

UT-4DL technical specifications according to EN15317, are given in Table below

Parameter	Dimension	Min.	Typical	Max.	Value and Comments
General characteristics					
Size	mm				230 mm x 55 mm x 95 mm (H x W x D)
Weight	g	600	620	650	Including battery pack
Types of power supply					a. Rechargeable NiMH battery pack with 4 AA batteries (capacity 2450 mAh, 11.5Wh); b.AC/DC adaptor DC12V (for built-in charger); c. VBus line USB-port DC5V
Type of probe connection					Dual LEMO "00" (coaxial) sockets, IP67
Low battery warning	V	4.45	4.5	4.55	Warning messages on display
Battery operational time	hours	15	24	30	Depends on pulse voltage and backlight setting
Operational voltage range	V	4.5	5.5	5.7	Battery status icon indicates 6 levels
Operational current range	mA	70	100	150	Depends on pulse voltage and backlight setting
Stability against temperature	°C	-10		50	
Operational temperature range	°C	-10		50	
Storage temperature range	°C	-20		55	
Display					
Type of display					Graphical LCD display module with LED (White) backlight and adjustable contrast
Display modes					Digital readout, 4 digits with 14 mm height
Number of pixels	pixel				64 x 128 pixels (high-resolution)
Display viewing area size	mm				62.0 mm x 27.0 mm (H x W)
Display update rate	Hz	1	8	16	User selectable from the keypad
Transmitter					
Pulse repetition frequency (PRF)	Hz		400		Burst (not adjustable)
Available transmitter voltage	V	-40	-60	-90	User selectable from the keypad
Transmitter pulse shape					Negative spike impulse (Main Bang)
Transmitter pulse rise time T_r	ns	20	22	25	Damping 75 Ohm resistor across the transmitter output socket
Transmitter pulse duration T_d	ns	140	180	260	Pulse width is automatically determined by the frequency of the probe
Transmitter pulse voltage V_{50}	V	-37	-55	-80	Damping 75 Ohm resistor across the transmitter output socket
Output impedance	Ohm		2000		With damping 100 μ H inductance across the transmitter output socket
Receiver					
Gain control	dB	7	35	55	a. Manually: 7dB to 55dB, 1dB steps; b. Time-dependent gain: 0 to Max (not adjustable)
Main Bang blank	μ s	0	3.5	10	Manually adjustable (0.1 μ s steps)
Frequency range of operation	MHz	0.5		50	Maximum bandwidth (-6dB, $R_L=100$ Ohm)
Input resistance	Ohm		100		
Performance					
Min. / max. measureable thickness	mm	1.0		400	With probe 2,5-12/2B (nom. frequency 2,5MHz)
Min. / max. measureable thickness	mm	0.8		300	With probe 5,0-12/2B (nom. frequency 5,0MHz)
Min. / max. measureable thickness	mm	0.6		50	With probe 10,0-6/2A (nom. frequency 10,0MHz)
Units and resolution	mm	0.1		0.01	Metric
Range of velocity setting	m/s	1000		19999	
Range of velocity measurements	m/s	1000		9999	
Units and resolution	m/s		1		Metric
Calibration mechanisms					a. On Block Zeroing, One-Point, Two-Point; b. Velocity can be entered manually or selected from Flash-memory
Calibration setting storage					Default dual element transducer setup storage locations in Flash-memory
Data storage capacity					Data recorder 10000 thickness readings in 100 files
File formats					Incremental, sequential
File name length					1 to 13 characters
Data output					Data recorder connected via 2.0 USB client
Display and recall					Data shall be viewed on display
V-path correction					Automatic, dependent on probe type