Application	Unit	USM 32XB	USM 32XL
		basic	+ large components or tough-to-penetrate materials
Maximum range	[inch]	56 (steel)	390 (steel)
	[mm]	1420 (steel)	9999 (steel)
Minimum range	[inch]	0.2 (steel)	
	[mm]	0,5 (steel)	
Material velocity	[inch/µs]	0.039 – 0.590	
	[m/s]	1000 – 15000	
Display delay	[inch]	-0.3 - 40 (steel)	
	[mm]	-10 - 1024 (steel)	
Probe delay	[µs]	0 – 199	
Frequency	[MHz]	0.5 – 18	0.1 – 18,3 selectable filters
PRF	[Hz]	Automatically optimized up to 1000Hz	4 – 1000
Operating modes		single, dual, through transmission	
Damping	[ohms]	50, 500	
Gain	[dB]	0 – 110	
Rectification		full wave	
Reject	[%]	0 – 80	
Gates		2 independent gates	
Measurement point		flank	
Fixed readings		sound path and amplitude in gate A	
Configurable large reading in A-scan		sound path, amplitude for gate A or B, sound path difference	
Measurement resolution	[inch]	0,001	
	[mm]	0,01	
Alarm		LED	
Datasets		100	
Copy key function		Transfer A-scan, test report, measurement value, function list, PCX or store actual setting with A-scan	
Dialog languages		20	
Interface		RS 232, bi-directional	
Printer drivers		EPSON, Seiko DPU, HP DeskJet, HP LaserJet	
Battery		Li-Ion, 6 Ah with internal charge, or 6 single C-cells (AlMn, NiCd, NiMH)	
Battery life	[h]	14 (Li-Ion battery), ~ 3 with 6 NiMH cells	
Mains supply		external charger power supply (100 – 240 V AC, 50 – 60 Hz)	
Screen		TFT color LCD with backlight	
Screen size, W x H	[inch]	4.6 x 3.4	
	[mm]	116 x 87	
Screen resolution	[pixels]	320 x 240	
A-scan size, W x H	[inch]	4.6 x 3.2	
	[mm]	116 x 80	
	[pixels]	320 x 220 (in zoom mode)	
Dimensions, W x H x D	[inch]	10 x 6.7 x 3.9	
	[mm]	255 x 177 x 100	
Weight	[lbs]	5	
	[kg]	2,2	
Operating temperature	[°F]	32 – 115	
	[°C]	0 – 60	
Environmental protection		IP 66	
Certification		EN 12668-1	

GE
Inspection Technologies

Ultrasonics

Krautkramer USM 32X
Compact Ultrasonic Flaw Detector

Now IP 66

Digital | Eddy Current | Film | Testing Machines | Ultrasonics | X-ray

USM 32XB and USM 32XL: small box, big performance
Well balanced between ergonomics and functionality:
Easy solutions for your daily applications.

Two versions – which one and for what?
This simplicity of use comes with the 2 different versions on which you will find only the functions you need:
- **USM 32XB** for all standard applications
- **USM 32XL** for testing large work pieces or strongly sound-attenuating materials

The USM 32X with its two versions is characterized by simplicity:
- two rotary knobs
- 14 keys only
- only one menu line
- four functions per menu
- direct access to all functions

The handle.
The ergonomy of UMS 32 allows its use in workshop, laboratory and outdoors. Due to its adjustable handle the instrument sits stable on any surface you encounter, even on round parts. For those who wish to hold the instrument, a holster is available.

The knobs.
Fast, easy and precise. The two rotary knobs will allow you to rapidly and precisely set any of the instrument parameters. To avoid accidental change you may disable the knobs.

Battery life
The Lithium Ion battery allows at least 14 hours of continous use, and can be charged internally within 7 hours. If necessary, it can be exchanged within seconds or replaced by 6 C-size standard batteries from the shop next door.

The Color screen.
Because the screen is what the inspector has to look at all the time, we selected a very high contrast and fast color LCD. Its big size, 4,5" x 3,4" (115 mm x 86 mm), its A-scan resolution of 320 x 220 pixels and its choice of color schemes offers you an outstanding comfort of viewing under all light conditions.

Two individual color coded gates.
Totally independent, easy to identify with different colors, the 2 gates can be placed anywhere on the range, with a threshold from 10 % to 90 % screen height. Their alarm logic can be changed from coincidence to anti-coincidence individually. You are flexible in choosing the reading you need: Echo amplitude, sound path or or sound path difference for each gate, displayed in large characters in the top right corner of the A-scan, even visible for a remote operator position.

Ease of use
Select menu, select function: spin right hand rotary knob to set the function value.
Spin left hand rotary knob to change the gain.

Plus four direct access keys:
- dB-step selects the wanted step width including lock
- freeze   halts the A-scan
- zoom   switches A-scan to full screen width and disables the menus and functions.
- copy   transfers selected data via the RS 232 to printer or PC

Multilingual
With 20 different languages, the USM 32X can be used everywhere around the world.