



# Mentor UT Configuration Guide

Probes/Scanners/Software/Accessory Part  
Number Guide

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**Baker Hughes** 

# Mentor UT Phased array instrument



Tailored Apps to guide users through the process step by step.



Translate paper procedure into App with simplified reporting.



Detailed instructions reduce human error in setup and calibration.



Remote Collaborations



Complete Solution for Corrosion, RotoArray, Boiler Tubes, Weld and more Applications.

# Mentor UT Instrument kits

## MENTOR UT Base Kit: P/N 100N3883

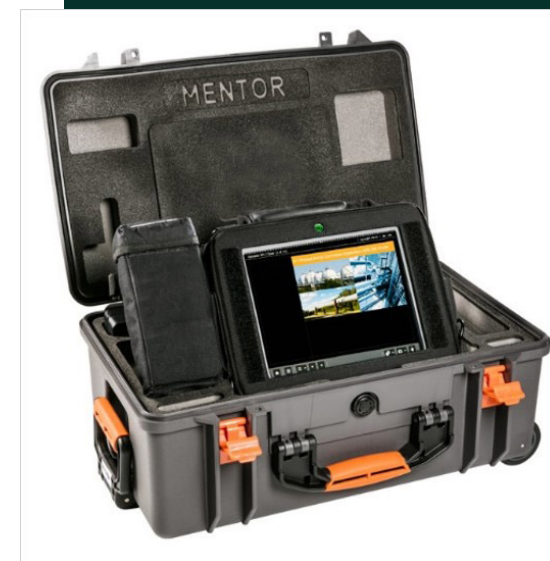
### Containing:

- Mentor UT Base Instrument
- Mentor AC/DC Power Supply\*
- External Battery\*
- Power Cord: USA, UK, or European\*
- Encoder Connectivity Module\*
- Mentor Create Software on USB
- Soft Carrying Case\*
- Transport Case\*
- Manual on USB

## MENTOR UT Corrosion Kit: P/N Mentor-UT-CORR1

### Containing:

- Mentor UT Base Instrument
- **DMArray\_MOD1: 5 MHz DM array module**
- **DMCable\_3M\_TOP: 3M cable with top exit for DMArray\_MOD1**
- Mentor AC/DC Power Supply\*
- External Battery\*
- Power Cord: USA, UK, or European\*
- Encoder Connectivity Module\*
- Mentor Create Software on USB
- Soft Carrying Case\*
- Transport Case\*
- Manual on USB



\*Common with Mentor EM

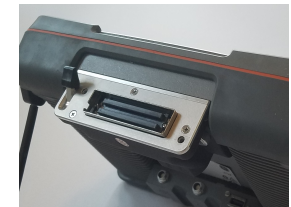
# Mentor UT Connector options

- The Mentor UT has a mentor style connector to allow for maximum versatility. Connector options and relevant part numbers are below.
- This allows the user to customize their connector plan based on the applications to be solved and any probes they may already own.

Option	P/N	Comments
Mentor Connector		This is the standard connector on the Mentor UT. Arrays with Mentor style connectors attach directly to the unit. This is the lightest, most compact, package and is well suited to dedicated applications.
Tyco/Phasor	Mentor-UT-ADP32-T	Compatible with 32 element arrays with standard Phasor (Tyco) style connector. Best choice if probes will be changed often for different applications. Not compatible with DM arrays.
IPEX/Omni	Mentor-UT-ADP32-I	Compatible with 32 element arrays with standard IpeX style connector. Best choice if user already has several IpeX connector arrays. Not compatible with DM arrays.
MUX 32:128	Mentor-UT-MUX-T	Compatible with up to 128 el. arrays. Standard Phasor connector. Also includes extra hot swappable battery, HDMI, and ethernet ports. Compatible with DM and linear arrays.
IPEX 32:128	Mentor-UT-ADP-MUXI	This adapter allows the use of up to 128 el. arrays with IPEX connectors with the MUX.
Conventional UT Module	108M7659	Module contains dual lemo connectors. For use in conventional UT only applications.
Phased Array DM	Mentor-UT-ADP32-DM	Mentor-UT Adapter to Phased Array DM (Transmitter/Receiver) Probes with TE Connectivity (Tyco) connector



Mentor connector



Mentor-UT-ADP32-T



Mentor-UT-ADP-MUX-T



# Modular DM Arrays and cable options

- These arrays are designed for corrosion inspection and have the same performance characteristics of the non-modular arrays. This style has a replaceable acoustic module.
- For information on additional models, please contact Baker Hughes.

