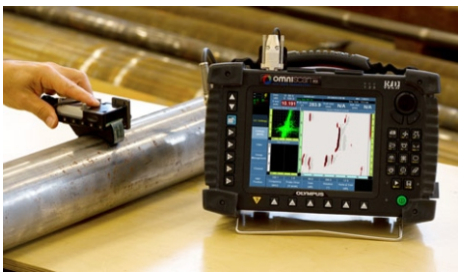
Eddy Current Test Instruments and Systems



Process Pipe Stress Corrosion Cracking Inspection

As a part of its eddy current array solutions, Olympus proposes an innovative pipe inspection kit for stress corrosion cracking detection. Though the results are comparable, ECA technology is much less time-consuming and labor-intensive than penetrant or magnetic-particle inspection. With ECA inspection, you can eliminate costly and complicated procedures, such as paint and coating removal.

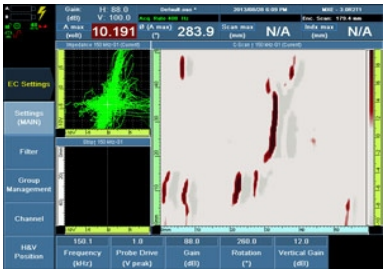
The new versitile ECA probe with interchangeable wedges fits a wide-range of pipe sizes. With the new continuous mode, scan imagery is revealed in real time with a constant results stream

Features

·Efficient inspection on magnetic and non-magnetic alloys.
·Indications are detected in all directions with only a single pass.
·No need to remove paint; fewer steps means time-savings.
·The 32-coil probe provides a large area of coverage.
·Defect depth evaluation capability.
·Continuous mode provides interrruption-free scan imagery.
·Imagery and archiving enabled.
·Adjustable sensitivity and post-process analysis.
·Green method (no chemicals involved)

Replace Conventional NDT Methods with Eddy Current Array Technology

Red dye penetrant indications.



Eddy current array indications with red dye color palette (patent rights protected)

Pipe Inspection Kit

1. Select the wedge you need

2. Slide the wedge into the slot.

3. Apply the flexible probe to the wedge.

4. The probe is now ready to use

Flaw Detectors NORTEC 600

Olympus converges its latest advancements in high-performance digital circuitry and eddy current flaw detection into one compact and durable portable unit—the new NORTEC® 600. With its crisp and vivid 5.7 inch VGA display and true full-screen mode , the NORTEC 600 is capable of producing highly visible and contrasting eddy current signals in any lighting condition. The redesigned interface of the NORTEC 600 borrows the intuitive, knob-operated navigation of its NORTEC predecessors and combines it with the simple menu structure and highly efficient direct-access keys of other popular Olympus instruments. Available in four versatile models, the NORTEC 600 offers a wide range of innovative functionalities, including an Application Selection menu, an all-in-one display, real-time readings, and signal calibration in Freeze mode, ensuring that inspections are quick and easy for any level of operator.

Reliable and Robust

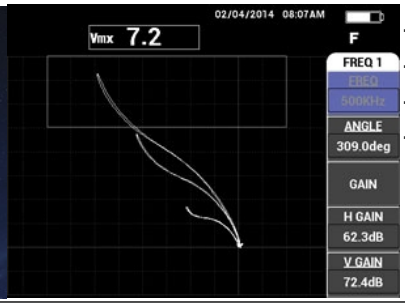
Based on an already field-proven instrument case, the NORTEC 600 is built for endurance in harsh field conditions. Its casing's durability and resistance to extreme weather makes the NORTEC 600 an instrument you can trust for any eddy current inspection job.

Portable and Lightweight

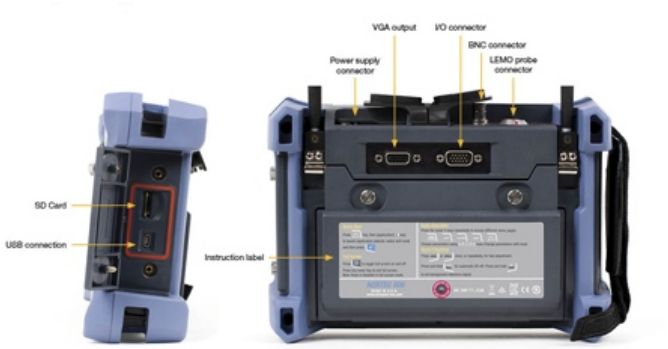
The NORTEC 600 weighs only 1.6 kg and is delivered with a factory-installed hand strap that provides direct thumb access to the key controls, offering genuine handheld versatility to operators.

