

# *Inhomogeneities and flaws* **identified quickly and safely.**

Equipped with a color TFT screen

Ideal choice for the ultrasonic inspection

A high degree of accuracy in finding flaws



# UFD-50

The **UFD-50** is a lightweight, ergonomically ultrasonic flaw detector, which particularly is suitable for assessing and locating material defects and flaws. It can be also used for measuring wall thickness.



# Inhomogeneities and flaws identified quickly and safely.

Specifications	
Scan:	min.: 0 - 4 mks max.: 0 - 1.000 mks adjustable in steps of 1 ms
Maximum length of tested material:	to 3.000 mm (echo-mode)
Velocity range:	1.000 - 9.999 m/s
The delay in the prism:	0 - 100 ms in increments of 0.01 ms
Damping:	25 Ohm / 50 Ohm / 1.000 Ohm
Input impedance:	50 Ohm / 600 Ohm
Interrogator:	RF pulse, amplitude of 50 or 200, with an adjustable number of half periods (1-10), with a variable duration of between 50 and 500 ns, 16 ns increments
Gain control range:	110 dB in increments of 0.5, 1, 2, or 6 dB
Additional key + dB:	0-40 dB programmable in steps of 0.5 dB
Temporary control gain (TCG):	range up to 90 dB, 12 dB / ms with the construction of the curve by 10 reference points manually entered or control reflectors
Distance-Amplitude-Curve (DAC):	building on the 10-point height adjustable two additional curves DAC 0- 12 dB from the base (0.5 dB increments)
Detection:	positive or negative half-wave, full, radio (in all range scan), B-scan
Memory:	100 settings with the A-signal 500 control protocols (signal envelope, the result of measurement, the parameters of the device, the date, time and name of the protocol)
External power supply:	230V AC, 50Hz
Operating temperature range:	from -20 °C to +50 °C
Dimensions (H x W x D):	200 mm x 225 mm x 80 mm
Weight:	2 kg with batteries

## Non-destructive, fast and reliable material testing

Equipped with a color TFT screen with a resolution of 640x480 pixels, this device is the ideal choice for the ultrasonic inspection in the field of searching and finding material defects.

With the recent advances of digital electronics, the **UFD-50** embodies a wealth of experience in the field of ultrasonic testing. It represents the new standard for the digital and modern equipment in the field of non-destructive testing.

Welds, forgings, rods, tubes, tanks and large containers are examples of the wide range of application. The robust construction ensures the use not only in the laboratory but also in workshops and on the go. The proven menu navigation allows quick access to all functions and settings of the transducer and device parameters. The measurement results can always be saved in the memory of the device. Additionally, the supplied software "UdReport" allows the full documentation of the performed tests.

## Features

- ✦ **Display:** Color TFT 135 x 100 mm (640 x 480 pixels)
- ✦ **Power:** Broadband 0.4 - 15 MHz
- ✦ **TCG** with a range of up to 70 dB, 12 dB / ms with the construction of the curve for the 32-m reference points
- ✦ **DGS function** with transducers database optionally
- ✦ **Optical and acoustic** signal of found defects
- ✦ **The repetition frequency GI:** to 800 Hz
- ✦ **Zone control** with two independent, individually defect detection logic
- ✦ **Output signals** in the form of **A-, B- Scan**
- ✦ **Interface:** USB
- ✦ **Power:** Li-ion battery or external power supply
- ✦ **Operating time** (battery): up to 8 hours

## Standard delivery range

- ✦ Device **UFD-50**
- ✦ 4 standard transducers
- ✦ 2 cabel lemo0-lemo0
- ✦ Evaluation and transfer software
- ✦ Data transmission cable to PC
- ✦ Battery
- ✦ Power supply 110 - 240 V
- ✦ User manual
- ✦ Carrying case

## Optional accessory

- ✦ DGS function with transducers database
- ✦ Transducers for custom applications
- ✦ Testblocks
- ✦ Protection bag



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