Part number	Part name	Description
DMARRAY_MOD1	DM Acoustic Module for Modular Probe	Wearable Acoustic Module ONLY for Mentor UT Modular DM Probe. 5MHz. 1.5mm Pitch
DMCABLE_3M_TOP	Modular Probe Housing - 3M top exit	Modular Probe Housing - 3M top exit - DOES NOT INCLUDE acoustic module. This must be combined with an acoustic module for a complete probe.
DMCABLE_3M_RT	Modular Probe Housing - 3M side exit	Modular Probe Housing - 3M side exit - DOES NOT INCLUDE acoustic module. This must be combined with an acoustic module for a complete probe.
DMCABLE_6M_TOP	Modular Probe Housing - 6M top exit	Modular Probe Housing - 6M top exit - DOES NOT INCLUDE acoustic module. This must be combined with an acoustic module for a complete probe.
DMCABLE_6M_RT	Modular Probe Housing - 6M side exit	Modular Probe Housing - 6M side exit - DOES NOT INCLUDE acoustic module. This must be combined with an acoustic module for a complete probe.
DMCABLE_10M_TOP	Modular Probe Housing - 10M top exit	Modular Probe Housing - 10M top exit - DOES NOT INCLUDE acoustic module. This must be combined with an acoustic module for a complete probe.
DMCABLE_10M_RT	Modular Probe Housing - 10M side exit	Modular Probe Housing - 10M side exit - DOES NOT INCLUDE acoustic module. This must be combined with an acoustic module for a complete probe.
DMCABLE_16M_TOP	Modular Probe Housing - 16M top exit	Modular Probe Housing - 16M top exit - DOES NOT INCLUDE acoustic module. This must be combined with an acoustic module for a complete probe.
DMCABLE_16M_RT	Modular Probe Housing - 16M side exit	Modular Probe Housing - 16M side exit - DOES NOT INCLUDE acoustic module. This must be combined with an acoustic module for a complete probe.



## DM Arrays, non-modular

- These arrays are designed for corrosion inspection.
- For information on additional models, please contact Baker Hughes.

Part number	Part name	Description
115-110-020	Dual Linear Array (aka DM array)	32-El DM Array, 5MHz, 1.5mm pitch, 3M cable, Mentor connector
115-111-020	Dual Linear Array (aka DM array)	32-El DM Array, 5MHz, 1.5mm pitch, 6M cable, Mentor connector
115-112-020	Dual Linear Array (aka DM array)	32-El DM Array, 5MHz, 1.5mm pitch, 10M cable, Mentor connector
115-113-020	Dual Linear Array (aka DM array)	32-El DM Array, 5MHz, 1.5mm pitch, 16M cable, Mentor connector
115-110-021	Dual Linear Array (aka DM array)	32-El DM Array, 5MHz, 0.75mm pitch, 3M cable, Mentor connector
115-111-021	Dual Linear Array (aka DM array)	32-El DM Array, 5MHz, 0.75mm pitch, 6M cable, Mentor connector
115-112-021	Dual Linear Array (aka DM array)	32-El DM Array, 5MHz, 0.75mm pitch, 10M cable, Mentor connector
115-113-021	Dual Linear Array (aka DM array)	32-El DM Array, 5MHz, 0.75mm pitch, 16M cable, Mentor connector
115-100-020	Dual Linear Array (aka DM array)	32-El DM Array, 5MHz, 1.5mm pitch, 3M cable, Phasor connector
115-100-021	Dual Linear Array (aka DM array)	32-El DM Array, 5MHz, 0.75mm pitch, 3M cable, Phasor connector



# DM Arrays probe wear bars

## Wear Bars for Non-Modular Probes

Part number	Part name	Description
389-075-530	Flat Wear bar	Flat Wear bar to mate with probe 115-110-020
389-075-540	Flat Wear bar	Flat Wear bar to mate with probe 115-110-021
389-075-560	Curved Wear bar	Flat Wear bar to mate with probe 115-110-020
389-075-570	Curved Wear bar	Curved Wear bar to mate with probe 115-110-021
389-076-700	Ported Flat Wear bar	Ported Flat Wear bar to mate with probe 115-110-020
389-077-160	Ported Curved Wear bar	Ported Curved Wear bar to mate with probe 115-110-020
389-077-150	Ported Curved Wear bar	Ported Curved Wear bar to mate with probe 115-110-021



Flat ported wear bars



Curved ported wear bars

## Wear Bars for Modular Probes

Part number	Part name	Description
389-088-270	Ported Flat Wear bar	Ported Flat Wear bar to mate with probe DMARRAY_MOD1
389-088-280	Ported Curved Wear bar	Ported Curved Wear bar to mate with probe DMARRAY_MOD1

## Linear array probes and wedges for general use

Waygate Technologies offer over 1500 unique array designs with choice of connector. The models below are for general use and are readily available.

