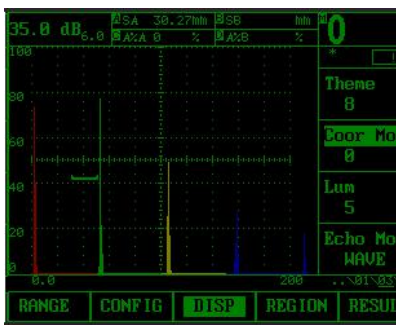# Ultrasonic Flaw Detector
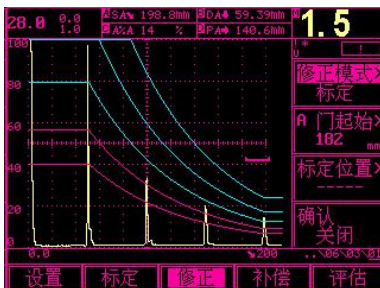## UTM-950

UTM-950:High performance and portability

UTM-950 is not only a simple and compact ultrasonic flaw detector with the ultimate lightweight design, long battery life, it is also designed for motion detection ,which perfectly combined the high performance and portability.

Wave Form

Value Display Area

DAC Curve

DGS Curve

FEATURES:

- **One Function Key, Easily Operate**
- **Ideal Menu Style**
- **Auto Calibration : Velocity, Probe Delay, Angle/K Value**

FUNCTION:

- **B Scan-Display Flaws Directly**
  Reducing analysis difficulty , missing detector
- **Massive Data Memory**
  100,000 values
- **Electronic Choice : Flaw detector together with high accurate thickness measured**
- **5 Intelligent DAC curves , comply to JIS and API standard**

OPERATION

- **High Accuracy: 10 places for AD samples**
- **Extra-long Standby Time:**
  20 hours, getting rid of trouble from battery
- **Display screen could be adjusted to provide 5 optimum brightness**
- **Magnesium alloy case, AP65 encapsulation, strong and durable , avoiding electronic-magnetic interference**

SPECIFICATIONS

Measuring Range
1.0~15000mm

Resolution
0.01mm(<100mm)

1mm(>100mm)

Velocity
500~20000m/s

20 fixed velocity

Delay
-20~3400us /resolution : 0.1us

Probe Delay
0~99us /resolution: 0.01us

Auto Calibration
Velocity Calibration &Probe Delay

Calibration

Linear Error
Horizontal error≤0.1% Vertical error≤3%

Dynamic Range
≥36dB

Sensitivity
≥64dB 200mmΦ2 flat-bottomed hole

Dimension (mm)
180×150×50mm

Weight
1.0 Kg（including battery pack）

Working Environment
Temperature：-20℃~70℃

Humidity：5%～90%

Pulse

Dive Pulse
Negative spikes, high energy/low

adjustable

Matched Damp
50/150/400Ω

Receiver

Detection mode
Pulse echo/transmitting &

receiving/transmission

Measuring mode
Peak/Verge

Detector Pattern   0~110dB
0/0.1/0.2/0.5/1/2/6/12/

Detector Pattern
RF/Full-Wave/Positive/Negative/

half-wave

Bandwidth
0.3~1/0.5~4/2~15MHZ

Display

LCD
TFT Color Display 5 options for variable

brightness

Screen Update Rate   ≥60Hz

GUI Theme
Strong/weak light 2,the user can through

the set text A,

background color, sweep waveform

coordinate free custom theme

Gate / measuring value / alarm

Sluice gate
Two Separated Gate A/B

Measured value display
5 measured value display area, where a

main display area,

Selectable measurement value content

SA/SB/DA/DB/PA/PB/A%A/A%B/dBtA/

dBtB/dBrA/dBrB/SBA/DBA/PBA/LA/LB

Alarm
Independent logic gate alarm, alarm

threshold thickness measurement

Storage

Channel Parameters	20 groups
Scan A	1000 groups

Thickness values
100,000 data, liner

Reference wave	4

Input / Output

Probe connector	LEMO or BNC

Regional

Clock	date and time
Language	English
Unit	mm/inch

Battery

Battery
High-energy lithium batteries, excellent

overcharge and over-discharge protection

Battery Monitoring
Coulomb energy measurement based on

battery monitoring, the percentage / time

display the remaining battery life

Working Hours
work continuously for more than 10 hours

Battery Adapter
Input : 100~240V/50~60Hz

Output : 9VDC/4A

High ranking

B-scan two-dimensional coding
Thickness / contour scanning; grayscale /

color palette settings

Curve freeze	**YES**
Data Storage	**U disk**

Characteristic indicator
Sound path measurement wave front and

amplitude measurement position indicator

CSC Surface Correction
According probe angle, diameter of the

work piece thickness and curvature

correction for the measured values

Screen Saver
Standby / Text / off

Equivalent curve

DAC curve
Can record 30 calibration points;

Automatic Gain; any order calibration;

calibration / edit two modified methods;

consider the material attenuation and

surface compensation factor; five

adjustable gain curve to assess compliance

with JIS and API Standards

DGS curve
For large flat-bottomed, flat-bottomed hole

via   three reference types, consider a

reference attenuation, attenuation and

surface material compensation factors,

defect assessment methods: equivalent

size/ equivalent gain / percentage

Standard

Main engine	1	Instructions	1
Straight /		Box	1
angle probe	2	Coupling paste	1
Probe line	1		
Charger	1		
Battery	1		

Optional

Printer
TP serial printer, you can print directly

screenshots / waveform / thickness of the

three data report

Communication
USB