

RENTAL PRODUCTS CATALOG

MARCH 2023



RADIOGRAPHY



MAGNETIC PARTICLE



ULTRASONIC



VISUAL



PMI



HARDNESS TESTING



VACUUM BOX TESTING



MATERIAL TESTING EQUIPMENT



RENTAL EQUIPMENT

Industrial Radiography Inspection Equipment

| Item Number | Equipment Description |
|-------------|--|
| R0900a | Carestream - Industrex Laptop View Station |
| R1000a | Carestream - HPX-DR 3543 PE Non-Glass, Large Format Detector |
| R1010a | Carestream - HPX-PRO Portable CR System with Transport Case |
| R1020a | Carestream - HPX-1 CR System with Transport Case |
| R1025a | QSA Global - OpenVision DX Corrosion Under Insulation (CUI) RTR System |
| R1030a | Microtek - NDT-2000 Film Digitizing System with Automatic Film Feeder |
| R1040a | COMET - PXS EVO 300D X-Ray System with Transport Cases |
| R1050a | COMET - PXS EVO 4-Legged Tube Stand |

Magnetic Particle & Blacklight Inspection Equipment

| Item Number | Equipment Description |
|-------------|---|
| R1100a | Magnaflux - Y-2 AC Yoke with Detachable Cord |
| R1120a | Parker Research - DA-400 AC/DC Yoke |
| R1700a | Spectro-UV Clarity 365 UV-A Inspection Flashlight |
| R1705a | LABINO - UVG5 2.0 Series Midlight Headlight Kit |
| R1710a | LABINO - Apollo 3.0 Series Light Meter |

Ultrasonic Thickness, Flaw, Phased Array and Blocks

| Item Number | Equipment Description |
|-------------|---|
| R1200a | Olympus - 38DL Plus w/B-Scan Ultrasonic Thickness Gauge |
| R1221a | Sonatest - WAVE Ultrasonic Flaw Detector |
| R1230a | Sonatest - WAVE Accessory Kit (Transducers, Wedges, Cables & DSC Block) |
| R1222a | Sonatest - Veo3 Phased Array 32:128 with TOFD & Live TFM |
| R1240a | 4 Step Calibration Block (1018 Steel) |
| R1241a | 4 Step Calibration Block (304 Stainless Steel) |
| R1242a | 5 Step Calibration Block (1018 Steel) |
| R1243a | 5 Step Calibration Block (304 Stainless Steel) |

Visual Inspection Systems

| Item Number | Equipment Description |
|-------------|--|
| R1300a | Wohler - VIS 700 Plus HD Inspection Camera |
| R1320a | Wohler - Camera Trolley Kit w/ Stabilizing Sleeve for Light Ring |
| R2000a | Mitcorp - X1000 6mm x 7m (All Way Articulating) Complete Portable Videoscope Kit |
| R2005a | VSNDT - 6mm x 7m (All Way Articulating) Complete Portable Videoscope Kit |
| R2010b | ViewTech - VJ-3 UV-A (All Way Articulating) Complete Portable Videoscope Kit |

PMI Hand Held XRF Analyzers/ LIBS Carbon Analyzer

| Item Number | Equipment Description |
|-------------|------------------------------------|
| R1400a | ThermoFisher - Niton XL2 980 Plus |
| R1405a | ThermoFisher - Niton XL5 Plus |
| R1410a | ThermoFisher - Niton Apollo LIBS |
| R1420a | SciAps - Z 902C+ LIBS Analyzer Kit |

Miscellaneous Testing Equipment

| Item Number | Equipment Description |
|-------------|--|
| R1500a | Fischer - FMP30 Feritscope |
| R1600a | Teleweld - Telebrineller Hardness Tester Kit |
| R1610a | Proceq - Equotip 550 UCI Hardness Tester Kit |
| R1800a | 30" Flat & 18" Corner Vacuum Box System |
| R1900a | FLIR - E6-XT Infrared Camera including WiFi Inspection Kit |

RENTAL PROTECTION PLAN (RPP)

Protect Your Investment



| Rental Liability | Damage Protection |
|---|---|
| <ul style="list-style-type: none"> - Significantly reduces your liability for damaged or stolen equipment. - Avoid claims against your insurance. - The RPP gives you coverage when your business insurance leaves you exposed. | <ul style="list-style-type: none"> - RPP provides coverage for repairs due to accidental or incidental damage to equipment. - Damage resulting from abuse or misuse is not covered - abuse or misuse is defined as equipment used in an application it was not designed for or an application that exceeds the manufacturers' specifications. |
| Theft Protection | |
| <ul style="list-style-type: none"> - You are only responsible for a percentage of the replacement cost. - A police report must be filed and notification given to QED within 48 hours of the customer being made aware of stolen equipment. If a police report is not provided, the customer is fully liable for the entire cost of replacement. - In the event that the stolen equipment is recovered, QED will retain ownership. | |

| Plan Cost | Repair | Theft & Loss |
|------------------|--------------|--------------|
| 15% of List Rate | 50% Coverage | 30% Coverage |

Examples of RPP Savings

| 50% Coverage of Damage | | | 30% Coverage of Stolen Equipment | | |
|---|-----------|-------------|---|----------|-------------|
| <i>Damage HPX-DR 3543 System (R1000a)</i> | | | <i>Stolen FMP30 Feritscope (R1500a)</i> | | |
| | With RPP | Without RPP | | With RPP | Without RPP |
| List Rate (Monthly) | \$ 9,000 | \$ 9,000 | List Rate (Weekly) | \$ 320 | \$ 320 |
| RPP (15%) | \$ 1,350 | - | RPP (15%) | \$ 48 | - |
| Repair Cost (Mfg. Repair Cost) | \$ 50,000 | \$ 50,000 | Replacement Cost (Mfg. List Price) | \$ 5,750 | \$ 5,750 |
| RPP Benefit (50% of Repair) | \$ 25,000 | - | RPP Benefit (30% of Replacement) | \$ 1,725 | - |
| Total Customer Cost (Rental & Repair) | \$ 35,350 | \$ 59,000 | Total Customer Cost (Rental & Replacement) | \$ 4,393 | \$ 6,070 |

Don't go without protection! Ask for the RPP on your next rental!

