

**Digital Ultrasonic Test Instrument**  
(Ultrasonic Flaw Detector)

**UI-S7α**

**More compact design  
for greater levels of practicality**



**High brightness LED monitor for indoor and outdoor usage.**

**Dust-proof, drip-proof construction.**

**Advanced architecture adopted.**

**Size: 250 (W) x 160 (H) x 86 (D) mm**

**Weight: Approx. 2 kg (incl. battery)**

**Battery operating time: Approx. 10 hours** (Depend on conditions)

# UI-S7 $\alpha$ DIGITAL ULTRASONIC INSTRUMENT

## ● Display

Screen size: 6.5"VGA a-Si TFT active-matrix  
Display area: 132.5 X 99.5  
Pixels : 640(W) X 480(H)  
A scan pixels: 424(W) X 316(H)  
530(W) X 421(H) Enlargement

## ● Size (mm) • Weight (kg)

250(W) X160(H) X86(D) Approx2kg Incl. Battery

## ● Case (IP65 Drip-proof)

Reinforced ABS resin (front and rear)

## ● Transmitter section

Output impedance: 50 $\Omega$  or less  
P.R.F.: Link with test range  
Pulse rise up time: Less than 10ns  
Wave form: Square wave pulse  
Voltage: Low / Medium / High  
Damping: 50 / 300 $\Omega$

## ● Receiver section

Gain: 110dB (in step of 0.1dB)  
Sensitivity: 80dB or better at 5MHz narrow band  
Input impedance: 50 $\Omega$  $\pm$ 15% / 300 $\Omega$  $\pm$ 15%  
Receiver amplification center frequency:  
0.25/ 0.5/ 1/ 2/ 3/ 4/ 5/ 10/ 15/ 25MHz  
Amplifier linearity:  $\pm$ 3% Max

## ● Time-base section

Test range:  
1 to 14,556 mm in sound velocity 5900 m/s  
Adjustable delay: full scale to 3,000  $\mu$ s  $\pm$ 5%  
Display time-base linearity:  $\pm$ 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

## ● Standard accessories

1, Li-Ion battery: UI02-LB66: 1  
2, AC adapter: UIA345-15: 1  
3, SD memory card: 1  
4, Neck strap: UIS7NS: 1  
5, Hand strap: UIS7HS: 1  
6, Manual, Test certificate, Warranty: 1set

## ● Frequency analysis function

Center frequency: 0.25 to 25MHz adjustable  
Display range: 50MHz max

## ● Temperature

Ambient temperature: 0 to 45 $^{\circ}$ C (operation)  
-20 to 60 $^{\circ}$ 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  
Angle beam technique support function:  
12 DAC max, refraction angle measurement  
Data storage capacity: In attached 2GB SD card,  
600 Conditions and 1,300 Images are stored.

## ● Power section

AC adapter: 100 to 240V $\pm$ 10% 50/60Hz $\pm$ 3Hz  
Battery: Li-Ion cell 1.  
Battery operation time: approx. 10 Hours  
Charging time: approx. 2.5Hr 80%, 5Hr 100%

## ● Interfaces

Card slot: SD memory card  
Connectors: USB (master)  
USB (slave)  
DC inlet  
Earphone and microphone (Headset)  
(JEITA RC-5240)

## ● Optional extras

1, External charger: UICGS7  
2, Soft case (protector): UIS7SC  
3, Earphone and microphone  
4, USB card reader



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