



**YUT Series
Ultrasonic Flaw Detector**

YUT Series Technical Specifications

Product Introduction	YUT-2600	YUT-2620	YU-2800	YUT-2820
True Color TFT LCD	√	√	√	√
DAC Curve	√	√	√	√
AVG Curve	×	√	×	√
Changeable Squared Ultrasonic Pulse	×	×	√	√
Data Logger	√	√	√	√
UtView Software	√	√	√	√

Characteristics and performance

Full Screen Function	Enables the echo wave displaying area to cover the entire screen so that the operator will have the maximal view.
Bulk memory	Store up to 1000 data sets,including waveforms,curves,and parameters(including the traditional 1000 channels).
Measuring Point	Peak Mode or Front Mode
Echo-echo Method	No need of zero calibration , the net thickness of the base material can be directly measured through the coating.
Wave Crest Memory	The real-time envelope can display the highest wave of the flaw and record the maximum value of the flaw to help the exact positioning and fast testing of the flaws as well as the qualitative analysis by the envelope waveform.
Automatic Gain	Automatically adjust the gain to the pre-set amplitude height.
Warning Function	Afferent echo /lost wave alarm.
Solid waveform	Can add the waveform visual contrast and omission will hardly happen during the fast testing.
Real-time Clock	Automatically record the date and time of the stored waveform.
Display Freeze	Catching the waveform and the sound path data at any moment and removing the hatch after freezing to measure the echo wave parameters.
Flaw Positioning	Real-time displaying the sound path S, horizontal height X, depth Y, and wave height H.
Flaw Quantify	Real-time displaying the dB difference & SL
Digital Inhibition	0-80%, increasing by 1%, not affecting the linearity and gain
Independent measurement shutters	2 independent measurement gates, monitoring the echo amplitude and the sound path distance
DAC/AVG-Curve Functions	Perfect DAC/AVG curve functions, the curves change along with the changes of the gain, sound path, and displacement.
Distance Compensation	When the resolving power in the near field is not influenced, only the remote signal will be compensated for its sensitivity so as to improve the testing range of the device significantly(Only YUT2620 & YUT2820)
Φ Value Calculation	This function is used for calculating the flaw equivalent(Only YUT2620 & YUT2820)
Pulse Generator with Changeable Width and Scope	The voltage of the pulse generator can be changed between 50V to 400V continuously, The width of the pulse can be changed between 25ns to 1000ns continuously (Only YUT2800 & YUT2820)
Damping	Changed among 4 levels: 33/50/100/500Ω(Only YUT2800 & YUT2820)
Wave Signal Filter	Changed between 2 levels: 1-4MHz/0.5-15MHz.(Only YUT2800 & YUT2820)
Repeating Frequency	Changed freely to avoid unreal signal. (Only YUT2800&YUT2820)
Languages	Chinese and English.
Data Communication	Communicating with the computer through the RS232 interface to transfer the waveform and data so as to manage the results of the flaw on the computer, generate the flaw testing reports and print them out.

Technical parameter

Item	Index	Item	Index
Working Frequency	(0.5-15)MHz	Sensitivity Excess	≥55dB (deep Φ2 Flat-bottom hole)
Detection Coverage	(0-4500)mm	Reject Scope	0-80% adjustable
Material Sound Velocity	(1000-9999) m/s	Definition	≥26dB
Operation Mode	Pulse echo, double crystal	Dynamic Range	≥26dB
Pulse Shift	(0-2000)mm	Average Noise Level	≤10%
Probe Zero	(0-99.99)us	Battery Working Time	9 hours
Gain Control	(0-110)dB,(0.1,1-2,6)dB stepping	Power Supply	12V DC, 220V AC
Vertical Linearity Error	≤5%	Dimensions	270mm x190mm x 60mm
Horizontal Linearity Error	≤0.5%	Weight	1.5kg(Without battery)