All RPP is based on list rental rate. Customer is responsible for all rental rates up until the day of notification to QED. Ask your local QED office for more details on our Rental Protection Plan (RPP) Agreement.

RADIOGRAPHY

Item # R1000a

Carestream - HPX-DR 3543 PE Non-Glass, Large Format Detector

NEW NON-GLASS DR!

Carestream NDT once again introduces breakthrough technology for NDT field imaging with our new non-glass DR detector. The new HPX-DR Non-Glass detector design incorporates a tougher plastic material instead of glass for maximum durability against the rigors of NDT field work.

The HPX-DR Non-Glass detector virtually eliminates costly repairs for broken glass. We're so confident in the design and reliability of our new durable detector that we're offering a two-year warranty!

The HPX-DR detector is unique in design – coming standard with a rugged, weatherproof enclosure perfect for remote field work. Unlike other panels that claim a weatherproof design when used inside their protective carrying case, this detector has an IP57 enclosure rating without the protective case! With the HPX-DR you can stop wrapping your DDA panel in bags and keep working in rain, snow, mud or whatever Mother Nature throws at you!

- **REDUCED EXPOSURE** - DDA panels are highly sensitive. Combine this with the ability to do frame averaging and you will likely be able to reduce your exposure time and still capture the sensitivity needed for your critical inspection task.
- **FASTER** - Uses no disposable media in the process, eliminating cassette loading and unloading time, developing, processing and reloading for the next shot. The HPX-DR detector offers quick start up and calibration, and rapid image display after acquisition. Produce high quality digital images in seconds for immediate analysis.
- **EASIER** - The HPX-DR detector is lightweight and compact with an all-weather design that is simple to operate. In the lab, it can be operated on a powered tether and in the field it can run 100% on battery. With the 'hot swap' feature the panel can remain on when changing batteries, increasing uptime.
- **WIRELESS** - The HPX-DR detector can operate completely wireless giving the user full freedom of movement and minimizing set-up time on site. This is especially helpful for rope access teams looking for minimal weight, high sensitivity and a powerful wireless connection.



Mount kit with pipe cleats to reduce stress on the detector for pipeline imaging.

EXPOSURE INTERFACE BOX (EIB)

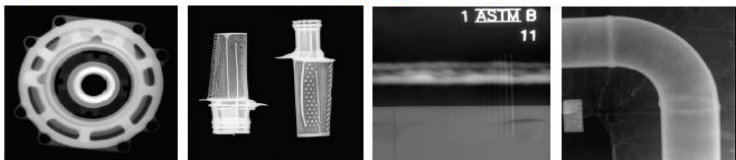
- Provides a standalone battery powered Wi-Fi access point to HPX-DR Detectors
- Optionally provides a communications interface to support select Golden pulse generator models.
- The pulse generator interface enables timing coordination of the HPX-DR Detector image capture with the Golden X-ray pulse generation.



EXPOSURE INTERFACE BOX (EIB)

- 139µ Pixel Pitch
- 139µ Spatial Resolution
- GOS DRX Standard Scintillator
- Portable at 12.5 lbs (5.7 Kg)
- Heavy Duty Shielding
- Exposure Range up to 3 MeV

HIGH RESOLUTION OUTPUT IN THE LAB OR IN THE FIELD



CarestreamNDT

RADIOGRAPHY

Item # R1010a

Carestream - HPX-PRO Portable CR System with Transport Case

The HPX-PRO CR system is built for high image quality, improved productivity and extreme portability. This next-generation system is lightweight (35 lbs.), portable CR imaging solution that is quick to deploy and rapidly produces high-quality images utilizing a new single-pass scan/erase protocol. The HPX-PRO's software incorporates a new user interface designed to get you set-up and imaging fast, with batch mode capacity to keep in pace with extreme process conditions like pipeline imaging. The new software tools also provide quick image analysis and customized reporting for generating unique customer reports in seconds. From hardware to software, to deep in the field and instant image sharing, the HPX-PRO is a complete system, designed to improve productivity.

Carestream spent a considerable amount of time working in the field with mobile x-ray technicians to help improve workflow. The HPX-PRO is only one piece of the total imaging solution. From shot time to final reporting, everything had room for improvement. And we met the NDT industries challenge.



Built for NDT

- Rigid aluminum construction with vibration damping feet
- Filtered air vents - replaceable air filter to keep out dust and dirt
- Protective plate feed doors seal off the unit from dirt and dust when in transport or not being used
- Detachable handle – mobile film labs don't have a lot of room – every inch counts
- Battery power mounts for in-use and storage mount for backup, 4 hours standby time at 45 minutes imaging time per battery
- Mounting bracket for security in transport on rough roads
- LED erase lamps for high efficiency and low power consumption

