

General specifications

Physical	
Dimensions (W x H x D)	295 mm x 230 mm x 60 mm (12" x 9.4" x 2.4")
Weight, w/Battery	2.9 kg (6.5 lbs)
Display	
Size	264 mm (10.4") diagonal
Resolution	1024 x 768 pixels
Mode	Indoor and outdoor specific color modes
Viewing Angle	± 85° all directions
Touch Screen (Multi-touch)	
Gloved Operation	Yes
Surface	Chemically strengthened glass, scratch resistant, chemical resistant, optically bonded to display
Data Storage	
Solid State Hard Drive	128 GB
USB Storage	USB 2.0 w included module
Data Capture	Full ASCAN capture for every CSCAN point, all settings. Recall on instrument with full analysis capability
Data Files	memd files, CSV files
Settings Files	All instrument settings plus position in workflow
Screen Capture	JPG Format
Report	PDF Format
Connectivity	
Wi-Fi	802.11 b, g, n
Connectors	USB 2.0, Ethernet, HDMI
Remote Collaboration	Local Network and Internet-Enabled via InspectionWorks Connect
InspectionWorks	Enabled
I/O	
Axes	2 digital quadrature encoders for X-Y axes
Audible	Tone, 2.7 kHz
Power	
Internal Battery	63 WH Lithium Ion
External Battery	84 WH Lithium Ion
Power Supply	100 to 240 VAC, 47-63 Hz, 1.9 A; 12VDC
Battery Life	3 hrs internal, 6 hrs with external battery under typical operating conditions
Compliance	Meets IATA air transport regulations with one contained installed battery and one packed external battery
Environmental	
Operating Temperature	-20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure I
Storage Temperature	-20C to +70C (-4F to 158F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II
Ingress Protection	Tested to IP65
Shock	4' Transit Drop to MIL-STD-810G method 516.6, Procedure V
Data Visualization	
User Interface	Customizable with Mentor Create software
Zoom	Any data view may be expanded to full screen with gesture
Instructional Material	Rich Text, JPG, PNG, BMP, PDF or Video (MP4)
Views	A-SCAN, C-SCAN, C-SCAN OVERVIEW, E-SCAN, S-SCAN
Probe Selection	Swap between conventional and phased array on same screen
Evaluation	2 Gates, one can be used as interface echo gate
Measurements	Amplitudes, Depth, Distance, % Wall Loss, Thinnest Point, X and Y Positions
Calibrations	Phased Array: TCG, Material Velocity, Probe Delay, Auto80, Encoder Cal, Dead Element Check Conventional: 2 Point (Material Velocity and Probe Delay)

Ultrasonic specifications

Configuration

Phased Array

Channels	32:32 PR
Aperture	1–32 Elements
Focal Laws	1024
Scanning	Linear, sectorial, focused
Groups	Up to 8

Conventional

Channels	1
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Pulser (Phased Array and Conventional)

PRF	10 Hz to 20 kHz
Pulse Shape	Bipolar or unipolar square wave
Voltage	20–150 V _{pp} , 0 – –75V _{op} ; in 5 V steps
Width (auto or manual)	50–3000 nS
Delay Step Increment	10 nS

Receiver and Digitizer (Phased Array and Conventional)

Gain	0–78 dB (Phased Array), 0–94 dB (Conventional); in 0.2 dB steps
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TCG

Number of Points	Up to 16
Slope	50 dB/μS
Rectification	Pos HW, Neg HW, Full, RF
Bandwidth	0.5 MHz to 15 MHz
Digitizing Rate	62.5 MHz, up-sampled to 500 MHz
Delay Step Increment	2.5 nS
Acquisition Range	50 nS to 150 μS
ASCAN Compression Points	512, 1024, 2048, 4096

MUX module specifications

Physical

Dimensions (W x H x D)	8.6" x 8.4" x 4.1"
Weight, w/Battery	6.5 lbs

Power

Exchangable Battery, hot swap	84 WH Lithium Ion
Power Supply	100 to 240 VAC, 47–63 Hz, 1.9 A; 12VDC

Configurations

Phased Array

Channels	32:128 PR
Aperture	1–32 Elements
Focal Laws	1024
Scanning	Linear, sectorial, focused

Conventional

Channels	1
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Mentor UT and MUX Module complies to standard EN ISO 18563-1 for Phased Array Channels and EN ISO 12668-1 for Conventional Channels.