Part number	Connector	Description	Wedge	20mm Delay line
115-110-001	Mentor	2 MHz, 8 element linear array	118-350-024	118-350-036
115-110-002	Mentor	4 MHz, 16 element linear array	118-350-024	118-350-036
115-110-003	Mentor	5 MHz, 16 element linear array	118-350-025	118-350-037
115-110-004	Mentor	5 MHz, 32 element linear array	118-350-025	118-350-037
115-110-005	Mentor	2.25 MHz, 16 element linear array	118-350-027	118-350-039
115-110-006	Mentor	2.25 MHz, 16 element linear array	118-350-028	118-350-040
115-100-001	Phasor/Tyco	2 MHz, 8 element linear array	118-350-024	118-350-036
115-100-002	Phasor/Tyco	4 MHz, 16 element linear array	118-350-024	118-350-036
115-100-003	Phasor/Tyco	5 MHz, 16 element linear array	118-350-025	118-350-037
115-100-004	Phasor/Tyco	5 MHz, 32 element linear array	118-350-025	118-350-037
115-100-005	Phasor/Tyco	2.25 MHz, 16 element linear array	118-350-027	118-350-039
115-100-006	Phasor/Tyco	2.25 MHz, 16 element linear array	118-350-028	118-350-040
115-100-007	Phasor/Tyco	5 MHz, 64 element linear array	118-350-026	118-350-038



# MSWS Arrays and wedges

These arrays offer a smaller contact array and fit on the MSWS style wedge.

## Arrays

Part number	Connector	Description
115-100-010	Phasor/Tyco	5 MHz, 32 element, linear array
115-100-011	Phasor/Tyco	10 MHz, 32 element, linear array
115-100-012	Phasor/Tyco	5 MHz, 16 element, linear array
115-100-013	Phasor/Tyco	2.25 MHz, 16 element, linear array
115-100-015	Phasor/Tyco	10 MHz, 16 element, linear array
115-100-037	Phasor/Tyco	5 MHz, 16 element, linear array

## Wedges

Part number	Description
118-340-028	MSWS-X, 45 degree
118-340-040	45 degree shear wave, CS
118-340-042	60 degree shear wave, CS
118-340-044	70 degree shear wave, CS
118-340-046	80 degree shear wave, CS
118-340-048	90 degree shear wave, CS



# Integral wedge arrays

- These arrays can be use for general weld inspection and other applications where MWB and SWB conventional probes are used. MWB are typically for small parts, SWB for thick parts.
- This provides an easy transfer from conventional to phased array inspection.
- Non-detachable wedges, no coupling loss between probe and wedge.



Part number	Name	Connector	Description
0600445	MWB 2 PA16	Mentor	2MHz, 16el, 0.5mm pitch, 9mm elevation, 8x9 mm aperture, 2m cable
0600446	MWB 4 PA16	Mentor	4MHz, 16el, 0.5mm pitch, 9mm elevation, 8x9 mm aperture, 2m cable
0600447	SWB 2 PA16	Mentor	2MHz, 16el, 0.88mm pitch, 14mm elevation, 14x14 mm aperture, 2m cable
0600448	SWB 4 PA16	Mentor	4MHz, 16el, 0.88mm pitch, 14mm elevation, 14x14 mm aperture, 2m cable
0069141	MWB 2 PA16	Phasor	2MHz, 16el, 0.5mm pitch, 9mm elevation, 8x9 mm aperture, 2m cable
0069142	MWB 4 PA16	Phasor	4MHz, 16el, 0.5mm pitch, 9mm elevation, 8x9 mm aperture, 2m cable
0069143	SWB 2 PA16	Phasor	2MHz, 16el, 0.88mm pitch, 14mm elevation, 14x14 mm aperture, 2m cable
0069144	SWB 4 PA16	Phasor	4MHz, 16el, 0.88mm pitch, 14mm elevation, 14x14 mm aperture, 2m cable

# Bolt inspection probes

- The detection of defective areas in bolt threads is preferably carried out using a sector scan of straight beam phased array probes.
- To ensure steady and uniform coupling, the B S/MB S probes features are a non-abrasive protective membrane allowing for coupling on rough surfaces and increasing lifetime of the probe, as well as a unique circular transducer design.
- Protective Membranes (10 pcs.) for B S Probes 0053756/Protective Membranes (10 pcs.) for MB S Probes 0053749.