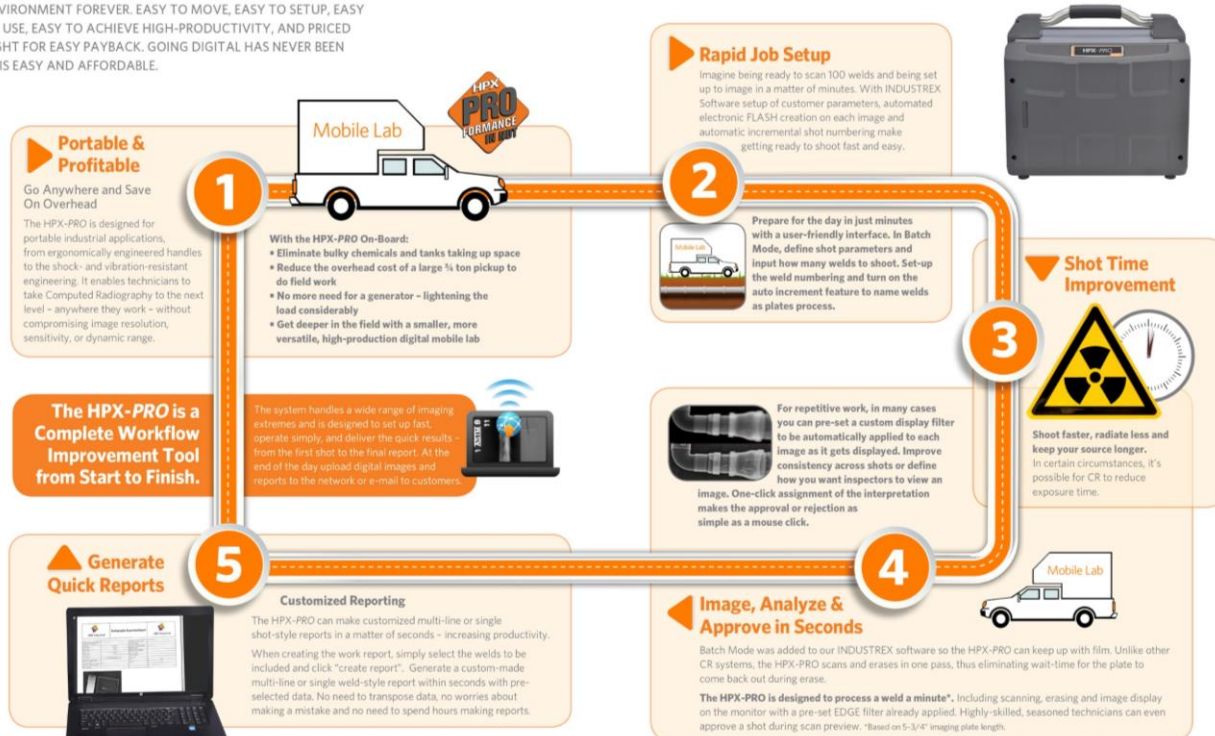
Designed for High Throughput

- Ships complete and easily installed in less than 5 minutes on-site by customer
- Maximum 6-inch wide x 96-inch length plate sizes
- INDUSTREX Digital Viewing Software installed and tested prior to shipping
- Custom EDGE image display filter with 10 predefined filters including 2 specifically for gamma work
- 25 micron, 50 micron & 100 micron resolution

PRO-fessional Workflow for High PRO-ductivity

THE HPX-PRO WILL CHANGE THE WAY YOU WORK IN A MOBILE ENVIRONMENT FOREVER. EASY TO MOVE, EASY TO SETUP, EASY TO USE, EASY TO ACHIEVE HIGH-PRODUCTIVITY, AND PRICED RIGHT FOR EASY PAYBACK. GOING DIGITAL HAS NEVER BEEN THIS EASY AND AFFORDABLE.

HPX-PRO On-the-Go



RADIOGRAPHY

Item # R1020a

Carestream - HPX-1 CR System with Transport Case

The HPX-1 Plus offers many improvements. Improved optics for better imaging, up to 30% faster throughput on long saturated plates (very high exposure), an improved imaging plate transport system to protect imaging plates, higher mechanical reliability and a more user-friendly DICONDE compliant software for the best experience in digital imaging.

The HPX-1 Plus is a full width CR reader capable of running extra long imaging plates. The system has a wide dynamic range with high sensitivity, making it ideal for almost any type of imaging application. Whether you're using a gamma or X-ray source, the HPX-1 Plus' high sensitivity can help reduce shot time. It shows exceptional performance in weld applications, delivering weld-quality images consistently and dependably.

Carestream's award-winning HPX family of digital products have improved field reliability and enhanced the capabilities in the NDT marketplace. Long plate and multi-plate scanning combined with SmartErase boosts output productivity so you can get more done in a day than ever before. Our exclusive positive pressure filtered air system keeps dust and dirt out for cleaner images in both the laboratory and in remote operations. With a shock and vibration resistant design your team can image in the harshest of environments bringing a new level of confidence to digital imaging in the field.



Ultra High Image Quality

Pixel Pitch: 25µm, 35µm, 50µm and 100µm operation

Spatial Resolution: 50 microns or better (12 lp/mm)

Laser Spot Size: 20µm (measured at 85% of peak)



Positive Pressure Fans for Dirty NDT Environments

Let's face it, NDT environments can be dirty. Drum and flat bed style scanners collect contaminants on the surface where they can be transported into the system or into the optical path and be imaged. HPX-1 Plus is the only CR system on the market that has positive airflow to keep contaminants outside the unit.



Dual Air Filters (including HEPA)

Clean air is critical to keeping the equipment cool and the imaging areas clean. The HPX-1 Plus is the only system outfitted with dual filters to make sure the environment is kept outside.



Image Plate Flexibility

HPX systems are one of the most flexible CR systems on the market capable of handling raw imaging plates, multiple plates at one time, custom cut sizes (with Plate Carrier), hard cassettes and long Plates (up to 60") without special feed guides.



Plate Transportation System

The HPX-1 Plus plate transport system has always minimized contact with the imaging plate. Unlike magnetic plate drive systems that require uniquely designed imaging plates (which can be costly) or drum systems that advise using plate protective covers to avoid plate damage, the HPX-1 Plus runs plates phosphor side up with a proven transport system that won't damage your imaging plates.