Key Features

·Designed to meet the requirements of IP66.
·EN-15548 compliant.
·Long battery life (up to 10 hours).
·Bright, 5.7 inch (14,5 cm) VGA display.
·Full-screen option in any display mode.
·Improved filters for rotary scanner mode.
·Intuitive interface with Application Selection presets.
·All-settings configuration page.
·10 Hz to 12 MHz frequency capacity.
·Automatic internal balancing (BNC connector).
·Up to two real-time readings.
·True automatic mixing.
·Storage capacity of up to 500 files (program and data).
·On-board file preview.

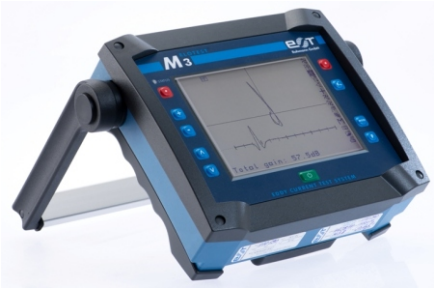


Easy Integration of NORTEC 600



·Designed to meet the requirements of IP66.
·-10°C to 50°C operating temperature range.
·Continuous null filter.
·Strip chart view with sweep alarm.
·6 kHz measurement rate.
·Remote Control from NORTEC PC.
·Alarm outputs.
·Analog outputs.
·Digital inputs.

ELOTEST M3- Examples of applications



Excellent performance in a small footprint, ligthweight tabletop housing

The new ELOTEST M3 is based on the small and powerful ELOTEST M2, well known as the smallest handheld eddy current tester on the market. The ELOTEST M3 offers a large size LCD display with stunning definition and brightness. When multiple inspectors have to review images for evaluation or precise handling of the probe does not allow capability of holding the instrument, the M3 will be the instrument of choice based on the large display and intuitiveness of the parameter adjustments.

Some of the exceptional performance data are listed below:

- ·Wide frequency range from 10Hz to 12 MHz
- ·Filter functions Low pass, high pass, band pass are standard
- ·Large 60db main gain and pre gain settings
- ·Independently adjustable dual frequency operation (single probe)
- ·Intuitive pictogram guided 10 key user operation
- ·All commonly available probes can be operated from the ELOTEST M3
- ·Optimized rotor operation feature included in the standard package

The main application fields for the ELOTEST M3 are manual surface inspection, bore hole inspection, hidden structure as well as conductivity and coating thickness measurements.

Manual surface crack detection with adapted contour sensor

Dual frequency inner tube inspection with signal-mix function

Test set for rough environmental conditions with LED-crack indicator on the probe

Conductivity measurement in IACSor MS/m from 1 % up to 110% IACS

Bore hole inspection with mini rotor on aluminium structures

تجهیزات گردشهای گردابی ET

Single-channel eddy current test

Single-channel eddy current test instrument for automated testing tasks

Single channel eddy current test instrument for automated testing tasks The single channel test instrument, designed with protection class IP54, can be integrated directly into the production process, for example for automatic screw testing machines. It can be integrated into existing systems with minimal expenditure. With a frequency range from 10 Hz to 12 MHZ , a universal signal filter and I/O interface, this test instrument is an efficient alternative for fast crack detection and sorting tasks

Single-channel test instrument for static and dynamic testing
Frequency range from 10 Hz to 12 MHz
Large display with intuitive user interface and X/Y- and Y/t-signal display
Protection class IP54; various mounting options
Low-cost in-line test instrument with full functionality

Technical Dat

User-Interface ELOTEST M3

Pictograph-based operation via key pad with key-click
6 languages: English, German, French, Italian, Swedish and Spanish
Direct-function keys for offset- and liftoff-compensation
Programmable function key
Intuitive operation using only one submenu-level
Speed control for rotor (torque compensated) in 10 steps (corresponds to approx. 900rpm to 2700rpm using Rohmann standard rotors)

Parameter Settings/Image Memory

99 user settings may be programmed, stored and recalled
Application-related factory default settings (cannot be overwritten)
32 signal memories incl. parameter settings for documentation
Parameter setups and images may be named using alphanumerical characters
Long-term recording (strip chart) of X- and Y-signals, from 20s to 24hrs 90.000min/max-values (envelope, without data-loss)
Data storage maintained (backup-battery)