Part number	Part name	Connector	Description
0600064	B2F PA16	Phasor	2MHz, 16 el, 1.5mm pitch, 24 mm diameter array, wear resistant
0600065	B4F PA16	Phasor	4MHz, 16 el, 1.5mm pitch, 24 mm diameter array, wear resistant
0600066	MB2F PA16	Phasor	2MHz, 16 el, 0.625 mm pitch, 10mm diameter array, wear resistant
0600067	MB4F PA16	Phasor	4MHz, 16 el, 0.625 mm pitch, 10 mm diameter array, wear resistant
0600469	B2F PA16	Mentor	2MHz, 16 el, 1.5mm pitch, 24 mm diameter array, wear resistant
0600470	B4F PA16	Mentor	4MHz, 16 el, 1.5mm pitch, 24 mm diameter array, wear resistant
0600467	MB2F PA16	Mentor	2MHz, 16 el, 0.625 mm pitch, 10mm diameter array, wear resistant
0600468	MB4F PA16	Mentor	4MHz, 16 el, 0.625 mm pitch, 10 mm diameter array, wear resistant
0069805	B2S PA16	Phasor	2MHz, 16 el, 1.5mm pitch, 24 mm diameter array, protected face
0069806	B4S PA16	Phasor	4MHz, 16 el, 1.5mm pitch, 24 mm diameter array, protected face
0069905	MB2S PA16	Phasor	2MHz, 16 el, 0.625 mm pitch, 10mm diameter array, protected face
0069906	MB4S PA16	Phasor	4MHz, 16 el, 0.625 mm pitch, 10 mm diameter array, protected face
0600416	B2S PA16	Mentor	2MHz, 16 el, 1.5mm pitch, 24 mm diameter array, protected face
0600417	B4S PA16	Mentor	4MHz, 16 el, 1.5mm pitch, 24 mm diameter array, protected face
0600418	MB2S PA16	Mentor	2MHz, 16 el, 0.625 mm pitch, 10mm diameter array, protected face
0600419	MB4S PA16	Mentor	4MHz, 16 el, 0.625 mm pitch, 10 mm diameter array, protected face





## Low profile arrays and curved wedges

Part number	Part name	Description
115-110-047	Linear Array	7.5MHZ/16EL/.5X10MM/3M cable/Mentor connector
115-100-047	Linear Array	7.5MHZ/16EL/.5X10MM/3M cable/PHASOR connector
115-100-048	Linear Array	10MHZ/32EL/.3X7MM/3M cable/PHASOR connector
115-001-332	Y-Probe	2 of 115-100-047 wired to single Phasor connector
360-142-239	Wedge	Low profile, 1.5" axial OD curved wedge for Palm 50
360-142-240	Wedge	Low profile, 1.75" axial OD curved wedge for Palm 50
360-142-241	Wedge	Low profile, 2.0" axial OD curved wedge for Palm 50
360-142-242	Wedge	Low profile, 2.0" axial OD curved wedge for Palm 64
360-142-243	Wedge	Low profile, 2.5" axial OD curved wedge for palm 64
360-142-244	Wedge	Low profile, 2.5" axial OD curved wedge for Palm 90
360-142-245	Wedge	Low profile, 3.0" axial OD curved wedge for palm 90
360-142-246	Wedge	Low profile, 3.5" axial OD curved wedge for Palm 90



AOD  
(Axial Outside Diameter)

## Y-Probes

Part number	Description	WEDGE (2 required)
115-500-061	4MHz, 16 el, .5 mm pitch, 3M cable, Phasor connector	0069438 to 0069441
115-500-062	10 MHz, 16 el, .5 mm pitch, 3M cable, Phasor connector	0069438 to 0069441
115-500-063	4 MHz, 64 el, .5 mm pitch, 3M cable, Phasor connector	083-069-657 to 083-069-659
115-001-332	7.5 MHZ/16EL/.5X10MM/3M cable/Phasor connector	See Low Profile Array page
115-500-072	4MHz, 16 el, .5 mm pitch, 3M cable, Phasor connector. MUX not required	0069438 to 0069441
115-500-073	10 MHz, 16 el, .5 mm pitch, 3M cable, Phasor connector. MUX not required	0069438 to 0069441
115-500-075	7.5MHZ/16EL/.5X10MM/3M cable/Phasor connector. MUX not required	See Low Profile Array page

