Digital Ultrasonic Test Instrument
(Ultrasonic Flaw Detector)

UI-180 II • UI-180 II T

High performance Ultrasonic flaw detector enables stable Ultrasonic Flaw Detection.

Feature:

• Inspection can be started / stopped from external signal.
• Built-in 5-axis encoder input function.
• Up to 4 channels can be expanded by switching probes.
• Achieve high noise immunity and high durability by the built-in AC power supply.
• Adopted 7 "VGA TFT color LCD with high visibility.
• Prepared the rich external interface.

Note:

UI-180II is the built-in sales to small-scale inspection system.

No single item sales products.
UI-180 II  DIGITAL ULTRASONIC INSTRUMENT

Display
Screen size: 7.0”VGA Wide LED TFT  
Display area: 152.4(W) X 91.44(H)  
Pixels: 800(W) X 480(H)  
Color: 262,144 colors

Size (mm) · Weight (kg)
330(W) X155(H) X350(D) Approx10kg

Case (IP41 Drip-proof)
Metal

Transmitter section
Output impedance: 50Ω or less  
P.R.F.: 100 - 6,000Hz(in step of 1.28 μs) 
Pulse rise up time: Less than 10ns  
Wave form: Square wave pulse  
Voltage: L:100V / M:200V / H:300V(±4%) 
Pulse width: 20 -1500ns  
Damping: 50 / 300Ω

Receiver section
Gain: 0 -110dB (in step of 0.1dB)  
Sensitivity: 80dB at 5MHz narrow band  
Input impedance: 50Ω±15% / 300Ω±15%  
Receiver amplification center frequency:  
Output impedance: 50Ω or less  
Pulse width: 20 -1500ns  
Damping: 50 / 300Ω

Freqeency analysis function
Center frequency: 0.25 to 25MHz adjustable  
Display range: 200MHz max

Temperature
Ambient temperature: 0 to 40°C (operation)  
-20 to 60°C (storage)

Standard functionality
Measurement methods:
single probe / dual probe / transmission technique  
Wave form selections: DC / DC+ / DC- / RF  
Beam path measurement methods:  
Peak / Up / First echo / Zero crossing / Peak up  
Echo height accuracy: 12 bits (0-4095)  
Data sampling speed: 1 data/PRF  
Auto readable work number: 256 max  
Language: English / Japanese

Power section
AC input: 100 to 240V±10% 50/60Hz±3Hz

Interfaces
VGA monitor: 1ch  
Analog outputs: 8ch (12-bit resolution)  
EH / Event / Path length  
Card slot: SDHC/SD memory card  
Connectors: USB: 2: For KBD/Mouse/RS232C  
LAN: 1: ETHERNET  
PI/O: 16 in / 16 out (In: 5-24V/Out: 24V)  
I/O: 8 in / out (+5V)  
Sync signal: 1 in/1 out (3.3-5V PRF sync)  
Encoder Inputs: 5 Axis (Two-phase clock)  
0-24V / 20 KHz max

Time-base section
Test range:  
5.9 to 1,900 mm at sound velocity 5980 m/s  
(In step of 0.1mm)  
Adjustable delay: full scale to 3,000 μs ±5%  
Display time-base linearity: ±1% Max

Gate section
Delay range:  
0 to full scale time range on the display  
Gate marker width:  
0 to full scale time range on the display  
Number of gate: 4  
(With S, B Echo tracking function)

Standard accessories
1, AC power cable: 1  
2, SD memory card: 1  
3, I/O cable: 2  
4, Terminal block for I/O: 2  
5, Manual, Test certificate, Warranty: 1set
Thin plate inspection system

【Specifications Summary】
1. Test plate : Thickness : 0.5 - 6.6mm / Width : 600 - 1650mm
2. Line Spec :
   - Speed : 100 - 450m/min
   - Skew : Less than ±150mm
   - Vertical movement : Less than ±1mm
3. Detection capability : φ1 - φ3 Drilled hole
   (Depend on the line speed.)
4. Wheel probe : Lamb wave 1MHz / 2.25MHz

Car parts inspection system

【Specifications Summary】
1. Inspection method : Full Immersion technique
2. Inspection target parts : EBW car parts
   - Gear / Wheel / Ring / Shaft etc
3. Number of Channels: 1CH-2CH
4. Scan method : Work rotation scanning type
5. Work in-out :
   - Automatic work in-out and automatic setting.
   - Automatic carry-out of NG or OK material.