

Athena 64/64 Phased Array



The Athena 64/64 Phased Array system, manufactured by WesDyne NDE Products & Technology, consists of a phased array acquisition system and personal computer running standard IntraSpect software. The PC is a full featured computer that performs the acquisition, analysis and storage of the data. The system hardware is capable of operating up to four data sets with any combination of phased array or conventional UT probes.

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Phased Array System Features

- Maximum number of elements in system: 64
- Number of elements to fire as one group: 64
- Maximum number of focal laws: 4000
- Controllable features per firing sequence
- Delay per element 0 – 5 microseconds in 5 nanosecond steps
- Gain per element 0 to 29 dB in 0.1 dB steps of analog gain
- User defined Start element, End element, Group size, Step size

- Pulsar Voltage 10 – 125 V, tunable square wave
- 8 data sets of phased array or conventional ultrasonics
- User selectable A/D rate: 20, 25, 50, and 100 MHz

Receiver Section Features:

- Dynamic Range: 88 dB in 0.1 dB increments
- Low and High pass Filters: 1, 2, 4, 6, 8 and 10 MHz
- DAC Dynamic Range: 24 dB

Data Analysis Standard Features

- Data Acquisition and Data Analysis on Windows 7/10 laptop or desktop PC
- Simultaneous C-scan, Sector B-scan (S-scan), and A-scan Display
- Color Maps, Gates, and Variable Range can be altered for the graphic displays.
- Time-of-Flight and Amplitude Based Statistics Functions
- Fast Fourier Transform (FFT) Function
- Weld Overlay Function
- RF or Video acquisition and display modes

