

Order-No. 1042.001

## **Compact Portable Phased Array Flaw Detector MANTIS "Adept"-Package**

including power supply/charger, 1 Li-ion-battery,  
one software license "CAPTURE" and transportation box

- Dimensions 320 mm x 220 mm x 100 mm
- High contrast resistive touchscreen with 8.4" diagonal, 1024 x 768 pixel resolution
- Weight 4,4 kg inclusive battery
- Power supply 230V
- Battery runtime at least 4 hours, hot swap possible
- Control panel with mode buttons and turning wheel for convenient parameterizing and measurement
- 16:64 phased array channel configuration, IPEX connector
- 2 conventional UT-channels, Lemo 00-connectors
- 2-axis encoder inputs
- 1 mini display port
- 1 USB 2.0-connector
- 1 USB 3.0-connector
- Weld preparation overlay
- Phased Array, TOFD, single element and TR-mode
- Real-time-TFM with 16 channels in direct mode
- Multi-salvo operation (8 groups)
- Easy to use operator guidance with pre-selection of the inspection method and editable data bases for specimens, probes and encoders/scanners
- Numerous semi-automatic set-up wizards (e.g. weld wizard, element balancing, element check, angle measurement of wedges, scanner calibration etc.)
- Phased array presentation as Linear-scan, Sector-scan und A-scan
- Phased array scan presentation as B-scan, C-scan (angle and top view), D-scan and side view, 3D
- TFM scan presentation as B-scan, C-scan, D-scan and side view, A-scan for selected points, horizontal and vertical echo dynamic
- DAC for single element- and TR-probes, loss compensation TCG for angles and sound path in phased array and TFM mode, DGS in phased array mode
- Flexible screen layout with up to 8 single frames
- On-board analysis mode, automatic generation of inspection reports

- Readjustment of gate settings and TFM frames in analysis mode
- Frequency range up to 20 MHz
- Negative square pulser, pulse width 30 - 1.250 ns
- Transmitter voltage 12-100 V in phased array mode  
10-200 V in single element/TR mode
- Pulse repetition frequency 10 Hz to 12 kHz
- Amplification up to 120 dB
- > 50 dB cross talk damping between the channels for excellent signal to noise ratio

Order-No. 1042.002

## **Compact Portable Phased Array Flaw Detector MANTIS “Expert”-Package**

including power supply/charger, 1 Li-ion-battery,  
one software license “CAPTURE” and transportation box

- Dimensions 320 mm x 220 mm x 100 mm
- High contrast resistive touchscreen with 8.4“ diagonal, 1024 x 768 pixel resolution
- Weight 4,4 kg inclusive battery
- Power supply 230V
- Battery runtime at least 4 hours, hot swap possible
- Control panel with mode buttons and turning wheel for convenient parameterizing and measurement
- 16:64 phased array channel configuration, IPEX connector
- 2 conventional UT-channels, Lemo 00-connectors
- 3-axis encoder inputs
- 1 mini display port
- 1 USB 2.0-connector
- 1 USB 3.0-connector
- Weld preparation overlay
- Live 3D-overlays (Nozzle, T-, K-, Y-joints)
- Phased Array, TOFD, single element and TR-mode
- Real-time-TFM with 16 channels in direct mode
- Multi-salvo operation (8 groups)
- Easy to use operator guidance with pre-selection of the inspection method and editable data bases for specimens, probes and encoders/scanners
- Numerous semi-automatic set-up wizards (e.g. weld wizard, element balancing, element check, angle measurement of wedges, scanner calibration etc.)
- Phased array presentation as Linear-scan, Sector-scan und A-scan
- Phased array scan presentation as B-scan, C-scan (angle and top view), D-scan and side view, 3D
- TFM scan presentation as B-scan, C-scan, D-scan and side view, A-scan for selected points, horizontal and vertical echo dynamic
- DAC for single element- and TR-probes, loss compensation TCG for angles and sound path in phased array and TFM mode, DGS in phased array mode
- Flexible screen layout with up to 8 single frames
- On-board analysis mode, automatic generation of inspection reports

- Readjustment of gate settings and TFM frames in analysis mode
- Frequency range up to 20 MHz
- Negative square pulser, pulse width 30 - 1.250 ns
- Transmitter voltage 12-100 V in phased array mode  
10-200 V in single element/TR mode
- Pulse repetition frequency 10 Hz to 20 kHz
- Amplification up to 120 dB
- > 50 dB cross talk damping between the channels for excellent signal to noise ratio

Order-No. 1042.003

## **Compact Portable Phased Array Flaw Detector MANTIS “Master”-Package**

including power supply/charger, 1 Li-ion-battery,  
one software license “CAPTURE” and transportation box

- Dimensions 320 mm x 220 mm x 100 mm
- High contrast resistive touchscreen with 8.4“ diagonal, 1024 x 768 pixel resolution
- Weight 4,4 kg inclusive battery
- Power supply 230V
- Battery runtime at least 4 hours, hot swap possible
- Control panel with mode buttons and turning wheel for convenient parameterizing and measurement
- 16:64 phased array channel configuration, IPEX connector
- 2 conventional UT-channels, Lemo 00-connectors
- 3-axis encoder inputs
- 1 mini display port
- 1 USB 2.0-connector
- 1 USB 3.0-connector
- Weld preparation overlay
- Live 3D-overlays (Nozzle, T-, K-, Y-joints)
- Phased Array, TOFD, single element and TR-mode
- Real-time-TFM with 16 channels in direct mode
- 64 channels TFM
- Matrix and dual arrays
- FMC recording
- Multi-salvo operation (8 groups)
- Easy to use operator guidance with pre-selection of the inspection method and editable data bases for specimens, probes and encoders/scanners
- Numerous semi-automatic set-up wizards (e.g. weld wizard, element balancing, element check, angle measurement of wedges, scanner calibration etc.)
- Phased array presentation as Linear-scan, Sector-scan und A-scan
- Phased array scan presentation as B-scan, C-scan (angle and top view), D-scan and side view, 3D
- TFM scan presentation as B-scan, C-scan, D-scan and side view, A-scan for selected points, horizontal and vertical echo dynamic
- DAC for single element- and TR-probes, loss compensation TCG for angles and sound path in phased array and TFM mode, DGS in phased array mode

- Flexible screen layout with up to 8 single frames
- On-board analysis mode, automatic generation of inspection reports
- Readjustment of gate settings and TFM frames in analysis mode
- Frequency range up to 20 MHz
- Negative square pulser, pulse width 30 - 1.250 ns
- Transmitter voltage 12-100 V in phased array mode  
10-200 V in single element/TR mode
- Pulse repetition frequency 10 Hz to 20 kHz
- Amplification up to 120 dB
- > 50 dB cross talk damping between the channels for excellent signal to noise ratio