# Single element probes for TOFD and conventional

Part number	Frequency [MHZ]	Diameter (inch)	Diameter (mm)	Wedge 45°	Wedge 60°	Wedge 70°	Wedge customized radius
389-065-790	2.25	3/8	10	0600574	0600575	0600576	0600577
389-065-810	2.25	1/2	13	0600578	0600579	0600580	0600581
389-065-760	5.0	1/4	6	0600570	00600571	0600572	0600573
389-065-780	5.0	3/8	10	0600574	0600575	0600576	0600577
389-065-800	5.0	1/2	13	0600578	0600579	0600580	0600581
389-065-770	7.5	1/4	6	0600570	00600571	0600572	0600573
389-066-600	7.5	3/8	10	0600574	0600575	0600576	0600577
389-064-340	7.5	1/2	13	0600578	0600579	0600580	0600581
389-070-660	10.0	1/8	3	0600570	00600571	0600572	0600573
389-070-590	10.0	1/4	6	0600570	00600571	0600572	0600573
389-067-630	15.0	1/8	3	0600570	00600571	0600572	0600573

**Notes**

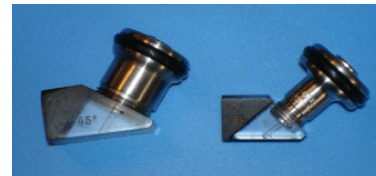
Probes with element dia 1/4" and 1/8" have the same housing and will use the same wedge style.

Wedges for probes with element dia 1/4" and 1/8" are shortened because they are used close to the weld.

Additional wedges are added where customer can choose beam angle and radius style.

All wedges will have water connection.

All wedges have side holes to fit in manipulator folks.



## Conventional dual element corrosion thickness probes

Part number	Part name	Description	Cable
113-516-002	KBA 525 Dual Element Transducer	Transducer: 10MHz/5mm	
0500495	DA501 Dual Element Transducer	Transducer: 5 MHz/12.5mm	DA 231 [0053616]
0500502	DA503EN Dual Element Transducer	Transducer: 2MHz/16.1mm	DA 231 [0053616]
113-552-013	DA512 Dual Element Transducer	Transducer: 10MHz/7.5mm	
113-544-224	DA507 Dual Element Transducer	Transducer: 5MHz/18mm	
113-835-721	DUFP Dual Element Transducer	Transducer: 7.5MHz/7.5mm	



KBA 525



DA501



DA503 EN



DA512

# Mentor UT – RotoArrays

Part number	Part name	Active width	Description
115-940-300	Rotoarray	51.2 mm	5 MHz, 32el, 2mm pitch, 6.4mm elev, 3m cable, Mentor connector
115-910-100	Rotoarray	51.2 mm	5 MHz, 64 el, 0.8mm pitch, 6.4mm elev, 3m cable, Phasor connector
115-910-200	Rotoarray	81.3 mm	5 MHz, 64 el, 1.27mm pitch, 8 mm elev, 3m cable, Phasor connector
115-910-800	Rotoarray	51.2 mm	3.5 MHz, 64 el, 0.8mm pitch, 6.4mm elev, 3m cable, Phasor connector
115-910-850	Rotoarray	81.3 mm	3.5 MHz, 64 el, 1.27mm pitch, 8 mm elev, 3m cable, Phasor connector
115-900-070	Rotoarray	81.3 mm	5 MHz, 64 el, 1.27mm pitch, Phasor connector, with scan control buttons
115-910-700	Rotoarray	51.2 mm	2.25 MHz, 64 el, 0.8mm pitch, 6.4mm elev, 3m cable, Phasor connector
115-910-750	Rotoarray	81.3 mm	2.25 MHz, 64 el, 1.27mm pitch, 8 mm elev, 3m cable, Phasor connector
115-910-625	Rotoarray	120 mm	1 MHz, 60 el, 2 mm pitch, 16 mm elev, 3m cable, Phasor connector
115-910-525	Rotoarray	81.3 mm	500 KHz, 60el, 1.3mm pitch, 8mm elevation, Phasor connector
389-087-380	Small Case Bundle		Includes small transportation/storage case and accessories necessary for RotoArray operation and maintenance
389-087-390	Large Case Bundle		Includes small transportation/storage case and accessories necessary for RotoArray operation and maintenance
124M7931	3 button adapter		4 pin to 9 pin lemo adapter enables use of scan controls
389-079-390	Service Station		Used for Rotoarray filling and service.
021-265-020	Couplant Sprayer		Ergonomic battery powered sprayer.



