


**Underwater Ultrasonic Thickness Gauge Comparison**

Gauge Name Manufacturer Features / Specification	Cygnus Instruments DIVE underwater 	Cygnus Instruments Underwater 	Tritex Multigauge 3000	Elcometer UG20DL
<b>Probe Type</b>	Single Crystal Twin Crystal	Single Crystal	Single Crystal	Single Crystal Twin Crystal
<b>Depth rating</b>	300 metres	300 metres	500 metres	300 metres
<b>Display Character Size</b>	1.5cm digit size 2.8" quarter VGA	9mm digit size display size 3.1cm	10mm digit size	12.7mm digit size 4.5 digit LCD
<b>Measuring Technique</b>	Multiple Echo Through coatings Single Echo	Multiple Echo Through coatings	Multiple Echo Through coatings	Dual Element: PE, EE (ThruPaint™), PECT Single Element: Triple-Echo
<b>Measuring Range in Steel</b>	1 - 250mm	1 - 250mm	1 - 250mm	PE: 0.63 - 500mm (0.025 - 19.999 inches) EE: 2.54 - 102mm (0.100 - 4.000 inches)
<b>Probe frequency range available</b>	2.25MHz 3.5MHz	2.25MHz 3.5MHz 5MHz	2.25MHz 3.5MHz 5MHz	1 - 10MHz
<b>Probe diameter range available</b>	13mm	13mm & 19mm	13mm & 19mm	13mm
<b>Probe recognition</b>	Yes	Yes	Yes	custom automatic (dual transducers) & manual - selectable from a list
<b>Accuracy</b>	0.1mm	0.1mm	±0.01mm	±0.01mm
<b>Resolution</b>	0.1 mm or 0.05 mm (selectable)	0.1 mm or 0.05 mm (selectable)	0.1mm or 0.05mm	0.01mm
<b>Datalogging Yes/No</b>	Yes	Yes (with surface display)	Yes (with surface display)	Yes
<b>Number of measurements stored</b>	5,000, 640 A-Scans unlimited when datalogged with surface repeater			5,000 with A-scan image & gauge settings in one batch sequential and grid logging
<b>PC connection</b>	USB or umbilical cable	Umbilical cable to computer	Umbilical cable to computer	RS232
<b>A-Scan</b>	Yes	No	No	Yes on software once the gauge is at the surface
<b>Automatic V-Path Correction</b>	Yes	N/A	N/A	Yes
<b>Power</b>	Single 3.6V Li-Ion rechargeable	NiMH rechargeable battery pack	Rechargeable 7.2V 2.3Ah NiMH battery pack	3 x AA Alkaline
<b>Battery Life</b>	10 hours (continuous)	30 hours (continuous)	55 hours	50 hours (15 with backlight)
<b>Connectors</b>	Fischer	Probe connected via a nose cone	Probe connected via a nose cone	Underwater Lemo
<b>Weight (incl. batteries)</b>	905 grams	950 grams	1110 grams	680g
<b>Dimensions</b>	105 mm x 110 mm x 35 mm	235 x 75mm	235 x 80mm	229.0 x 60.33mm
<b>Operating Temperature</b>	-10 to 50°C	-10 to 50°C	-10 to 50°C	-30 to 60°C
<b>Environmental Protection</b>	IPX8 continuous 300m rating	IPX8 continuous 300m rating		
<b>Compliance</b>	CE, British Standard BS EN 15317:2007	CE, British Standard BS EN 15317:2007	CE, British Standard BS EN 15317:2007	
<b>Warranty</b>	3 years gauges 6 months on probes and accessories	3 years gauges 6 months on probes and	3 years gauges	2 years gauges 3 months probe and accessories
<b>Special features</b>	Wrist-mountable Topside Repeater Unit with Video Overlay option to show thickness reading on dive monitor screen at the surface & then be recorded on the dive video Surface Display on a laptop, along with showing real-time readings can	Topside Repeater Unit Surface Display on a laptop	long battery life but only one supplied in the kit	Coating Thickness Measurement Selectable Gain: vlow, low, medium, hi or vhi

\* no responsibility is held for inaccuracies