Improved Imaging

HPX-1 Plus' improved PMT's improve its sensitivity and reduce unwanted artifacts. CR systems often also make it possible to lower your exposure while still achieving the required sensitivity. Our adjustable PMT and Laser Power allow you fine tune every image for optimum capture every time.



Powerful Software

HPX-1 Plus is operated using our powerful INDUSTREX software that includes a host of features for measurement, custom designed EDGE Image Filters, full DICONDE compliance, and many other tools designed specifically for NDT.

HPX-1 Plus



RADIOGRAPHY

Item # R1025a

QSA Global - OpenVision DX Corrosion Under Insulation (CUI) RTR System



Corrosion Under Insulation (CUI) Scanning. Heat Tracer Inspection. Weld Location Mapping.

OpenVision DX is an easy-to-use, digital x-ray system with live video output for real-time radiographic inspection and reporting. A patented combination of a c-arm mounted 70 kV x-ray source and a digital imager allows you to observe external defects as small as 0.010" (250 μ m) on insulated piping.

OpenVision DX can be used on various insulation and cladding combinations, including mineral wool and calcium silicate with galvanized steel, stainless steel, and aluminum cladding up to 36 inches in total diameter.

OpenVision DX enables the inspection of hundreds of feet of insulated piping to quickly identify indications of corrosion or corrosion precursors such as scaling, external wall loss, and wet insulation. Pictures and real-time videos are recorded and downloaded with the touch of a button for rapid review and reporting.

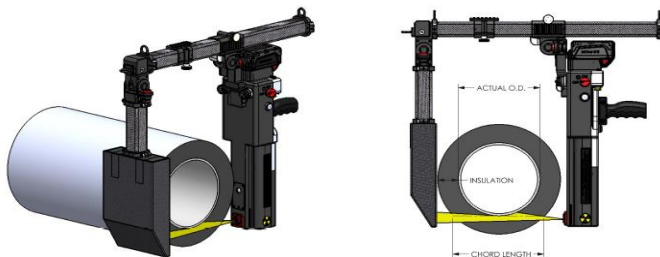
OpenVision DX is IRR99/IRR17, ANSI 43.5, and CE compliant.

The OpenVision Method

OpenVision is a nondestructive testing (NDT) method using real-time radiography to quickly scan insulated piping systems for indications of corrosion or corrosion precursors, weld mapping, and heat trace location.

Benefits Include

- High-Speed Scanning
- Easy Operator Interpretation
- Minimal Operator Training
- Reduced Missed Calls
- Video and Still Image Recording
- Simplified Report Generation



Item # R1030a

Microtek - NDT-2000 Film Digitizing System with Automatic Film Feeder

NDT-2000 Film Digitizing System is a down-to-earth digitization solution developed exclusively by Microtek for use in NDT/RT industry. Besides retaining great functions of the original MII-900 Plus, such as 1200-dpi (21 μ m) optical solutions, 16-bit grayscale, and exclusive AFF and multi-channel trays, NDT-2000 adopts better optical density via innovative image technology and therefore it can enrich image layers and meet with high requirements about image quality from the NDT/RT industry.

Features

- Equipped with 1200 dpi (21 μ m) resolutions, 4.5D optical density, and 16-bit grayscale
- Optional Automatic Film Feeder (AFF) and Multi-Channel Tray enhance working efficiency
- Maximum scanning area is up to 14" x J33200", supporting most sizes of industrial films
- Bundled with multi-functional image management software, including functions of file building, searching, measuring, annotating, zooming, report making, saving and burning; meeting with the DICOM standard
- Supports image formats of DCM, BMP, JPEG, and TIF

Scan Control Module

- Resolution: 150, 300, 600, 1200 dpi
- Scan Area: Up to 14" x 200"
- Support: AFF, Multi-tray Feeder
- Depth: 8 or 16 bits (Default)
- File: Tiff, JPEG, JPEF 2000, BMP, etc.
- Integration: TWAIN

Image Archive and Viewer

- File: DICOM
- Local/network database
- Image Enhancement Tools
- Filters
- Report
- Send images over DICOM network protocol

Software selection:

AcuScreen NDT Pro

MICROTEK



**ScanWizard-Industry
(Bundled)**

RADIOGRAPHY

Item # R1040a

COMET - PXS EVO 300D X-Ray System with Transport Cases

comet



Built to Last - It's Robust and Reliable

Designed and built in Denmark; the EVO systems are comprised of the best components and assembled with the utmost care - making them reliable, long-lasting, and a sound investment. They are fitted with a high-quality metal ceramic X-ray tube, and the robust composite casing now protects all vital parts even better. The systems meet the IP65 standard, making them fully operational in dusty and wet conditions.

It's Light-weight and Easy to Handle

The ergonomic design and the low weight of 64 lbs. make the EVO 300D easy to handle and re-position. A broad temperature range from -4°F to +122°F makes the EVO systems reliable and ensures smooth operation even in extreme environments. The intuitive interface allows for a smarter workflow.

High Performance Capabilities

Built to meet the highest international safety standards, each unit is individually tested and measured for safety and accuracy. The EVO 300D features a combination of 300 kV and 900 W constant potential X-ray power for high penetration - making it well suited for all heavy-duty field inspection jobs.

EVO 300D

Nominal voltage: 300 kV

mA adjustment: 0.5-4.5 mA

Weight: 64 lbs.

Beam type: Directional

Max. X-ray power: 900 W

Focal spot, EN 12543: 3.0 mm

CONTROL EVO

Built to Last - It's Robust and Reliable

Designed and built in Denmark, the CONTROL EVO is based on state of the art technology. The unit is fitted with a high quality die-casted aluminium chassis protecting all vital parts. It meets the IP66 standard, making the CONTROL EVO fully operational in dusty and wet conditions. It is reliable, long lasting and a sound investment.