## Mentor UT – Bond seam scanners

Part number	Part name	Description
0600325	Bond Seam Scanner 32	Flexible 10MHz array, 32 el, 1mm pitch, spring loaded and sealed encoder. Protective foil for reducing wear. Phasor connector.
0600181	Bond Seam Scanner 64	Flexible 10MHz array, 64 el, 0.5mm pitch, spring loaded and sealed encoder. Protective foil for reducing wear. Phasor connector.
0600567	Bond Seam Scanner 18mm	For inspection of A-Side hemming with flat contour and B-side hemming. Probe with 32 elements, 10 MHz, 0.62 mm pitch and a variable scan width of 8–20 mm.
0600329	Sensitivity Calibration Block	Compatible with 0600325 and 0600181
0600199	Protection foil for Bond Seam Scanner.	Compatible with 0600325 and 0600180.



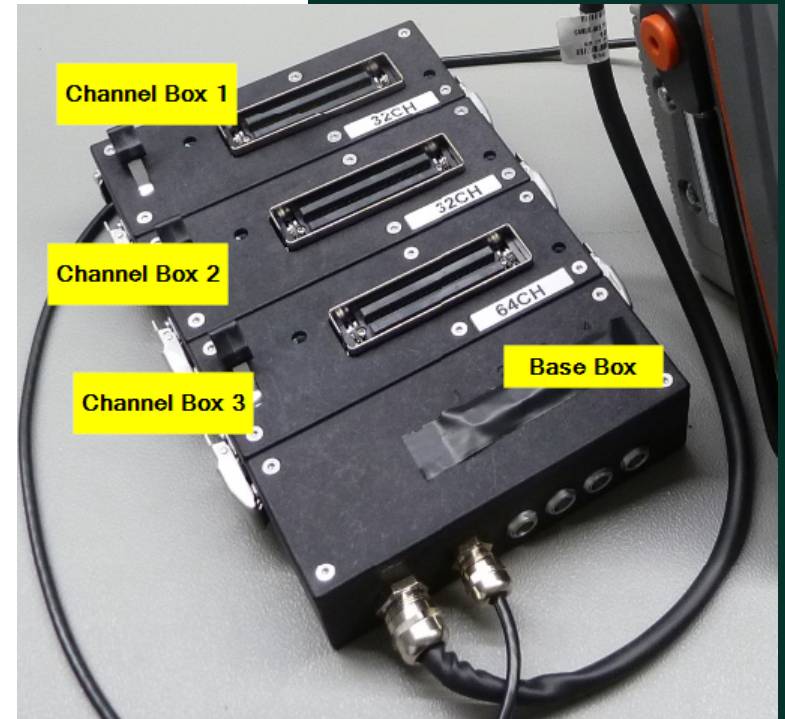
# Mentor UT – Splitter box

The splitter will allow the user to connect multiple Phased Array probes to the Mentor UT.

The splitter consists of a “Base Box” that is connected to the Mentor UT device.

A number of different “Channel Boxes” are connected to the “Base Box” and to each other depending on the application. The splitter is a very flexible solution since the channel boxes can be mounted in the field\*.

- With MUX-Module: any combination of channel boxes up to 128 elements (e.g. Splitter with 2x16e configuration).
- Without MUX-Module (Tyco adapter required): the first 32 elements can be used (e.g. 4x16e, 2x64e or 2x16e+32e+64e).



Part number	Description
UA600495	16 channels box
UA600496	32 channels box
UA600497	64 channels box
UA600638	Base box



# Palm scanner

Part number	Name	Description
0600140	Palm 50 Bracelet	Tube diameters from 1.5" to 2" (38mm to 50mm). Includes scanner, encoder cable with 12mm and 15mm encoder wheels, set of probe springs, cable sleeve
0600141	Palm 64 Bracelet	Tube diameters from 2" to 2.5" (50mm to 64mm) Includes scanner, encoder cable with 12mm and 15mm encoder wheels, set of probe springs, cable sleeve
0600142	Palm 90 Bracelet	Tube diameters from 2.5" to 3.5" (64mm to 90mm) Includes scanner, encoder cable with 12mm and 15mm encoder wheels, set of probe springs, cable sleeve.
0600159	Palm 50 Kit	Includes scanner, relevant wedges, enc cable and 1-7.5MHz low profile array w Phasor connector
0600160	Palm 64 Kit	Includes scanner, relevant wedges, enc cable and 1-7.5MHz low profile array w Phasor connector
0600161	Palm 90 Kit	Includes scanner, relevant wedges, enc cable and 1-7.5MHz low profile array w Phasor connector
0600392	Palm 50 Kit	Includes scanner, relevant wedges, enc cable and 1-7.5MHz low profile array w Mentor connector
0600393	Palm 64 Kit	Includes scanner, relevant wedges, enc cable and 1-7.5MHz low profile array w Mentor connector
0600394	Palm 90 Kit	Includes scanner, relevant wedges, enc cable and 1-7.5MHz low profile array w Mentor connector
0161925	Extension	Palm 50 Double sided extension
0161926	Extension	Palm 64 Double sided extension
0161927	Extension	Palm 90 Double sided extension



