Specifications

PHASELINK 64-128PR

Weight	4KG
Dimension	232mm x 190mm x 107mm
Cooling fan	2
Number of encoders supported	2-axis
Channel configuration	64:128PR
Digit	16 bits
A Scanning amplitude	Up to 800%
Maximum A scan count	16384
Focusing law quantity	8192
Maximum PRF	30 kHz
Maximum transmission rate	2GB/s
Digitization frequency	200MHz
Voltage	±100V
Pulse width	20ns to 1250ns
Band width	0.4 MHz to 25 MHz
Acquisition rate	90,000 A scans per second
Gain	0-80 dB
Average	Up to 64
Focusing mode	Depth, sound path, projection
Built-in engineering machine	Yes
Gigabit network port	2
HDMI HD video port	2
Standby power interface	Yes

PHASELINK 32-64PR**

Weight	4KG
Dimension	232mm x 190mm x 107mm
Cooling fan	2
Number of encoders supported	2-axis
Channel configuration	32:128PR
Digit	14 bits
A Scanning amplitude	Up to 800%
Maximum A scan count	16384
Focusing law quantity	8192
Maximum PRF	20 kHz
Maximum transmission rate	2GB/s
Digitization frequency	200MHz
Voltage	±100V
Pulse width	20ns to 1250ns
Band width	0.4 MHz to 18 MHz
Acquisition rate	90,000 A scans per second
Gain	0-80 dB
Average	Up to 64
Focusing mode	Depth, sound path, projection
Built-in engineering machine	Yes
Gigabit network port	2
HDMI HD video port	2
Standby power interface	Yes

*** Support system customization and adjustment of indicators**

** We also offer PHASELINK ultrasound systems in model 32: 128PR. In addition to the number of channels, other parameters are the same as the 32:64PR model, and can be upgraded to the 64:128PR model in the future.

Standard kit

PHASELINK® Phased array instruments, power cords, and printed versions of the Easy to Get Started Manual.

The package includes the latest version of PHASELINK software, a hard carrying case, a calibration certificate, and a USB stick with a user manual.

Optional features:

FMC/TFM full focus function

M2 Electronics (Shanghai) Co., Ltd.

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PHASELINK

Integrated advanced phased array ultrasonic system

PHASELINK Series

PHASELINK

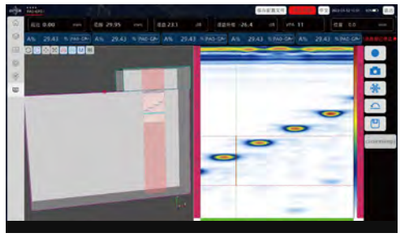
Integrated advanced phased array ultrasonic system

The PHASELINK series has powerful ultrasonic phased array technology performance and operation processing speed, which can ensure real-time and rapid inspection, and is equipped with professional system data acquisition and analysis software, providing flexible and scalable solutions for general and customized ultrasonic phased array inspection systems.

The PHASELINK system supports the integration of multiple hosts

The PHASELINK host systems are connected by network cables and can be extended indefinitely to meet complex and large automated inspection system integration requirements, from 64:128 configurations to infinite sizes. The integrated use of PHASELINK multi-host system can greatly improve the inspection speed. Available with: unlimited number of probes and unlimited number of group Settings.

- **Up to 2 GB/s data transfer rate**
- **Support 6 axis position information input**
- **The IP65 is water and dust resistant, rugged and optimized for heat dissipation.**
- **Integrated design, each device is an industrial computer ultra-high signal-to-noise ratio**

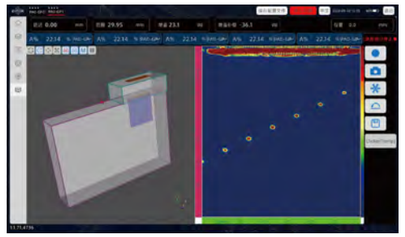


Advanced phased array mode

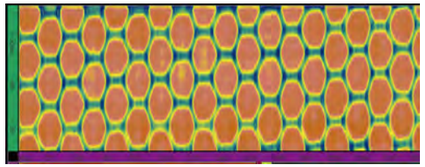
- **Supports 3D CAD import configuration**
- **3D real-time imaging: the location and size of defects are visually displayed within the 3D workpiece.**
- **One-shot function: It can effectively detect the weld of high attenuation materials such as stainless steel.**
- **Multi-group simultaneous detection: More suitable for complex detection scenarios.**
- **Available with probes: one-dimensional linear array, twin linear array DLA, twin matrix DMA, chrysanthemum array, ring array, flexible probe, and custom non-standard probe.**

PHASELINK

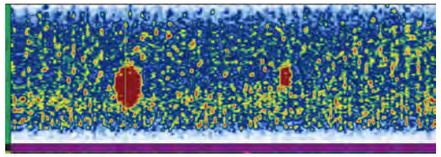
Data acquisition and analysis scheme



3D full focus images captured by acquisition software



C-scan detection of honeycomb structural composites



C-scan detection of high attenuation composite materials

Real-time Full Matrix Acquisition (FMC) and Total Aggregation Method (TFM)

At present, FMC and TFM are effective methods to improve the resolution and measurement accuracy of ultrasonic phased array image, which can solve the problem of image diffusion display caused by traditional ultrasonic beam diffusion, and the focusing range of TFM technology is not limited. PHASELINK's computational power ensures faster image processing, more accurate images, and a larger inspection area for evaluation.

- **128-chip full-focus imaging significantly improves resolution and increases beam coverage**
- **Has a variety of full focus modes**
- **Phased array and full focus are simultaneously acquired and displayed together**
- **Simultaneous acquisition and display of a variety of different modes of full focus data, one acquisition can restore the true appearance of all types of defects**

Imaging software modules for different applications

According to the requirements of different detection applications, we can provide basic imaging software modules for a variety of applications
To meet most requirements of testing applications, if users need to develop customized testing application software, we can provide software development interface to assist users to complete software development.

- **Interface for fully automatic inspection solutions**
- **Real-time data retrieval (Data server)**
- **Language/operating system/computer independent**
- **Full real-time control: gain, TCG, gate, alarm, encoder, etc**

Application scenario

Aerospace and defense industries

Aircraft nondestructive testing

Aircraft surface skin damage and corrosion detection
Aircraft landing gear
Aircraft fuselage composites
Aircraft fastener hole
Aircraft bolt detection
Aircraft engine fan blade internal defect detection
Aircraft fuselage rivet detection (prevent falling off)

Detection:

Composite workpiece
Honeycomb structure reinforced composite workpiece
Friction Stir Weld (FSW)

transportation

Detection:

Train wheel
Train wheel shaft
High-speed rail track
Train wheelset

Manufacturing and processing of metals

Detection:

Heavy forging
Tube material
Slab
Bar

Oil and gas

Detection:

Welds (including austenitic alloys)
Corrosion imaging
AUT welding of oil and gas long distance pipeline
Seam and corrosion detection
TKY weld inspection
PE tube electric and thermal fusion welding test