Smarter Workflow

It's Light-weight and Easy to Handle

The ergonomic design and shoulder strap makes the CONTROL EVO easy to handle and reposition. All information is clearly displayed on the 6.5 inches high contrast color screen. The unit features an exposure calculator and has an intuitive interface with a wide range of advanced functionalities – equalling a smarter workflow.

Compatible

It's Backwards Compatible and Future-proof

The CONTROL EVO is backwards compatible with the EVO portable X-ray systems. It has an Ethernet interface allowing for remote diagnostics and software updates. The USB interface facilitates, control of the system via a USB-to-Serial converter, saving diagnostics reports and can also be used for software updates in the field. It even has Bluetooth™ for future applications. All of these make the EVO system smart and future-proof.

Exposure Calculator

The advanced built-in exposure calculator ensures fast exposure calculations and uniform results. It can calculate the minimum required film focus distance optimising the exposure time. It accommodates the use of a wide range of films, materials and settings.

Exposure calculator

Calculate exposure

Tube

Material

Film manufact

Film type

FFD

Density

Thickness

Voltage

Current

Time

EVO 300D

☒ Auto-cal

[200]

[3.5]

[225]

[1.0]

[as pro]

Clos

MAGNETIC PARTICLE

Item # R1100a

Magnaflux - Y-2 AC Yoke with Detachable Cord



AC Electromagnetic Yoke

The Y-2 is an AC electromagnetic yoke, ergonomically designed to improve productivity and reduce operator arm and wrist fatigue. The yoke generates a strong AC magnetic field for the detection of surface indications during magnetic particle testing.

Lightweight with an ergonomic grip and trigger, the Y-2 is designed for the rugged demands of field inspection. Featuring a field swappable cord and isolated trigger switch; the Y-2 is easily serviceable because a severed cord should not stop a job from getting done.

Benefits

Increase inspector productivity and reduce physical fatigue

- Less arm strain, wrist fatigue and physical stress help operators get more done due to the lightweight and ergonomic design.
- Easily position the yoke in any direction with lightweight, heavy-duty and powerful electronics components.

Keep tools in service with a design that's built to last

- Cords and triggers can be easily replaced, so work doesn't stop and tools aren't scrapped due to accidental damage.
- Prevent dust and dangerous water damage with an IP54 o-ring sealed housing.

Features

- IP54 sealed housing resists dust and water
- Field-swappable power cord
- Isolated, replaceable trigger switch
- Steel shields for leg protection
- Exceeds ASTM lifting specifications
- Convenient carrying case supplied with all yoke shipments



Ergonomic Handle & IP54 Sealed Housing Resists Dust and Water



Item# R1120a

Parker Research - DA-400 AC/DC Yoke



AC/DC Electromagnetic Yoke

The DA-400 Contour Probe is a portable, self-contained instrument designed to produce a magnetic field on or within ferrous-magnetic materials.

The selective AC and DC functions are built into a single reliable instrument. The AC mode produces an intense AC field for detection of surface defects and demagnetizing after inspection. The DC mode produces an intense Half Wave Rectified (DC) field for detection of some subsurface defects.

Controls and solid-state electronics are contained within the high impact molded housing. Articulating legs allow the AC or DC field to be applied to the precise area of inspection on nearly any part of the surface shape... in the lab, factory or field site.

Features

- High-Impact, Glass-Filled Nylon Housing
- AC & Half Wave Rectified (DC)
- Exceeds ASTM Lifting Standards

UV-A EQUIPMENT

Item # R1705a

LABINO - UVG5 2.0 Series Midlight Headlight Kit

UVG5 2.0 Series UV LED Headlight (Midlight)

Extremely durable! Compact, powerful and adjustable headlight that frees your hands during inspections. The UVG5 2.0 UV LED Head Lamp is penetrant resistant and includes a current regulator to provide a homogeneous beam. Battery run time is 14 hours on the Midlight model and includes an acoustic battery indicator that signals the battery time left. All models can be re-charged fully, within 3 hours, without removing batteries.

Specifications

- UV Intensity: 9,000 $\mu\text{W}/\text{cm}^2$
- UV Coverage: \varnothing 3.8 Inch
- Battery Run Time: 14 Hours
- Compliance: ISO 3059, ASTM E3022, AITM6-1001 & Pratt & Whitney

Features

- Adjustable Light - The lamp can be adjusted to three different angles.
- Powered by two lithium batteries that can be recharged either by a cigarette outlet in a vehicle, a wall outlet or a PSU charger (without removing the batteries).
- A high quality UV LED with respective high quality white light block filter that does not suffer from solarization.
- Two different white lights: (a) a strong "search" white light for use in dark and tight spaces such as pipes and tanks and (b) a visual inspection white light.
- On/Off switch is positioned at the back to prevent accidental activation.

Kit Includes

- UVG5 2.0 Midlight Headlight
- Four batteries and charging kit for wall outlet and car cigarette outlet
- Power supply unit to charge without removing batteries
- UV-A Glasses



COMPLIES WITH
ASTM E3022-2018
Standard

COMPLIES WITH
Airbus AITM6-1001
Testing Method

Item # R1710a

LABINO - Apollo 3.0 Series Light Meter

Apollo 3.0 UV & White Light Meter w/ Case

The Apollo meter is engineered for use in Non Destructive Testing. The visible light sensor is specially designed to measure visible light at short wavelengths (near UV) and starts measuring at 380 nm. The spectral sensitivity of the Apollo visible light sensor closely relates to the reception of the human eye (CIE Standard Observer).