# Palm flat scanner

Part number	Name	Description
0600185	Encoder Adapter	Adapter cable to connect large connector to small connector on Mentor UT
0600176	Palm Flat Scanner	For flat surfaces to 3.5" diameter tubes to flat surface (> 90mm) Includes scanner, encoder cable with 12mm and 15mm encoder wheels, cable sleeve
0600274	Palm Flat Kit	Palm Flat Scanner solution package, including 1 Palm Flat scanner (ref. 0600176), PA-probe (ref. 115-100-002), flat wedge (ref. 0600218). Requires Encoder Adapter 0600185

## Phased array probes and wedges\*

Part number	Connector	Description	Wedge
115-100-001	Phasor	2 MHz, 8 element, 1mm pitch. 8x9mm Aperture	0600218 NPA36°M (flat)
			0600183 NPA36°M R. (A-D)
115-100-002	Phasor	4 MHz, 16 element , 0.5mm pitch, 8x9mm Aperture	0600218 NPA36°M (flat)
			0600183 NPA36°M R. (A-D)
115-130-001	Iplex	2 MHz, 8 element, 1mm pitch, 8x9mm Aperture	0600218 NPA36°M (flat)
			0600183 NPA36°M R. (A-D)
115-130-001	Iplex	4 MHz, 16 element , 0.5mm pitch, 8x9mm Aperture	0600218 NPA36°M (flat)
			0600183 NPA36°M R. (A-D)



\*Inspection of welds with a typical material thickness of up to 25 mm

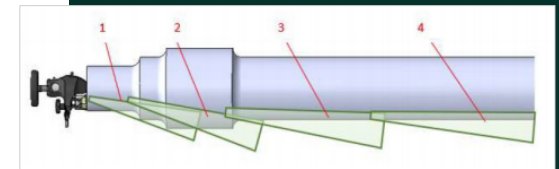
# Solid axle mechanized tester (SAMT)

Part number	Description	Included
0600512	SAMT Basic 4 MHz System	<ul style="list-style-type: none"> <li>• Probe; SAMT 4 PA32</li> <li>• Cone Kit; SAMT 90°</li> <li>• Wedge; SAMT 100-180 mm</li> <li>• Wedge; SAMT 90-100 mm</li> </ul>

## Additional accessories

Part number	Description
0600588	Probe SAMT 4 MHz PA16
0600858	Probe SAMT 2 MHz PA16
118M1844	Presentation Module (Mentor UT)
Mentor-UT-ADAP32-T	Adapter; Mentor UT 32ch/Tyco

For more information visit: <https://www.bakerhughesds.com/solid-axle-mechanized-testers>



## Mentor UT – Accessories

Part number	Part name	Description
112M4767	Mentor EM/UT Soft case	Soft carrying case/RAK for Mentor EM/UT. New model includes attachment for external battery
MENTOR-UTCASE-0001	Mentor UT Shipping Case	Hard-shell travel case for Mentor UT
MENTOR-RBAT-0002	External Battery Pack – Mentor	External Battery Pack Mentor EM/UT
MENTOR-ACPWR-0001	AC/DC Power Supply Kit	AC Power Supply/Charger (with U.S., U.K., and Euro Power Cords)
104-400-508	Mobile Wireless Router	Battery Powered Wireless Router
104M1207	Encoder and Buzzer Module for Mentor	Encoder & Buzzer Module with USB, X/Y/Z Encoder Inputs, and Alarm Outputs
CH7070GE	2 Bay Charger Cradle	2 Bay charger cradle for MUX battery (CRADLE ONLY, does not include MENTOR-APWR-0001)
125M7159	Mentor UT Handle Kit	Replaces bail with carry handle. This item is included with the MUX.
118M1844	Presentation Module	Replace encoder connectivity module. Includes encoder input, HDMI, USB, and ethernet.
0104393	Lemo to BNC adapter	Single Lemo to BNC adapter
MUT-UMA010-B	Encoder adapter	Omniscan MX/zetec topaz to Mentor
MUT-UMA010-D	Encoder adapter	Omni MX2/SW to Mentor