Probe Connection

11-pin Fischer socket, compatible with the 8-pin Fischer connector

Interfaces

Digital I/O signals, test enable input, threshold alarm output, ready output andexternal 24VDC supply are available on a 5 pin M12 size connector

Frequency Range

10Hz to 12MHz, continuously adjustable, quartz stabilized, display in Hz, kHz, MHz
Adjustable driver current to 100% in 2% steps (100% ≈+/-10V at Imax=0.3A)

Gain

Preamplification 0 to 60dB in 0.5dB steps (0 to 40dB over 100kHz range)
Gain 0 to 60dB in 0.5dB steps
Axis spread 0 to 20dB in 1dB steps
Automatic selection of preamplification and gain

Ambient Conditions

Operation between -20°C (-4°F) and 50°C (122°F) at max. 85% rel. humidity (non-condensating)
Storage between -30°C (-22°F) and 80°C (176°F) at max. 85% rel. humidity
(non-condensating

Gates / Alarm

Alarm: optical and acoustic
Active in all display modes; may be inverted
Adjustable gates: +Y-gate, Box-gate, Circle-gate with adjustable flat in the
Y-direction

Filter

Low-pass filter 1.3Hz to 10kHz in 40 steps
High-pass filter 0Hz to 10kHz in 40 steps
Band-pass filter 0Hz to 10kHz, combination of HP and LP
Selectable automatic filter for rotor operation
HD-filter to optimize the defect classification during rotor inspection (e. g. distinction crack/corrosion)

LCD – Display

LCD featuring long-life LED backlight, 120 x 89mm (4.72“ x 3.5“)
Temperature-compensated contrast setting
Resolution 320 x 240pixel, refresh rate 75Hz,
220.000 data samples/second, no signal delay
Signal display covering 100% of the screen; over 89% with menu displayed
80° viewing angle

SIGMATEST 2.069 EDDY CURRENT

Portable eddy current test instrument for measurement of electrical conductivity of non-ferrous metals
Determining physical and technological material properties
Monitoring the condition of highly stressed parts
Material-mix testing
Sorting of metals and alloys
Scrap sorting
In-process inspection in industrial, metallurgical and metalworking plants
Quality control inspection
Aircraft maintenance inspection
Determination of heat damage
Verification of the age-hardening condition of aluminum used in aircraft construction

FEATURES

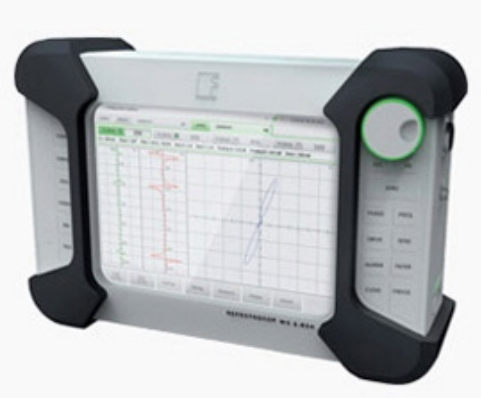
·Easy operation
·Five measuring frequencies: 60, 120, 240, 480, 960 kHz
·Internal and external temperature compensation
·Measurement possible up to 0.5 mm distance from the test item
·Measurement range from 0.5 to 65 MS/m (1 - 112 % IACS)
·20 measurements per second
·Multilanguage operating system
·Remote control via RS-232 port or Ethernet port
·Robust device design for operation on site

DEFECTOMETER® 2.837

√ High detection sensitivity to surface flaws (even underneath paint)
√ Simple, microprocessor-controlled operation
√ Automatic lift-off and zero compensation
√ Several alternatives for signal display
√ Integrated crack standards (optional)
√ Comprehensive range of test probes
√ Two alarm thresholds
√ External control through PC or PLC systems
√ Modern capabilities for test documentation to printer and PC via RS232 serial interface
√ Fully compatible with all predecessor instruments and existing probes

تجهیزات گردشهای گردابی ET

DEFECTOSCOP MC 2.834



General Description

The **DEFECTOSCOP** Eddy Current test unit is known for its user friendly operation and its uniqueability to connect Eddy Current Arrays (ECA) with up to 32 sensors to each of its 3 input modules.This permits up to a total of 96 sensors. Each module can operate up to 4 separate frequencies,either simultaneously or sequentially, driven by two independent channels.