Features

- World's first wireless UV and white light meter
- Tested to comply with ISO 3059-12 Standard
- Red LCD screen for easy readings in the dark
- Visible light readings delivered on your choice of lux or foot candles
- Reader unit powered by three "AA" batteries that last 100 hours of active measurement

Why a Wireless Sensor?

- Keeps the sensor stable without movements from connecting cables
- No damaged cables as in traditional meters
- Readings of up to 16 feet from sensor



ULTRASONIC - THICKNESS & FLAW DETECTION

OLYMPUS



4-Step and 5-Step Test Blocks
(Carbon Steel and Stainless Steel)

Item # R1200a

Olympus - 38DL Plus w/B-Scan Ultrasonic Thickness Gauge

38DL PLUS Ultrasonic Thickness Gauge



The 38DL PLUS is an innovative instrument that signals a new era in ultrasonic thickness gauging. Ideally suited for almost every ultrasonic thickness application, this handheld thickness gauge is fully compatible with a full line of dual and single element transducers. The versatile 38DL PLUS can be used in applications ranging from wall thinning measurements of internally corroded pipes with dual element probes to very precise thickness measurements of thin or multilayer materials with single element transducers.

The 38DL PLUS comes standard with many powerful but easy-to-use measurement features and a host of application-specific software options. Its sealed case is designed to meet IP67 requirements to withstand the rigors of very wet or dusty environments. The color transfective VGA display provides superior readability from bright sunlight to complete darkness. It features a simple, ergonomic keypad that can be operated with the left or right hand for easy access to all functions.

Key Features

- Wide thickness range: 0.003 in. to 25 in. depending on material and transducer selection
- Corrosion thickness gaging with dual element transducers
- THRU-COAT and Echo-to-Echo measurements on painted and coated surfaces
- Standard resolution of 0.01 mm or 0.001 in. for all transducers
- Time-based B-scan mode; 10,000 reviewable readings per scan
- Designed for EN15317

Item # R1221a

Sonatest - WAVE Ultrasonic Flaw Detector

WAVE - Interactive Flaw Detector

Next generation technology at your fingertips

What if you could tailor the settings on your UT device and alter it to your own process and people's needs? An instrument where all the useful parameters are pre-set and available in less than two clicks? Now you can.

Introducing **WAVE** by Sonatest. It integrates the latest technologies available in order to create a revolution in the ultrasonic non-destructive testing equipment market.

Not only is it innovative, but the customisable interface also optimises the daily workflow, and a unique and embedded interactive scan plan, with ray-tracing capability and simulation tools, consolidates your results.

Its WiFi capability allows you to access it anywhere in the field, eases data transfer, application installation and manages calibration date and software version.



Mitigate false calls with the new WAVE Interactive Scan Plan

The **WAVE** Interactive Scan Plan has been developed to ease diagnostics on the inspected part. The scan plan can reproduce complex geometries such as curved surfaces and T-Joints. Combined with a real-time Raytracer, this unique feature facilitates the distinction between a real flaw and a geometrical indication, thus avoiding unnecessary repair.

Reach performance & conformity with the Wave Application Concept

The **WAVE** Application Concept combines conformity and performance allowing the operator to customise the user interface according to his/her specific procedure. A lean manufacturing philosophy means less training and long-term financial benefits. The intuitive user interface with an easy to use display will guarantee workflow optimisation as well as preventing potential operational errors.

ULTRASONIC - PHASED ARRAY

Item #

R1222a

Sonatest - Veo3 Phased Array 32:128 with TOFD & Live TFM



veo³ | Inspect with Confidence

Retaining the best features of the established Veo line, the new Veo3 now offers a PCAP touch interface, user templates, and more importantly, live TFM.

Key design elements of the Veo3 are user and performance focused. Based on superior and innovative digital technology and its live concurrent multi-scan / multi-technique capabilities, the Veo3 truly helps you to **inspect with confidence**.

The Veo3 multi-techniques allow inspectors to keep inspecting as they always have, with no need to change their current workflow and by doing so, users can benefit from the additional resolution and sizing performance of TFM while carrying out an already approved, trusted and reliable procedure.

Multi-technique Advantages

Even though TFM is now a ubiquitous inspection method, correct configuration and selection of the most appropriate TFM propagation mode for the application is a very real challenge. Comparing modes is frustrating and time consuming. With Veo3, having the ability to simultaneously show a PA and several live TFM scans it is now easier than ever to identify and size flaws with high P.O.D. and increased technician confidence.

The advanced technology in Veo3 also allows the addition of a TOFD scan to the PA and TFM live scans. Inspect with confidence when simultaneously using three complementary inspection techniques.



No Need for Additional Qualification

The **Veo3** multi-technique functionality, combining phased array with TFM, allows users to benefit from the additional resolution and sizing performance of TFM – all while performing inspections to an already approved phased-array procedure. No need to change. No need to go through a new approval process.

Focus Where it Matters

The **Veo3** has all the flexibility necessary to help you solve challenging applications. Its unique architecture can generate up to six live TFM (including TFMiTM) scans, produced from multiple FMC sources on different probes. This allows the end-users to focus where it matters, solving the most difficult inspections.

Single Scan of Thicker Parts

The **Veo3** can generate TFM images of up to 500K pixels with a maximum resolution of 100 pixel per mm without limiting the number of pixel per axis. Combining Time Corrected Gain on the TFM image, the technician is able to inspect thicker parts with superior flexibility whilst remaining ASME compliant. And all with a single scan. The **Veo3** has what it needs to answer your daily challenges.

Flaw Characterisation and Assessment has never been this easy in difficult applications.