## Mentor UT – Calibration blocks

Part number	Part name	Description
118-540-985	5 step Cal Block, Inches	Calibration block for corrosion. Carbon Steel. Inches.
118-540-986	5 step Cal Block, Metric	Calibration block for corrosion. Carbon Steel. Metric.
118-540-987	5 step Cal Block SST Inches	Calibration block for corrosion. Stainless Steel. Inches.
118-540-988	5 step Cal Block SST Metric	Calibration block for corrosion. Stainless Steel. Metric.
118-540-300	DSC Block	Angle beam calibration block, Carbon steel.
118-540-260	Miniature Angle Beam Block	
118-540-270	IIW Type 1 Block	
118-540-280	IIW Type 2 Block	
118-540-370	NAVSHIPS Test Block	
0050434	K2 Block	
0600444	PA Calibration Block	Phased Array calibration block ISO 19675:2017

## Simple manual encoders



ODI-II



ODI-Single Probe

Part number

Description

MUT-ODI-singleprob

Versatile single wheel mini encoder. Rubber wheel and pressure clamping to probe

MUT-ODI-II

Versatile single wheel mini encoder for TOFD and multi-probe applications

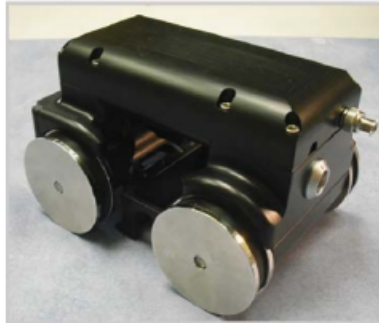
# Baker Hughes Switchgear manual scanner

Part number	Description
MUT-SWGMANSCAN300	Switchgear manual magnetic scanner – 300mm index coverage
MUT-SWGMANSCAN600	Switchgear manual magnetic scanner – 600mm index coverage
MUT-SWG-CBL3M	Switchgear manual encoder cable – 3 meters
MUT-SWG-CBL6M	Switchgear manual encoder cable – 6 meters
MUT-SWG-CBL10M	Switchgear manual encoder cable – 10 meters
MUT-SWG-CBL16M	Switchgear manual encoder cable – 16 meters
021-383-648	Motorized couplant delivery system with battery backup. Includes case, pump, battery
100N4330	Scanner couplant tubing – Clear PVC tubing, 1/8 ID x ¼ OD, 50ft. roll





## Path scanner



Part number	Description
021-383-649	PATH encoder scanner for non-modular DM array
021-383-656	Cable kit, PATH to Mentor UT
021-383-648	Motorized couplant delivery system with battery backup. Includes case, pump, battery
100N4330	Scanner couplant tubing – Clear PVC tubing, 1/8 ID x 1/4 OD, 50ft. roll
021-265-020	Manual Couplant Sprayer/Pump

## Other validated scanners

Scanner name	Manufacturer	3 <sup>rd</sup> Party Part #
Mapman Scanner	Phoenix (United Kingdom)	
Rotix Manual Scanner	Jireh (Canada)	CEG027
Navic Motorized Scanner	Jireh (Canada)	CXG002

### Testing and validation

Mentor UT is designed to work with a variety of commercially available scanners. These are just a few scanners that are tested and validated. It is not all inclusive. To arrange validation of additional scanners, please contact Product Management.

# Software – Mentor Create, Mentor PC and Apps

To complete your Mentor UT Inspection package please visit: <https://inspectionworks.com/#/supportDetails/mentorut>

## The following items are available on InspectionWorks platform

<b>Mentor Create</b>	This PC based software package is used to create, modify, and clone Apps for use on the Mentor UT instrument.
<b>Mentor PC</b>	This PC based software package allows the user to open an App created for the Mentor UT on a PC and utilize the data analysis functions for offline analysis and reporting.
<b>Applications</b>	These are general use App templates built for the Mentor UT. While these Apps can be used as is, their primary purpose is to be cloned and customized per the specific requirements of the user.
<b>Mentor UT Video Playlist</b>	<a href="https://www.youtube.com/playlist?list=PLf5aGxd5yPUGZZcLiA8NdNUOjomEHAbpH">https://www.youtube.com/playlist?list=PLf5aGxd5yPUGZZcLiA8NdNUOjomEHAbpH</a>
<b>Contact Support</b>	<a href="mailto:remoteservices@bakerhughes.com">remoteservices@bakerhughes.com</a>



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