FEATURES

·Test frequency: 10 Hz to 10 MHz
·3 modules with 2 independent channels including multiplexing (up to 96 sensors)
·4 separate frequencies simultaneously or sequentially adjustable
·Clearance compensation
·TFT Touch Display
·Screen views: x/y, x/t, y/t, C-Scan
·User friendly operation

Technical Specifications

Test frequency: 10 Hz to 10 MHz
Modular options: 3 modules with 2 independent channels including multiplexing (up to 96 sensors)
Clearance compensation: possible for each individual sensor (up to 48 sensors)
Simultaneous operation: 3 modules with 4 independent frequencies each
Sensors: Single sensor/Arrays with up to 32 sensors in multiplexing mode and all coil configurations
Position encoder: one or two axis synchronization
Preamplifier: -24 to +36 dB in 0.5 dB steps adjustable for each module, input range ±15 V to ±15 mV
Driver output: ±16 V ; 10 mA to 1 A with adjustable current
Sensitivity (digital scaling): ±90 dB independently adjustable per sensor in 0.5 dB steps
Display: TFT Touch Display with LED Backlight, 600 x 800 pixel, 26.4 cm (10.4") diagonal
Screen views: x/y, x/t, y/t, C-Scan (with unlimited user defined views)
Outputs: 3x USB 2.0, 1x RS232, 1x Ethernet 100 MBit/s, VGA, Audio In/Out, GPIO, 2x Analog
Power supply: up to 2 lithium ion rechargeable batteries (typ. operating time: 6-14h), mains (115/230V)
Weight: 4.3 kg (with 1 module and 1 battery)

DEFECTOMETER® M 1.837 Mobile crack measurement

The eddy current principle

When an alternating current flows in a coil the magnetic field of the coil induces circulating eddy currents in close proximity to a conducting surface. Any defects or irregularities in the grain structure will effect the loading on the coil and thus its impedance. By monitoring the voltage across the coil defects like cracks are detected in the material of interest.

Applications

Testing for surface cracks on turbine blades, on wheels, on wings around rivets etc. at aircrafts
Testing of surface cracks on bridges
Testing of surface cracks on gas pipelines
The flaw resolution is approximately 20 µm
Simple sorting tasks, identification of hardness changes and detection of surface cracks on automotive components
Detection and evaluation of surface cracks on semi-finished products

FEATURES

·High sensitivity with a flaw detection > 20 µm
·Simple operation
·Automatic Lift-off, Zero and Tilt compensation
·Warning for lifted off probe
·Very good legibility of the LED scale display and the LCD display
·35 hours operation with activated backlighting
·USB port for the visualisation and documentation of the measurement results
·Probes from earlier DEFECTOMETERs can be used

Phasec 3 Series Flaw DetectorsEddy Current

Single Frequency Eddy Current Instrument for Crack and Corrosion Detection, with Conductivity and Coating Measurement

The basic model is suitable for a wide range of applications from high frequency surface inspection to low frequency sub-surface inspection. The conductivity and coating thickness meter function further extends the instrument's capability.

Standard Eddy Current Probes

Compatible with all commonly used eddy current probes whether they are simple absolute or complex reflection probes.

Using the GE WeldScan range of probes, the Phasec 3 Series offers an advanced system for checking the integrity of welds on steel structures such as bridges, ships, oil rigs and steel framed buildings. Cracks can be detected through surface coating materials such as paint and aluminium, so minimal time and resources are needed for preparation

The WeldScan range of probes can be used on ferrous, stainless steel (magnetic and non-magnetic) and aluminium materials. The technique has been written into British and European Standard BS EN 1711:2000
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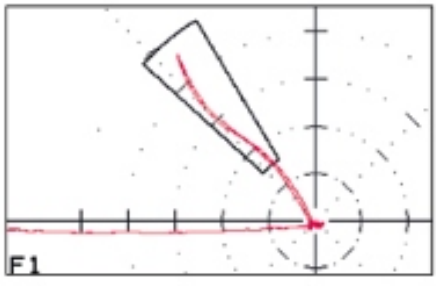
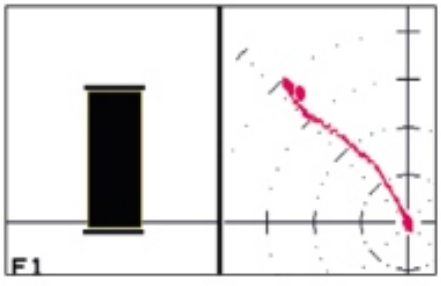
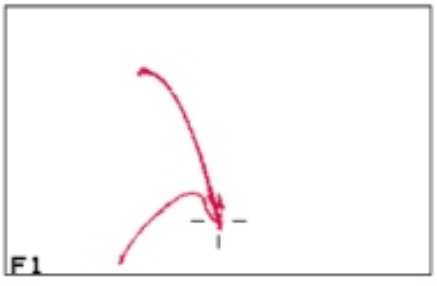


Phase plane display



Bargraph and phase plane display



Phase plane display using a weldscan probe

تجهیزات گردشهای گردابی ET

Phasec 3d Series Flaw DetectorsEddy Current

Dual Frequency Instrument for Crack and Corrosion Detection in Metal Components, Tubes, Structures and Welds

Stepping up to the Phasec 3d adds dual frequency inspection capability plus several features designed to facilitate Eddy Current inspections.

