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LEVERAGE THE POWER OF ULTRASONIC FLAW DETECTION

**DIGISCAN
DS-702**



**DIGISCAN
DS-702 Lite**



Parameters	DS-702 Lite	DS-702
DISPLAY		
Display Type : 7" high brightness LCD with Touch panel	✓	✓
Touch Screen :	✓	OPTIONAL
Custom Color Scheme :	✗	✓
Display Brightness : 1000 nits, variable from 10% to 100%	✓	✓
Display Update Rate : 60 Hz*	✓	✓
HDMI Video Output : Yes (HDMI supported resolution for Monitor) (1024 x 768*, freq:60Hz)	✓	OPTIONAL
Touch Screen:	✓	OPTIONAL
Range :	10 to 5,000 mm, in 0.1 mm steps	2 to 15,000 mm, in 0.1 mm steps
Velocity	1000 to 10,000 m/s, in 1 m/s steps	250 to 16,000 m/s, in 1 m/s steps
Zero Offset : 0 to 1000 μ s, in 0.01 μ s steps	✓	✓
Display Delay :	0 to 3,000 mm, in 0.1 mm steps	-60 to 15,000 mm, in 0.1 mm steps
Units :	millimeters	millimeters, inches, μ s, %
Rectification :	Full Wave only	RF, Full wave, positive Half-wave, negative half-wave, Filter
Horizontal :	100.00%	Grid 100% or 110%
Reject : 0% to 99% FSH with visual indication	✓	✓
Skip Distance : Visual indications based on thickness and angle	✗	✓
A-Scan : Freeze Active freeze, freeze, filled , Envelope	✓	✓
Live Mode A-Scan : Recalled the saved reference A-Scan pattern to compare during testing	✓	✓
Full Screen Mode : A-Scan can be displayed in Full Screen area by pressing double Enter Key	✓	✓
Real Time Clock : Date and time for saved records, and editable date format.	✓	✓
Key Sound : Audio Feedback for Touch and Keypress	✓	✓
DATA ACQUISITION		
Digitizing Frequency : 100 MHz	✓	✓
Data Storage : 32 GB SD card	✓	✓
Single A-Scan Storage :	1000 A-Scans be stored, recalled	>6 million A-Scans
Report Generation : On-board PDF report with custom logo, PNG A-Scan	✓	✓
Calibration Sets :	100 Cal sets can be stored and recalled	10,000 cal sets
Data Export :	SD card, USB flash drive	SD card, USB flash drive, PC connection
RECEIVER		
Gain (Dynamic Range) :	0 to 100 dB, in 0.1,0.5,1,2,6,12,18,20 dB steps	0 to 120 dB, in 0.1 dB steps
Receiver Bandwidth : 0.5 to 20 MHz wide band amplifier	✓	✓
Digital Filter Settings : 0 to 26.5 MHz, in 0.1 MHz steps	✗	✓
System Linearity : Horizontal: \pm 1% FSW Vertical: \pm 2% FSH	✓	✓
Gain scale : It can be set 80dB/120dB as per requirement	✗	✓
GATES		
Measurement :	2 gates	Gates 3 gates + 1 interface gate*
Measurement Mode : Max peak, flank, j-flank, first peak, zero crossing	Max peak, j-flank	✓
Start :	0 to 4,999 mm, in 0.1 mm steps	0 to 14,999 mm, in 0.1 mm steps
Width :	1 to 5,000 mm, in 0.1 mm steps	0 to 15,000 mm, in 0.1 mm steps
Threshold : 0% to 100%, in 0.1% steps	✓	✓
ToF Resolution :	✗	Select able 1/0.1/0.01 mm
Alarms (Monitor) :	Positive and Negative threshold.	wall thickness WT+ve , WT-ve Positive and negative threshold,
Alarm Indication : Audio and visual indicators	✓	✓ (with vibration)
Gate Width Zoom :	For gates 1 & 2	For gates 1,2 & 3
Amplitude Measurement : 0% to 110% FSH, with 0.1% resolution	✗	✓

