UDT-08

Portable ultrasonic thickness gauge

- Powerful
- Light and portable
- Ergonomic design
- High reliability
- High measurement accuracy
- Usability

General information

The updated easy-to-use ultrasonic thickness gauge. The device has a *B*-scan for building a profile of the bottom surface of the product. The device also has an A-scan in the setting mode, which allows the user to observe radio-frequency signals in real time.

The new version has expanded the range of available transducers and increased the gain range up to 92 dB. High accuracy and reliability, color frost-resistant TFT display make this ultrasonic thickness gauge one of the best in its class by price / quality ratio.

Specifications

Measurement range
0,8 - 300 mm
Discreteness
0.001 - 0.01 - 0.1
Measurement accuracy
0,01 mm
Gain
92 dB, in increments 1 dB
AGC (Automatic Gain Control)
included
TCG (Time Corrected Gain)
no
Frequency range
1 - 10 MHz (-6 dB)

Display
TFT with adjustable brightness and color set
43 x 58 mm; 240 x 320 pixels
Memory
no
Interface
no
Power supply
built-in Li-Po battery
Operation temperature range
from -25 to +55 °C
Dimensions (H x W x L)
148 mm x 64 mm x 25 mm
Weight
180 g

Delivery set

UDT-08 main unit with built-in Li-Pol battery

PC Software

Transport bag

Protective bag with blind and belts

Power supply 5 V / 220 V

1 x 2Lemo00 — 2Lemo00 cable

1 x transducer

UDT-08 menu structure

1. Select a parameter;
2. Confirm the action;
3. Adjust the parameter value;
4. On/Off;
5. Settings;
6. Change the operation mode.

Connectors
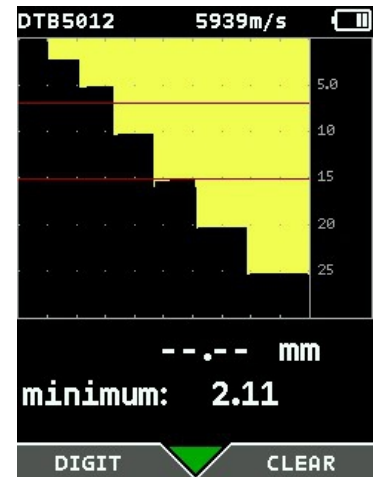
1. USB-C
2. Pulser
3. Receiver

Ease of operation and reliability

This thickness gauge combines the latest achievements in analog and digital electronics, usability, ergonomic design and high reliability.

Specifics

- high-contrast and easy-to-read at any angle frost-resistant TFT display;

- powerful Li-Pol battery with up to 15 hours battery life;

- protective bag with blind and belts for field operation;

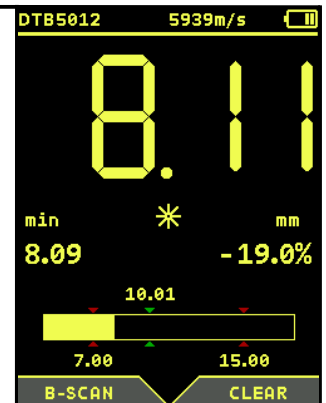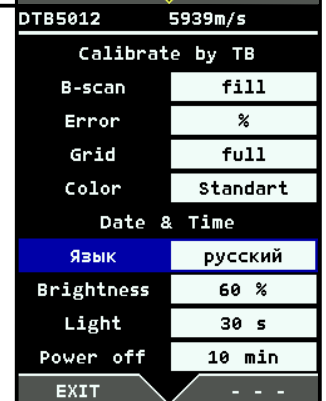- built-in V-path correction;

- AGC.
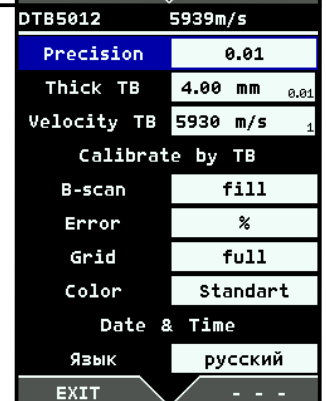

B-scan

Transducer choosing

UDT-08 specifics

For the convenience of the user, the device has three color sets, which can be adjusted independently.

DTB5012	5939m/s
8.11	
min ✳ mm	
8.09	-19.0%
10.01	
7.00	15.00
B-SCAN	CLEAR

UDT-08 has support for two languages by default: Russian and English.
Support for other menu languages is optional.

DTB5012	5939m/s
Calibrate by TB	
B-scan	fill
Error	%
Grid	full
Color	Standart
Date & Time	
Язык	русский
Brightness	60 %
Light	30 s
Power off	10 min
EXIT	- - -

An additional option is added to the UDT-08 to calibrate according not only to the built-in sample, but to any sample specified by the user.

DTB5012	5939m/s
Precision	0.01
Thick TB	4.00 mm 0.01
Velocity TB	5930 m/s 1
Calibrate by TB	
B-scan	fill
Error	%
Grid	full
Color	Standart
Date & Time	
Язык	русский
EXIT	- - -

The UDT-08 has two signal display modes, each of which has its own characteristics: DIGIT and B-SCAN.

DTB5012	5939m/s
13.38	
min mm	
13.360	+33.6%
10.01	
7.00	15.00
B-SCAN	CLEAR

General technical specifications

Measurement range
0,8 - 300 mm
Discreteness
0.001 - 0.01 - 0.1
Measurement accuracy
0,01 mm
UT speed range
1000 - 9999 m/s
Gain
92 dB, in increments 1 dB
AGC (Automatic Gain Control)
included
TCG (Time Corrected Gain)
no
Frequency range
1 - 10 MHz (-6 dB)
Visualization
A-scan, *B*-scan, digital values
Alarm System
no
Max. number of measurements per sec.
30
Transducers
DF1220 (1,25 MHz, 20 mm)
DF2512 (2,5 MHz, 12 mm);
DTB5012 (5 MHz, 12 mm);
DT1006 (10 MHz, 6 mm)
DT1044 (10 MHz, 4x4 mm)
Probe calibration
by built-in sample or by any sample specified by the operator
Sound velocity calibration
according to the thickness specified by the operator
Non-original transducers usage
no

Display
TFT with adjustable brightness and color set
43 x 58 mm; 240 x 320 pixels
Color sets
standard color, luminescent, monochrome
(for working in bright sunlight)
Brightness
5 - 100%, in increments 1%
Display lights auto-off
included
Auto-off
3 min., 5 min., 10 min.
Date/time setting
included
Memory
no
Interface
no
Language
Russian, English
Transducer connectors
2 x Lemo 00
Power supply
built-in Li-Po battery
Battery life
no less than 15 hours
External power supply
220 V AC / 5 V DC
Operation temperature range
from -25 to +55 °C
Dimensions (H x W x L)
148 mm x 64 mm x 25 mm
Weight
180 g