Crack and Corrosion

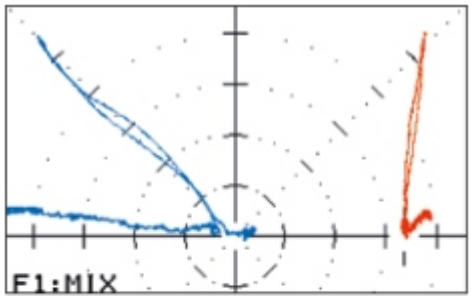
Dual frequency inspection offers the ability to test at two frequencies or modes simultaneously. This may be used to remove unwanted signals or give additional information. In order to assist in removing unwanted signals an Automatic Mix Setting (Automix) function is provided.

Examples of dual frequency inspection:

Inspection optimization

The dual frequency capability allows optimization of the weld inspection

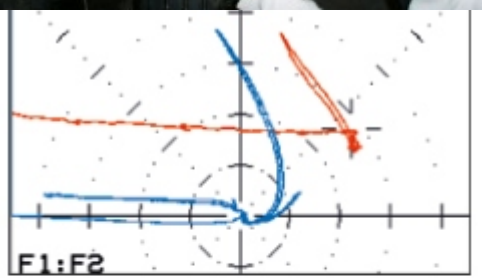
Bridge + absolute.



Lift off and probe handling reduction mix

Multilayer inspection

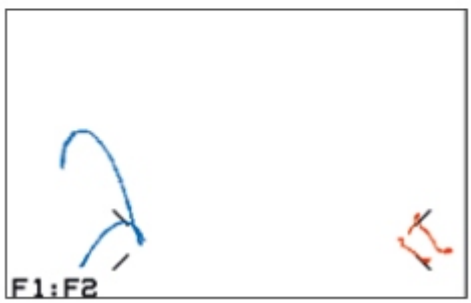
Using two frequencies allows simultaneous inspection at two distinct depths



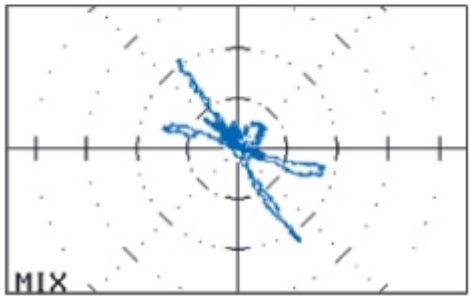
Multilayer inspection : Use of 2 frequencies to inspect 2 depths at the same time (blue 2kHz, red 200kHz)

Reducing the effect of lift off and probe orientation

Automix and Automatic Lift off increase inspection speed and improve confidence by reducing the effect of lift off and probe orientation



Phase plane mode using weldscan probe



Fast scan

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Phasec 3s Series Flaw DetectorsEddy Current

Single Frequency Instrument for Crack and Corrosion Detection, with Conductivity, Coating, Measurement and Dynamic Rotating Capability

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Stepping up to the Phasec 3S adds Dynamic Rotary capability to Phasec 3

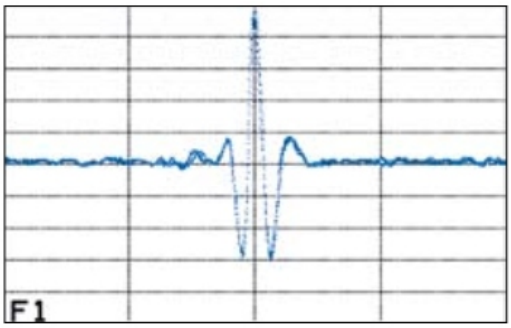
Rotary Inspection

Stepping up to the Phasec 3s adds dynamic rotating inspection capability. The Phasec 3s instrument has an optional powerful dynamic rotating drive that facilitates easy inspections of ferrous and non-ferrous metals. A rotary hole inspection gives the operator an increased Probability of Detection (POD) of flaws compared to a manual inspection and at a far higher speed

