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PORTABLE ULTRASONIC FLAW DETECTOR U-TOP

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U-TOP is a complete ultrasonic testing device, suitable for all ultrasonic measurements, and due to many additional inputs and outputs (PC onboard), it can be used as a controller for more complicated devices.

The device can work together with following devices:

- 2 - 32 channels multiplexer
- scanner - it has input for incremental encoders;
- etc.

Can be connected to the WLAN or WWW network.

The device contains one channel pulser & receiver and can be used with one transducer or with two (one is sending and the second receiving) for pulse-echo and through transmission measurements.

Size: 250mm x 310mm x 100 mm
AI Housing with protection: IP 65
Power Supply: 12V DC / 2A
Weight: 4kg



Technical data	
LCD:	Touch screen 10.4" AUC (800x600) 24-bit colors
CPU:	AMD 500MHz processor (up to 1.7GHz)
RAM:	512MB (up to 2GB)
HDD:	4G Compact Flash

Interface:	Ethernet 10/100Base 4 x USB2.0 1 x LPT 6 x RS232 1 x RS422/485 1 x PS2 1 x IDE 1 x VGA
Battery:	2x 7.2V/3000mAh LiIon
A/D converter:	
- Resolution:	8 bit (internal 10bits)
- Sampling frequency:	12.5, 25, 50 or 100MHz ¹
Delay time:	Post trigger 256µs
Data buffer:	256, 512, 1k, 2k,4k,8k,16k, 32k, 64k, 128kB ¹
Analog parameters	
- Input amplifier gain:	from -29dB to 67dB
- Input preamplifier	0dB or +24dB
- Sensitivity:	0.1mV - 1Vpp
- Bandwidth:	0.5 MHz - 25 MHz (-3dB)
- Input impedance	50 Ohm, 10pF
- Filters switchable	.5-6MHz ¹ , .5-10MHz ¹ , .5-15MHz ¹ , .5-25MHz ¹ , 1-6MHz ¹ , 1-10MHz ¹ , 1-15MHz ¹ , 1-25MHz ¹ , 2-6MHz ¹ , 2-10MHz ¹ , 2-15MHz ¹ , 2-25MHz ¹ , 4-6MHz ¹ , 4-10MHz ¹ , 4-15MHz ¹ , 4- 25MHz ¹
DAC (TGC) with arbitrary waveform generator	
- Resolution of time step	0.05 ms
- Resolution	8 bit
- Max. Gain changing	48dB pro step
Counters / Input for incremental encoder:	
- Counters for Incremental Encoders 2 channel	8-bit
Trigger	
- Internal trigger rate	Software
- External trigger rate	TTL Signal
- Multiplexer	TTL Signal
- Trigger output signal	TTL Signal
Additional inputs:	
- Multiplexer control	up to 32 channels
- 2 digital lines	TTL Signal
Output:	
- 5 digital lines	TTL Signal
Pulser:	
- Pulse Voltage	off - 360V (positive pulse, Short circuit step pulser) in 13 levels
- Pulse length (loading time)	from 0 – 3.1us with resolution 0.1us
- Fall Time	<= 20 ns
- Pulse Duration	Short circuit, bandwidth up to about 50MHz
- Output impedance	< 1 Ohm

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