analysis software

- Phascan instrument is equipped with an off-line analysis software based on computer platform. The software has 17 display modes, supports 8 groups of data to be displayed at the same time, supports local image magnification, and can quickly locate and measure defects, generate detection reports.
- The off-line software supports automatic defect evaluation, and all defects are screened with one click, which greatly reduces the workload of data analysis and improves the work efficiency.



## TOFD&PA

- Dual independent high-performance conventional ultrasonic flaw detection channels can implement single channel flaw detection or dual channel TOFD detection at the same time of phased array detection, and the defect information is richer.

## Weld illustration function

- For weld workpieces that meet industrial standards, the weld illustration function is helpful to analyze defect signals and locate volumetric defects.

## Data acquisition / analysis / management

- The instrument can be connected with automatic, semi-automatic scanner system or simple wheel encoder .
- Single axis encoder can be configured or time coding can be adopted .
- Interactive analysis of A/B/S/C scan is available.
- All measured readings can be obtained online, and the measured values can be viewed offline after saving the complete A-scan data .
- The test data can be stored in SD card or USB .

## Multiple scanning modes

- Built in focal law calculator, which can realize various scanning methods such as sectorial/linear scan.