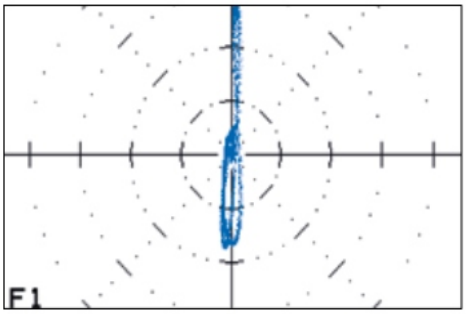
Rotary inspection of aircraft wheel tie bolt holes.

Probe drives from GE and other manufacturers can be used with Phasec 3s.

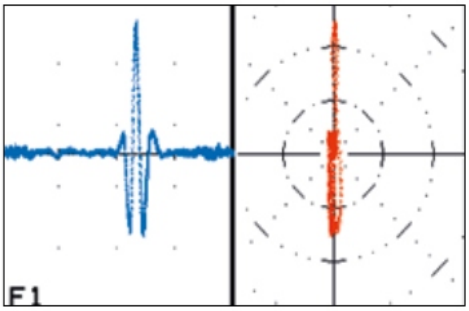
The AutoDetection facility automatically detects the use of the rotary probe and immediately switches to the correct inspection mode. If a GE drive is being used, Phasec 3s will also automatically bring up the previously used rotary settings.



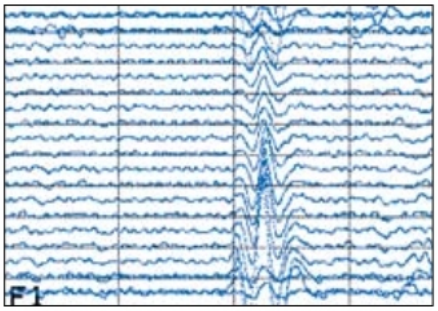
Time base display



Spot display



Simultaneous time base and spot display



Waterfall display

Eddy Current Probes

Tubing Inspection Probes
For inspection of non-ferrous and ferrous tubing in Balance-of-Plant applications in the Power Generation, Oil Gas and Air Conditioner industries.
Replaceable Head Id Brochure

Tubing Probes Brochure

Standard Probes
For surface, sub-surface, fastener holes, aircraft wheels and welds. We also offer conductivity probes for measuring non-ferrous materials, coils for bar, wire and wire inspection and probe starter kits.
Surface Inspection Shielded (Absolute) Probes

Surface Inspection Unshielded (Absolute) Probes

Sub-surface Inspection (Differential and Reflectio Probes

Reference Blocks
We offer a wide range of conductivity and standard high frequency reference blocks to ensure accuracy during calibration and inspection.
Reference Block Brochure

Conductivity Reference Blocks Brochure

تجهیزات گردشهای گردابی ET

EPOCH 650

Portable, Rugged, Ergonomic

Physical Features

The EPOCH 650 is a lightweight, portable fl aw detector built to be rugged and fl exible for nearly any inspection. Some key physical features include:

- Large, full VGA resolution transfl ective display for vivid clarity in any indoor lighting and direct sunlight conditions
- Rubber overmolded bumpers on all four corners for shock absorption and anti-marring considerations
- Four-point harness connection for chest straps
- “No tools” access to battery compartment and side I/O door
- Continuous position stand with right angle crook for improved stability from 0 to 180 degrees
- Gasketed side door for USB OTG connection and removable memory
- Standard internal, rechargeable lithium-ion battery
- Lightweight, ergonomic design for increased portability and ease of use

Standard Package

- EPOCH 650 Digital ultrasonic fl aw detector, AC or battery operation
- Charger/AC adapter (100 VAC, 115 VAC, 230 VAC, 50 Hz or 60 Hz)
- Rechargeable lithium-ion battery
- Transport case
- USB cable
- Quick reference card
- Comprehensive operation manual (CD)

Physical Features – Rear
A – USB On-The-Go port
B – MicroSD card
C – DC power connector
D – VGA port
E – Digital I/O port
F – Transducer connectors (2)
G – Battery door
H – Pipe stand

Instrument Inputs/Outputs	
USB ports	USB On-The-Go (OTG)
RS-232 port	Yes
Video output	VGA output standard
Analog output	1 analog output (optional), Selectable 1 V/10 V Full Scale, 4 mA max
Alarm output	3 alarm outputs, 5 V TTL, 10 mA
Trigger I/O	Trigger input, 5V TTL; Trigger output, 5V TTL, 10 mA max
Encoder inputs	1-axis encoder line (quadrature - Corrosion Module mode only)

