

## **UD2V-P45**

### **New flow detector with more performance features.**



- Selectable damping: 50 ohms and 1000 ohms (25 ohms in dual mode)
- 3 to 3000mm range (steel)
- 110 x 65 mm LCD display with switchable backlight (240 x 128 pixels)
- Two independent monitor gates
- RS232 serial interface: RF, A-scan and settings output to PC
- Overall weight: 2 kg with batteries
- Reject: 0 to 80% screen height, variable in steps of 1%
- Rectification: RF (in all ranges), full wave, positive and negative halfwave
- Powered by 220V plug-in power supply or 4 NiCAD or NiMH C (or D)-sized batteries
- Amplifier: 0.5 to 10MHz (-3dB)
- A-scan image freeze and zoom
- Digital measurement resolution: 0.001 mm up to 10 mm steel
- Memory for storage of 64 datasets with A-scan and 1000 measurements results
- 110 dB controllable gain in steps of 0.5, 1, 2, and 6 dB
- Electronically generated display graticule
- PRF: up to 800 Hz or 40 Hz
- Pulse echo and dual operation
- LED alarms for gates
- Trigonometric functions
- TGC/DAC function

## Available Accessories:

- Plug-in supply unit
- Batteries and batteries set unit
- Battery Charger
- Probes and probe cables
- Soft Carry Case with Neck Strap
- Transport case
- Printer & PC cables

## Specifications:

### Calibration Range

min.: 0 - 2.9 mm; (for steel)  
max.: 0 - 2970 mm; (for steel)

### Sound velocity range

1000 - 9999 m/s

### Memory

Storage of 200 datasets with alphanumeric description and 1000 results of thickness or amplitude measurements

### Pulse shift

-0,5 us to 498 us

### Probe delay

0 - 100 us

### Damping

pulser: 1000 ohms / 50 ohms  
resiver: 600 ohms / 50 ohms

### Pulser intensity

1 nF / 220 pF

### Frequency range

0.5 - 10 MHz (-3dB), 3 selectable settings

### Pulse repetition frequency

Up to 800 Hz or 40 Hz

### Gain

110 dB, adjustable in steps of 0.5, 1, 2 or 6 dB

### Rectification

RF (in all ranges), full-wave, positive and negative halfwave

### Reject

linear, 0 - 80% screen height, variable in steps of 1%

### Monitor gate

2 independent monitor gates with individual logic, with alarm LED and sound indication

### Sound path measurement

Digital display of sound path between zero and the first echo signal in the gate or between two echos in the gates, measurement at echo flank or peak with trigonometric flow location

### Measurement resolution

0.001 mm / 3 ns up to 10 mm

### Display of amplitude

as a percentage of the screen height, in dB to reference test echo, in dB referens to DAC curve

### Display

LCD with switchable backlight and contrast

### Display size / resolution

110 mm x 65 mm; 240 x 128 pixels

### A-scan storage

statically (A-scan freeze) & datasets

### Interface

RS 232 C

### Probe connections

2 BNC or 2 Lemo1

### Dialog languages

Russian or English (in order)

### Batteries

4 C or D cells (NiCAD or NiMH) with external batteries unit

### Operation time

Approx. 7 hours with 3.5 Ah cells, backlight off

### Mains power

via external plug-in power unit (220 V AC)

### Operating voltage

7 - 9 V DC

### Power consumption

Max. 6 W, depending on instrument setting

### Operating temperature

-20 °C to +50 °C

### Dimensions (H x W x D)

245 mm x 265 mm x 46 mm

9.7 inch x 10.4 inch x 1.8 inch

### Weight

2 kg; with 4 C-size batteries

### TGC/DAC

Curve recording with maximum of 10 reference echoes