Mentor UT for Corrosion

App-based corrosion inspection for today's workplace

 Powerful 32/32 array inspection with conventional UT channel

• Create your own inspection 'Apps' or use pre-installed apps on the device

 Lower training costs with customizable apps and user interface

• Streamline reporting with built-in analysis and data export

 Pair with GE's industry leading dual-element, linear DM probes







GE introduces Mentor UT, the powerful, connected ultrasonic flaw detector optimized for corrosion mapping. Mentor UT brings the power of array inspection to everyday use with an intuitive, touch-screen interface and customizable inspection applications. Increase your inspection productivity through guided, on-device setup and calibration.

Now You Have an App for Corrosion

What if corrosion inspection was as easy as using an app on your smartphone? What if you could customize the user interface of your UT instrument for different inspection jobs? Mentor UT combines outstanding UT performance with today's advances in software to create a new kind of inspection experience. Complex inspections are now as easy as following on-screen menus. Use GE-provided on-device apps for corrosion inspection, or create your own using GE's desktop software, Mentor Create.

Lower Training Costs for New Inspectors

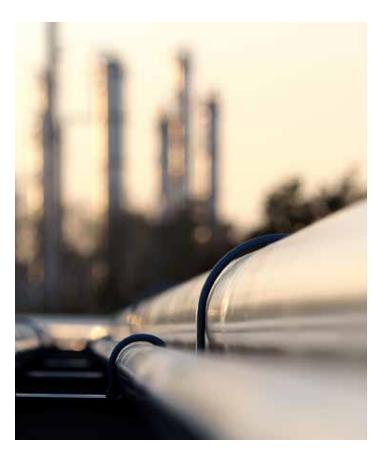
For NDT managers who struggle to maintain a staff of qualified experts, Mentor UT makes it faster and easier to train inspectors to conduct UT inspections. On-screen menus guide inspectors through every step of the inspection, from probe selection and calibration through conducting the inspection and reporting results. The durable, daylight-readable touchscreen makes navigating the device easy and intuitive. Inspection procedures, training documents, pictures and reference guides can all be viewed on the Mentor pictures, videos and reference guides for immediate access during field inspections.



Custom application-specific workflows

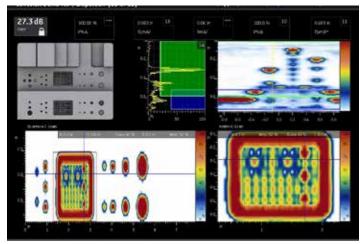


Guided calibration





Automatic probe identification



Corrosion scanning made easy



MENTOR

Improve Inspection Productivity

Mentor UT is more than just cutting-edge software. It combines a powerful 32/32 array flaw detector with a conventional channel, allowing you to instantly switch between PA and conventional inspection.

Avoid errors in probe selection and calibration with automatic probe ID and guided setup.

Mentor UT has been developed with the quality and precision you've come to expect from GE's DM corrosion probes, and it stands up to tough environments with its IP65 durability rating. Archiving and reporting are easy with the ability to store A-scan data, as well as post-inspection analysis and reporting, on the device.



Field-Ready Right Out of the Box

Take the guesswork out of inspection setup with probe kits and inspection apps, already installed on your Mentor UT device.

Mentor UT for Corrosion can be easily partnered with GE's rugged, field-proven DM probes and your preferred commercially available mechanical corrosion scanner.

Need to create a custom inspection procedure for a specific need?

Mentor Create software allows you to design and customize inspection workflows and custom user interfaces for your unique applications.



Setting the Standard for Connectivity

Building on the success of the Mentor EM and Mentor Visual iQ products, Mentor UT is the first UT device equipped with wireless connectivity and live streaming. Remote collaboration saves time, simplifies reporting and gives field inspectors the confidence of a second opinion for tough inspection calls.