We Revolutionised TFM Imaging

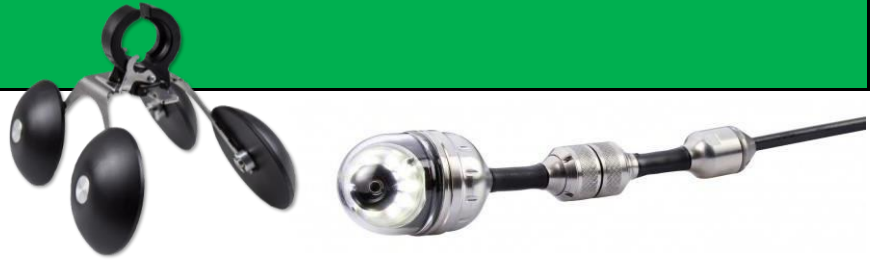
The **Veo3** can combine up to 4 live TFM modes. As known as TFMi, the details of the defects have never been so close to the reality. That imaging scan provides a high-precision height assessment and an improved shape accuracy compared to conventional PA inspections. The ability to characterise the type of defects is now effortless. This technique has indeed demonstrated superior results on weld analysis.



Simplicity | Capability | Reliability

VISUAL

WÖHLER



Item # R1300a

Wohler - VIS 700 Plus HD Inspection Camera

Wohler VIS 700 HD Inspection System

The Wohler VIS 700 inspection camera offers exactly what professionals have been waiting for: razor sharp high definition images, a focus function for precise inspection, and now wireless locating. The Wohler VIS 700 is the ideal inspection camera for waste water pipes, flue gas and ventilation lines as well as NDT and plumbing applications.

Fully Digital Camera System

A new digital high-resolution sensor assures amazingly sharp images. With the Wohler VIS 700, professionals are able to plan their maintenance services on the basis of clearly visible facts. The displayed level indication ensures you to keep orientation in the pipe. The camera display shows the camera head position and angle for ease of navigation. The home function allows you to realign the camera head straight forward when needed. HD images are displayed for you on the brilliant, touch screen high-resolution monitor.

Individual Control of Sharpness

The focus function via touch screen or joystick makes it possible to precisely control the depth of focus. A simple tip on the joystick ensures a precise, crystal clear image on the screen. Additional settings and extras, such as the touch screen keyboard, are accessible by tapping the touchscreen monitor.



VIS 700 App

The free Wohler app allows control and video streaming on your smartphone / tablet. It can't get much more comfortable.



HD-TOUCHSCREEN

Adjustable to individual requirements, reliable grip when operating the monitor



HD

TOUCH
SCREEN



VOICE
RECORDING



VIDEO
FUNCTION



PHOTO
FUNCTION



HOME
FUNCTION



EASY TO
CLEAN



LOCATOR
TRANSMITTER



WIRELESS LAN
TRANSMISSION



POWER
UP TO 4h



VIS 700 APP



Mitcorp



AVIATION



POWER GEN



PETROCHEMICAL



OIL & GAS



AUTO



QUALITY

Item # R2000a

Mitcorp - X1000 6mm x 7m (All Way Articulating) Complete Portable Videoscope Kit

Key Features:

- Super Image Quality - Sharp, Clear and Bright
- 7" TFT LCD - Protected by Oil and Scratch Resistant Tempered Glass
- 1m Drop Resistance
- 800 x 480 Display Resolution
- 640 x 480 Video (with Audio)/Photo Resolution (jpeg)
- Rechargeable Li-Battery lasts for 5 Hours
- LED Backlight Function Keys: Ideal for Dark Environment operation
- Capacitive Touch Technology for Best Performance and Durability
- Neck/Hand Strap: Convenience and Great for Operation
- Light Weight: Only 2.86 lb
- IP57 Protection (Main System) - Drop and Water Proof
- Provide Flexibilities in Narrow Spaction Inspection
- 360° Articulation
- USB Reader: Simply connect your PC to Retrieve your Data from the SD Card, Card Reader is not Necessary



Temperature / water resistant layer
stainless coil layer

High Density Stainless Steel Braided Tube provides Durability, Flexibility and also Rust, Water and Temperature Resistance

VIEWTECH BORESCOPIES

Introducing the New 3.9mm & 6.0mm Ultraviolet VJ-3 Video Borescope - Available in Lengths ranging from 1.0m to 3.0m

Item # R2010b

ViewTech - VJ-3 UV-A (All Way Articulating) Complete Portable Videoscope Kit

Key Features:

- 3.5" IPS anti-glare LCD, 640*480 Resolution
- Effective Pixels: 450,000 pixels
- Articulation Control: Thumb-actuated, mechanical rocker
- Joystick Lock: Automatic
- Control Buttons: Image Capture, video Capture, LED control, frame rotation, freeze frame, 4X zoom, menu access / navigation
- 6 Super high-intensity Ultraviolet LEDs
- Wavelength 365nm / Intensity $\geq 1200\mu\text{W}/\text{cm}^2$
- Internal Storage: 16GB SD Card / 10,000 photos or 8 hours video
- Image Format: JPEG (optional date and time stamp)
- Video Format: AVI (optional date and time stamp)
- Rechargeable Li-Battery lasts for 4 Hours
- Light Weight: Only 2.2 lbs.
- Operating Temperature (Base Unit): -5 - 120°F
- IP Rating (Base Unit): IP54
- Operating Temperature (Insertion Tube): 15 - 120°F
- IP Rating (Insertion Tube): IP67



POSITIVE MATERIAL IDENTIFICATION (PMI)

ThermoFisher SCIENTIFIC

Positive Material Identification is a well established analytical materials testing and materials identification technique used throughout industrial plant as well as within the metal assembly and component manufacturing industries. It guarantees a material's elemental composition as required for safety compliance and quality control.