Environmental Ratings

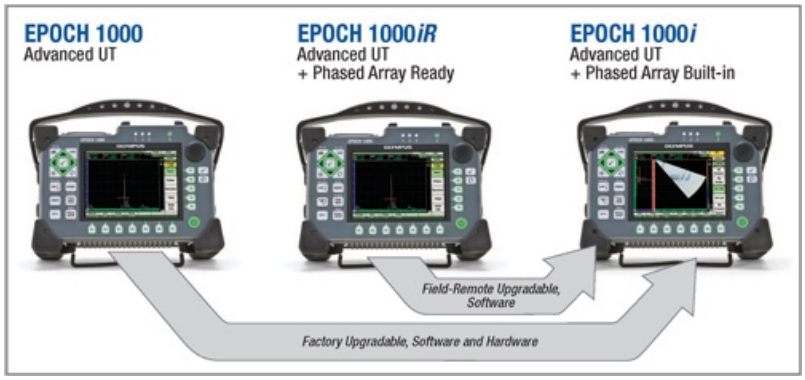
Designed to meet the standards of the Ingress Protection (IP) rating number IP67 (navigation pad version) or IP66 (knob version) per IEC 60529-2004 (Degrees of Protection provided by enclosures – IP Code).
The product design was confi rmed to meet the IP rating by means of Olympus internal design verifi cation test process that occurs prior to the release of the product to production.

Safe operation as defi ned by Class I, Division 2, Group D, as defi ned in the National Fire Protection Association Code (NFPA 70), Article 500, and tested using MIL-STD-810F, Method 511.4, Procedure I.

MIL-STD-810F, Method 516.5 Procedure I, 6 cycles each axis, 15g, 11 ms half sine

MIL-STD-810F, Method 514.5, Procedure I, Annex C Figure 6, general exposure: 1 hour each axis

Flaw Detectors EPOCH 1000



The EPOCH 1000 Series Digital Ultrasonic Flaw Detectors combines the highest level of performance for conventional portable flaw detection with the power of phased array imaging. The EPOCH 1000, 1000 *iR* and 1000 *i* feature a new horizontal case style with full VGA display, knob and navigation arrows for parameter adjustment, and full EN12668-1 compliance. The advanced conventional ultrasonic functionality of the EPOCH 1000 series is augmented in the EPOCH 1000 *i* with phased array imaging capabilities.

Key Features

·Available with Phased Array Imaging Package
·EN12668-1 compliant
·37 digital receiver filter selections
·6 kHz pulse repetition rate for high speed scanning
·Encoded or time-based C-scan option
·Automatic phased array probe recognition
·Intuitive wedge delay and sensitivity calibration for all focal laws
·Programmable analog/alarm outputs
·Designed for IP66 environmental rating
·Horizontal design with navigation panel and knob parameter adjustment
·Digital high dynamic range receiver
·Full VGA sunlight readable display
·ClearWave™ visual enhancement package for conventional A-scan interpretation
·SureView™ visualization feature
·Reference and measurement cursors
·Standard dynamic DAC/TVG
Standard onboard DGS/AV

EPOCH 1000 Advanced UT

The EPOCH® 1000 is an advanced conventional ultrasonic flaw detector that can be upgraded with phased array imaging at an authorized Olympus service center.

EPOCH 1000 iR *Advanced UT + Phased Array Ready*

The EPOCH 1000 *iR* provides the same ultrasonic flaw detection capabilities as the EPOCH 1000 with the benefit of upgrading to phased array with simple field-remote activation

EPOCH 1000 i *Advanced UT + Phased Array Built-in*

The EPOCH 1000 *i* comes standard with the same advanced ultrasonic flaw detection capabilities as the EPOCH 1000, with the addition of a built-in phased array imaging package

Key Industries and Applications

·General weld inspeciton
·Crack detection and sizing
·Power generation inspections
·AWS D1.1/D1.5 weld inspection
·Casting and forging defect inspections
·DGS/AVG defect sizing
·In-line inspections
·Composite delamination and defect inspections
·Aerospace and maintenance
·Automotive and transportation

Flaw Detectors OmniScan SX

·Olympus is proud to introduce the OmniScan® SX, a flaw detector that benefits from more than 20 years of phased array experience and shares the OmniScan DNA. For improved ease of use, the OmniScan SX features a new streamlined software interface displayed on an 8.4 in. (21.3 cm) touch screen. A single-group and non-modular instrument, the OmniScan SX is easy to operate and cost-effective for less demanding applications

The OmniScan SX comes in two models: the SX PA and SX UT . The SX PA is a 16:64PR phased array unit, which, like the UT-only SX UT, is equipped with a conventional UT channel for pulse-echo, pitch-catch or TOFD inspection. Compared to the OmniScan MX2, the SX is 33% lighter and 50% smaller, offering an unprecedented level of portability for an OmniScan.