Learn more and activate your free trial at www.inspectionworks.com

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 × 768 pixels | | |
| Mode | Indoor and Outdoor specific color modes | | |
| Viewing Angle | ± 85° all directions | | |
| viewing Angle | ± 05 dii directions | | |
| | Touch Screen (Multi-touch) | | |
| Gloved Operation | Yes | | |
| Surface | | | |
| Surface | Chemically strengthened glass, scratch resistant, chemical resistant, optically bonded to displa | | |
| | Data Chausan | | |
| Callid Charter Hand Daire | Data Storage | | |
| Solid State Hard Drive | 16 GB | | |
| USB Storage | USB 2.0 w included module | | |
| Data Capture | | | |
| Data Files | Full ASCAN capture for every CSCAN point, all settings. Recall on instrument with full | | |
| =:1 | analysis capability. | | |
| Settings Files | All instrument settings plus position in workflow. | | |
| Screen Capture | JPG Format | | |
| Report | PDF Format | | |
| | | | |
| | Connectivity | | |
| | | | |
| Wi-Fi | Yes. 802.11 b, g, n | | |
| Wi-Fi Remote Collaboration | Yes. 802.11 b, g, n Local Network and Internet-Enabled via InspectionWorks Connect | | |
| | | | |
| Remote Collaboration | Local Network and Internet-Enabled via InspectionWorks Connect | | |
| Remote Collaboration | Local Network and Internet-Enabled via InspectionWorks Connect | | |
| Remote Collaboration | Local Network and Internet-Enabled via InspectionWorks Connect Yes | | |
| Remote Collaboration InspectionWorks Enabled | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O | | |
| Remote Collaboration InspectionWorks Enabled Axes | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes | | |
| Remote Collaboration InspectionWorks Enabled Axes | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes | | |
| Remote Collaboration InspectionWorks Enabled Axes Audible | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz | | |
| Remote Collaboration InspectionWorks Enabled Axes Audible Internal Battery | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion | | |
| Remote Collaboration InspectionWorks Enabled Axes Audible Internal Battery External Battery (included) | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion | | |
| Axes Audible Internal Battery External Battery (included) Input | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47-63 Hz, 1.9 A | | |
| Axes Audible Internal Battery External Battery (included) Input Battery Life | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions | | |
| Axes Audible Internal Battery External Battery (included) Input | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed | | |
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| Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure I -20C to +70C (-4F to 158F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II | | |
| Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature Ingress Protection | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure I -20C to +70C (-4F to 158F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II Tested to IP65 | | |
| Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure I -20C to +70C (-4F to 158F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II | | |
| Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature Ingress Protection | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure I -20C to +70C (-4F to 158F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II Tested to IP65 4' Transit Drop to MIL-STD-810G method 516.6, Procedure V | | |
| Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature Ingress Protection Shock | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure I -20C to +70C (-4F to 158F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II Tested to IP65 4' Transit Drop to MIL-STD-810G method 516.6, Procedure V | | |
| Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature Ingress Protection | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47-63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II Tested to IP65 4' Transit Drop to MIL-STD-810G method 516.6, Procedure V Data Visualization Customizable with Mentor Create software | | |
| Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature Ingress Protection Shock | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure I -20C to +70C (-4F to 158F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II Tested to IP65 4' Transit Drop to MIL-STD-810G method 516.6, Procedure V | | |
| Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature Ingress Protection Shock User Interface | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47-63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II Tested to IP65 4' Transit Drop to MIL-STD-810G method 516.6, Procedure V Data Visualization Customizable with Mentor Create software | | |
| Remote Collaboration InspectionWorks Enabled Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature Ingress Protection Shock User Interface Zoom | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II Tested to IP65 4' Transit Drop to MIL-STD-810G method 516.6, Procedure V Data Visualization Customizable with Mentor Create software Any data view may be expanded to full screen with gesture | | |
| Remote Collaboration InspectionWorks Enabled Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature Ingress Protection Shock User Interface Zoom Instructional Material | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure I -20C to +70C (-4F to 158F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II Tested to IP65 4' Transit Drop to MIL-STD-810G method 516.6, Procedure V Data Visualization Customizable with Mentor Create software Any data view may be expanded to full screen with gesture Rich Text, JPG, PNG, BMP, PDF or Video (MP4) ASCAN, ESCAN, CSCAN, CSCAN OVERVIEW | | |
| Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature Ingress Protection Shock User Interface Zoom Instructional Material Views Probe Selection | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 100 to 240 VAC, 47-63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure I -20C to +70C (-4F to 158F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II Tested to IP65 4' Transit Drop to MIL-STD-810G method 516.6, Procedure V Data Visualization Customizable with Mentor Create software Any data view may be expanded to full screen with gesture Rich Text, JPG, PNG, BMP, PDF or Video (MP4) ASCAN, ESCAN, CSCAN, CSCAN OVERVIEW Swap between conventional and phased array on same screen | | |
| Remote Collaboration InspectionWorks Enabled Axes Audible Internal Battery External Battery (included) Input Battery Life Compliance Operating Temperature Storage Temperature Ingress Protection Shock User Interface Zoom Instructional Material Views | Local Network and Internet-Enabled via InspectionWorks Connect Yes I/O 2 digital quadrature encoders for X-Y axes Tone, 2.7 kHz Power 63 WH Lithium Ion 84 WH Lithium Ion 100 to 240 VAC, 47–63 Hz, 1.9 A 3 hrs internal, 6 hrs with included external battery under typical operating conditions Meets IATA air transport regulations with one contained installed battery and one packed external battery Environmental -20C to +55 C (-4F to 131F) to MIL-STD-810G Method 501.5 & 502.5, Procedure I -20C to +70C (-4F to 158F) to MIL-STD-810G Method 501.5 & 502.5, Procedure II Tested to IP65 4' Transit Drop to MIL-STD-810G method 516.6, Procedure V Data Visualization Customizable with Mentor Create software Any data view may be expanded to full screen with gesture Rich Text, JPG, PNG, BMP, PDF or Video (MP4) ASCAN, ESCAN, CSCAN, CSCAN OVERVIEW | | |

Ultrasonic Specifications

| Scanning | | |
|--------------|-----------------|--|
| Aperture | 1–32 Elements | |
| Max Elements | 32 | |
| Focal Laws | 1024 | |
| Scanning | Linear, focused | |

| Pulser | | |
|------------------------|---------------------|--|
| Pulse Shape | Bipolar Square Wave | |
| Voltage | 20–150 in 5 V steps | |
| Width (auto or manual) | 50–3000 nS | |
| Delay Step Increment | 10 nS | |

| Receiver and Digitizer | | |
|--------------------------|---|--|
| Gain | 0–78 dB in 0.2 dB steps | |
| Number of Points | Up to 16 | |
| Slope | 50 dB/µS | |
| Rectification | Pos HW, Neg HW, Full, RF | |
| System Bandwidth | 0.5 MHz to 15 MHz | |
| PRF | 10 Hz to 18 kHz | |
| 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 | |
| Filters | 1, 2, 4, 5, 7.5, 10 MHz, and Broad Band | |
| Gates | A, B and IF, controlled by gesture or menu parameters | |
| TOF Modes | J-Flank, Zero Before, Zero After, Peak | |
| Amplitude Modes | Readings up to 800% FSH – deep dynamic range | |
| Start Modes | Initial Pulse, IF | |
| Thickness Resolution | 0.05 mm (0.002") | |



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