

NextLINK

The Next-Gen PA UT TFM/FMC Multi-Stacking Analyzer

Advanced PA
System Integration

/

FMC & TFM

/

Single System
64 / 128 PR

Professional
Ultrasound Computation

/

Multi-System
Stacking

/

Sturdy and
Compact Construction



Integrated Advanced Phased Array Ultrasonic System

When using FMC and TFM, the **NextLINK** product series has advanced phased array ultrasonic technology with better performance and operating speed, equipped with professional system data acquisition and analysis software to provide flexible and scalable solutions for various industrial NDT applications.

► The PHASELINK system supports the integration of multiple hosts

The **NextLINK** 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.



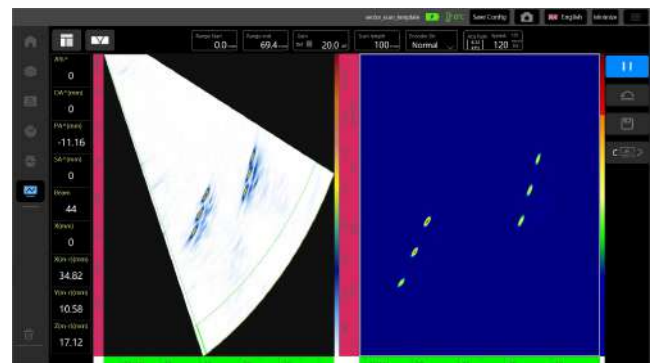
The **NextLINK** host systems are connected by network cables and can be extended indefinitely to meet complex and large automated inspection system integration requirements, from 64:128 configurations to infinite sizes. The integrated use of **NextLINK** multi-host system can greatly improve the inspection 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.
- ✓ Multi-group simultaneous detection: More suitable for complex detection scenarios.
- ✓ ne-shot function: It can effectively detect the weld of high attenuation materials such as stainless steel.
- ✓ 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.



Aerospace and defense industries



Transportation

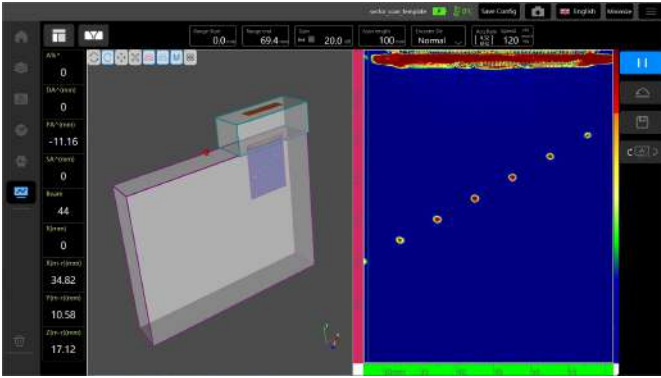


Manufacturing and processing of metals



Oil and gas

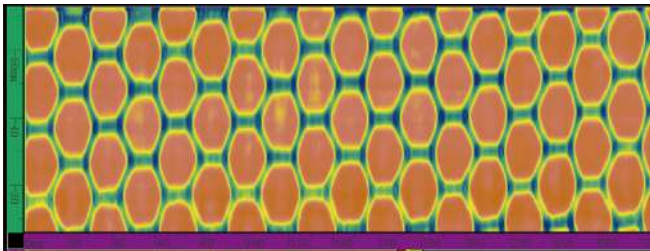
Data acquisition and analysis scheme



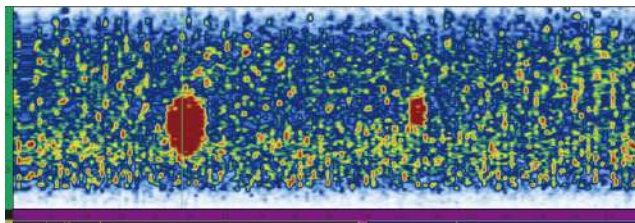
► Real-time full matrix acquisition (FMC) and full aggregation method (TFM)

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. NextLINK'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



C-scan detection of honeycomb structural composites



C-scan detection of high attenuation composite materials

► 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



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)



Detection:

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



Detection:

Heavy forging
Tube material
Slab
Bar
Aircraft bolt detection
Aircraft engine fan blade internal defect detection
Aircraft fuselage rivet detection (prevent falling off)



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

NextLINK Specifications

PHASELINK 64-128PR

Weight	4 kg
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	2 GB/s
Digitization frequency	200 MHz
Voltage	±100 V
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 32-128PR

Weight	4 kg
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	2 GB/s
Digitization frequency	200 MHz
Voltage	±100 V
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

Three models are available

We provide three models of **NextLINK** flaw detectors: 32: 64PR, 32: 128PR, and 64: 128PR. If you choose the 32:64PR and 32:128PR models, you can easily upgrade to the 64:128PR model in the future.

Standard Kit (64: 128PR)

NextLINK Phased Array Analyzer, including FMC/TFM and PA function, **NextSOFT** software, calibration certificate, DC charger with power cord, and carrying case.

***NextLINK** Technology: Including FMC, TFM, and PA technology with built-in sound field 3D simulation calculation technology

Products have been certified by ISO 9001 Quality Management System, ISO 14001 Environmental Management System, and ISO 45001 Occupational Health and Safety Management System. The information in this document was accurate at the time of its publication, and actual products may differ from those described herein. All technical specifications are subject to change without notice.

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