The OmniScan SX touch screen offers a full-screen mode option that maximizes visibility, essentially converting many menu functions into easy touch-screen operations. The intuitive interface provides smooth menu selection, zooming, gate adjustments, cursor movements, and text and value input. These, along with other premium integrated features, including easy-to-follow setup and calibration Wizards, a rapid refresh rate for both the S-scan and A-scan displays, and a fast pulse repetition frequency (PRF), make the OmniScan SX a highly efficient inspection tool.

The OmniScan SX is fully compatible with the extensive portfolio of Olympus scanners, probes and accessories, as well as with its dedicated software companions, NDT SetupBuilder and OmniPC. Combined, the complete family of software and hardware contributes to a streamlined and efficient inspection workflow, from design and setup to acquisition and analysis.

OmniScan MX2

The OmniScan MX2 and its MX predecessors have been leaders in the market from the day they were introduced. The top-of-the-line MX2 unit is equipped with advanced features such as:

Multigroup (ex: two PA probes or combined PA + UT).
Modular platform.
Up to 32:128 phased array configuration.
2 or 8 channel UT configurations.
Large 10.4
-in. (26.4 cm) touch screen.

The MX2 modular platform facilitates the upgrade path
—you can start with the module in your price/ performance range and upgrade later to one of the many other modules available

تجهیزات التراسونیک UT

Flaw Detectors OmniScan MX2

The result of over 10 years of proven leadership in modular NDT test platforms, the OmniScan MX has been the most successful portable and modular phased array test instrument produced by Olympus to date, with thousands of units in use throughout the world

Olympus now offers a new PA module with TOFD, a new UT module, as well as new software programs (NDT SetupBuilder and new OmniPC version) that expand the capabilities of the successful OmniScan MX2 platform and improve the workflow efficiency of nondestructive testing inspections.

More than an Instrument-A Solution Provider

The OmniScan MX2 is an important part of your inspection solution, and can be combined with other critical components to form a complete inspection system. Olympus offers a complete product range that includes phased array probes, scanners, analysis software, and accessories, all of which are integrated and packaged into rapidly deployable, application-specific solutions for a quick return on your investment. In addition, Olympus offers a high-quality global calibration and repair service, backed by a team of phased array application experts to ensure that you get the support you need.

Pressure Vessel Weld Inspection

A complete inspection of pressure vessel welds can be performed in a single scan using an OmniScan PA and manual scanner such as the HSMT series or a motorized scanner like the WeldROVER. By combining TOFD and PA in a single inspection pass, a significant reduction in inspection time can be achieved as compared with conventional raster scanning or radiography. Furthermore, inspection results are available immediately, enabling you to detect problems with welding equipment and fix them right away

Composite Inspection

Parts made of laminate composite materials pose an inspection challenge due to their various shapes and thicknesses. Olympus offers complete solutions for the inspection of carbon-fiber-reinforced polymer structures. These solutions are based on the OmniScan flaw detector, the GLIDER™ scanner, and dedicated probes and wedges designed for CFRP flat panel and radius inspection..

Weld Inspection of Small-Diameter Pipes

When coupled with the COBRA manual scanner , the OmniScan flaw detector is capable of inspecting pipes ranging from 0.84 in. OD to 4.5 in. OD. With its very slim design, this manual scanner is able to inspect pipes in areas with limited access. Adjacent obstructions such as piping, supports, and structures can be as close as 12 mm (0.5 in.)..

Manual and Semiautomated Corrosion Mapping

The OmniScan PA system with the HydroFORM scanner is designed to offer the best inspection solution for detecting wall-thickness reductions resulting from corrosion, abrasion, and erosion. In addition, this system detects mid-wall damage such as hydrogen-induced blistering and manufacturing-induced delamination, and clearly differentiates such anomalies from loss-of-wall-thickness. For this application, phased array ultrasound technology offers superior inspection speed, data point density, and detection