

AIR-COUPLED ULTRASONIC DETECTOR

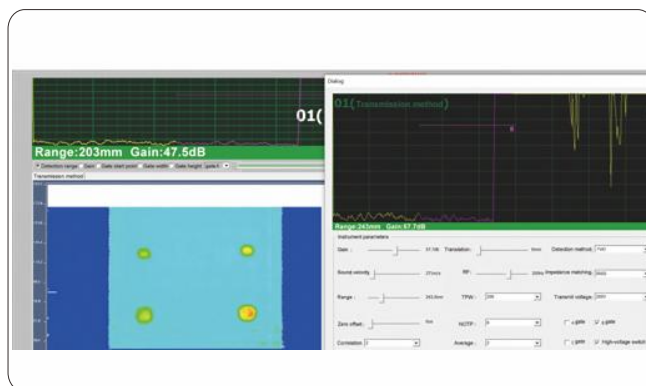
PART No. UFD-AW□□□

CUSTOMIZED ACCORDING
TO WORKPIECES

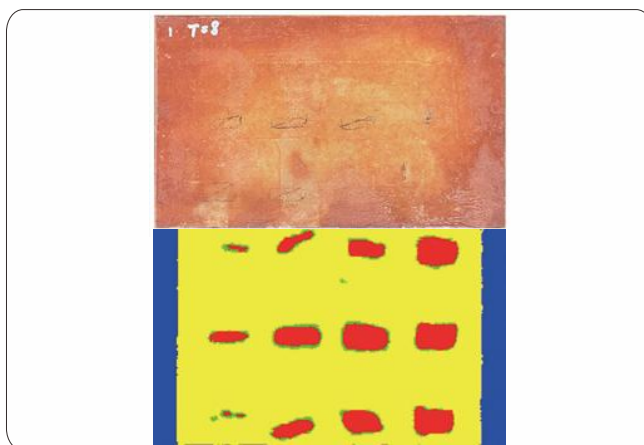
- Suitable for all types of aerospace composites, lithium batteries, water-repellent or slightly porous materials, as well as non-metallic materials that are susceptible to damage or intrusion of foreign objects
- Non-contact ultrasonic detection without coupling agent, detection distance from a few millimeters to several tens of millimeters
- Inspection of thin, rough or curved workpieces, which are less affected by the inspection surface
- Can withstand certain high and low temperature material testing
- A-scan, B-scan, C-scan imaging available
- Multi-channel automated scanning devices can be adapted to the size of the parts to be scanned



software parameter setting interface



scanning measurement function interface



scanning display interface

SPECIFICATION

Accept parameters	sampling frequency/bit depth	100MHz/14bits
	receiver bandwidth	35kHz~2MHz
	gain range	0~120dB, step 0.1dB
	gain linearity	cumulative error within every 20dB $\leq \pm 1\text{dB}$; cumulative error within every 60dB $\leq \pm 2\text{dB}$
	equivalent input noise	$1.5\text{nV}/\sqrt{\text{Hz}}$
Launch parameters	number of channels	unlimited combinations
	transmission frequency range	50kHz~2MHz (adjustable pulse count)
	transmission voltage amplitude	highest 400V (customizable 800V)
	transmission voltage waveform	square wave
	maximum output power	2kW (400V), 4kW (800V)
Probe parameters	pulse repetition frequency	15~1000k
	frequency range	50kHz~2MHz (adjustable pulse count)
	relative sensitivity	$\leq 30\text{dB}$
	resolution	$\leq .08''$
	focusing method	fixed focus or electronic deflection focusing
Hardware parameters	scanning range	11.02"×7.08" (customizable)
	maximum scanning speed	31.50"/s
	repeatability	.004"
	detection method	positive-wave、negative-wave、RF-wave、full-wave
	impedance matching	200Ω, 500Ω
	operating temperature	0~40°C, relative humidity: $\leq 85\%$
	power supply	110V, 60Hz
	dimensions (L×W×H)	23.62"×20.47"×31.50" (customizable)

STANDARD DELIVERY

Main unit	1pc
Mechanical system	1pc
Control system	1pc
Data processing system	1pc
Ultrasonic transducer	2pcs