Measurement Rate : Equivalent to PRF	✓	✓
Automated Calibration : • Velocity, Zero Offset • Angle Beam (Sound path or Depth) • Straight Beam (first back wall or echo-to-echo)	✗	✓
PULSER		
Pulser Types (Transmitter) :	Spike	• Square wave • Spike
PRF :	125 Hz	1 to 2000 Hz, in 1 Hz steps
Voltage : 50V - 450V, in 25V steps	✗	✓
Pulse Width : 0.5 - 20 MHz, in 0.1 MHz steps	✗	✓
Damping : High / Low is selectable, 50 Û, 400 Û.	✓	✓
Test modes :	Pulse Echo, Dual	Pulse echo, dual, through transmission
INSTRUMENT INPUTS/OUTPUTS		
Ports : USB C - Charging, storage access USB A - Flash drive HDMI Type - Mini HDMI to video output	✓	✓
Transducer connections : LEMO 00	✓	✓
SD Card : 32 GB	✓	✓
HDMI : 1024 x 768 resolution & frequency - 60 Hz	✓	✓
ENVIRONMENTAL RATINGS		
IP Rating : IP 65	✓	✓
Operating Temperature : -10° C to 55° C	✓	✓
Storage Temperature : -20° C to 60° C	✓	✓
Battery Recharge Temperature : 0° C to 40° C	✓	✓
MEASUREMENTS		
Measurement Display Locations : 12 user defined blocks	✗	✓
Trigonometric :	Beam Path, Flaw depth, Surface Distance, Height of Gate 1 & Gate 2	Beam path, flaw depth, surface distance, min/max depth, gate2 gate1,attenuation and curv offset
Threshold :	Echo height in %	Echo height in %, attenuation in dB, min/max threshold
Trigger :	Initial pulse	Initial pulse, IF gate
Job Thickness : 0.1 to 999.9 mm, in 0.1 mm steps	✓	✓
Refracted Angle : 0° to 90°, in 0.1° steps	✓	✓
Enhance	✗	✓
DAC : Point-to-point and parabolic curve along with 6 additional curves offset by ±100dB each, are provided up to a maximum of a 15-point curve	✓	✓
TCG : 15 point, 18 dB/10 ns slope	✗	✓
Curved Surface Correction : Tube, bar	✗	✓
AWS : D1.1/D1.5*	✗	✓
DGS : Universal DGS*	✗	✓
Flexi DGS Flexi DGS* : 16 predefined probe settings and custom probe settings for defect size evaluation.	✓	✓
Video recording*	✗	✓
Interface Gate (IF) for Immersion testing*	✗	✓
GENERAL		
Overall dimensions (W x H x D) : 205 mm x 130 mm x 60 mm Construction IP 65 Compact, Rugged Molded ABS, Soft Touch	✓	✓
Weight With Battery	1.25 kg	1.18kg
Operation : 5 button navigation Keypad + 1 gain key, ambidextrous operation	✓	✓
Battery Type : Single rechargeable inbuilt lithium-ion 7.4V 40W	✓	✓
Battery Life : Up to 8 hrs.	✓	✓
Power Requirements : USB C fast charger, 100 - 240 VAC, 50-60 Hz, 1.5 A	✓	✓
Warranty : 1 year	✓	✓

TEST DETAILS

Bump Test : - IEC:60068-2-27	✓	✓
Resistance to vibration Test : - IEC:60068-2-6	✓	✓
Tropicalisation and Humidity Test : - IEC:60068-2-30	✓	✓
Electromagnetic Interference (EMI)Test : - IEC:61000-4-3	✓	✓
Power frequency magnetic field immunity test : - IEC:61000-4-8	✓	✓
Equipment Protection IP 65 test : - IEC:60529	✓	✓
Standard Accessories :	<ul style="list-style-type: none">• USB C 45W Fast Charger• 32 GB SD Card• Protective Rubber cover• Palm Strap	<ul style="list-style-type: none">• USB C 45W Fast Charger• 32 GB SD Card• Instrument Carry Case• Protective Rubber cover
Optional Accessories :	<ul style="list-style-type: none">• Neck support strap• Nylon Cover	<ul style="list-style-type: none">• Portable power bank up to 30 hours operation• Neck support strap• wrist strap• Extended warranty for additional 2 years• PC communication cable• ISO 22232-1 certificate• Wireless Keyboard• Nylon Cover
Optional Software :	✗	Universal DGS IF gate Video recording