**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 flas 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 quivalent(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 change d 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 Vecocity | (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) |