Failures at petroleum, petrochemical and power generation facilities can have catastrophic consequences. Positive Material Identification (PMI) programmes allow plant operators and maintenance professionals to test critical process components before and after they are put in service, so they do not merely rely on the suppliers' certificates.

Item # R1400a

ThermoFisher - Niton XL2 980 Plus

Niton XL2 Plus Handheld XRF Analyzer

Confidently perform elemental analysis with the Thermo Scientific™ Niton™ XL2 Plus handheld XRF analyzer. When durability, performance and productivity are top of mind, industrial businesses rely on the Niton XL2 Plus handheld XRF analyzer for fast results and low detection limits. Identify pure metals and alloys, or obtain geochemical data, the Niton XL2 Plus provides operators the ability to scan a broad range of materials in one versatile analyzer.

Rugged and Reliable

When durability, performance and productivity are top of mind, industrial businesses rely on the Thermo Scientific Niton XL2 Plus handheld XRF analyzer. Offering superior analysis and enhanced robustness, the Niton XL2 Plus is built for the way you work. Founded on a reputation of dependability and reliability, you can count on the Niton XL2 Plus for years to come.

Purpose Built

Maximizing form and function, the Niton XL2 Plus is engineered to conquer your toughest environments. Analyze sharp items while minimizing puncture risk with standard Detector ProGuard protection. Backed by a certified IP54 rating, the Niton XL2 Plus is sealed against moisture and dust, ensuring uninterrupted operation, even in the harshest of industrial environments.



Item # R1405a

ThermoFisher - Niton XL5 Plus



Small Size, Big Power

Fast, accurate, versatile XRF analysis

When versatility, low limits of detection (LODs) and high sample throughput are critical, industrial businesses rely on the Thermo Scientific Niton XL5 Plus handheld XRF analyzer. Providing customers with solutions designed to meet their most demanding applications, the Niton XL5 Plus maximizes performance and productivity.

Rapid Results

Powered by a 5W x-ray tube, the Niton XL5 Plus generates fast and accurate results. An upgraded graphene window ensures optimum sensitivity for each measurement - even light elements. Results are displayed in real time, enabling you to make faster decisions. And with a standard system health check designed to verify operating parameters, your device will operate smoothly.

Design

Tight spots are no match for the Niton XL5 Plus. Discover expanded field use with improved compact geometry and ergonomics. Reaching tight welds, corners and joints, are no longer defined as awkward test spots for the Niton XL5 Plus. Standard Detector ProGuard protection also reduces risk when measuring sharp items.

Functionality

ivid new icons and an application interface ease navigation and configuration. Utilize swipe and touchscreen functionality, even with a gloved hand. Optional directional keys provide added usability. A hot swap battery keeps you up and running when it's time to replace a low battery. Micro and macro cameras enable precise sample positioning and collect images for better record keeping. Finally, WiFi accessibility automatically transmits data from your device to PC.

ThermoFisher
SCIENTIFIC

Size and Weight

Make light work of heavy industrial tasks utilizing the Niton XL5 Plus. Weighing an industry leading 2.8 pounds, the Niton XL5 Plus is the lightest handheld XRF analyzer available for elemental determination and alloy identification. It's small footprint and featherweight design reduce operator fatigue while increasing productivity.

POSITIVE MATERIAL IDENTIFICATION (PMI)

Item # R1410a

ThermoFisher - Niton Apollo LIBS

Niton Apollo Handheld LIBS Analyzer for Carbon Equivalency Testing

Discover the Thermo Scientific Niton Apollo handheld LIBS analyzer. Powered by laser induced breakdown spectroscopy, the Niton Apollo specializes in carbon analysis for metals and alloys. Part of the industry leading family of Niton products, the Apollo offers unmatched speed, performance and portability. Unleash the possibilities- bring the power of lab analysis to the field! Request a demo and speak with a member from our team to learn more about the Niton Apollo.

Analytical Performance

Designed to provide fast analysis and low detection limits, the Niton Apollo ensures superior results. Powered by an effective laser and high purity argon purge, the Niton Apollo delivers lab quality analysis in about 10 seconds. Users can calculate carbon equivalency and perform advanced averaging, while also identifying alloy grades and programming pseudo elements. Data is displayed in real time, enabling fast and efficient decision making.

Expanded Field Use

Avoid maneuvering heavy equipment into tight spaces. Weighing just 6.4 pounds (2.9 kilograms), the Niton Apollo transforms a traditional laboratory, or cart-mounted Optical Emission Spectroscopy (OES) system, into a highly portable handheld analyzer. Experience a whole new range of motion as you seamlessly climb up pipelines and into trenches. A tapered nose helps users achieve even more coverage to measure difficult to reach areas, such as tight welds and cavities.



ThermoFisher
S C I E N T I F I C

Item # R1420a

SciAps - Z 902C+ LIBS Analyzer Kit



True Portability

Only 4.35 lbs with battery and a narrow profile for accessing the tightest spaces; an aerospace-grade aluminum body for improved performance in high ambient temperatures; and a re-designed, Android-based user-interface all make this system the most usable platform on the market. Wifi and Bluetooth with GPS capability to print, email, and connect to virtually any information management system for efficient, real-time test data and reporting.

A new standard for NDT/PMI

The world's first handheld analyzer to deliver carbon content just got better. SciAps Z-902 Carbon is the key to rock-solid, in-field analysis for alloys. Confirm alloy type and grade 300 series stainless into L, H, and S series. Determine carbon equivalents for welding. Perform material verification pre-and post-fabrication.

Identification of stainless steels and low alloy steels, including carbon analysis down to 70 ppm and instant CE (carbon equivalence) calculations using our uniquely powerful laser, onboard argon purge and high-resolution spectrometer.

- On-board argon delivers results for pennies per test.
- Powerful laser delivers 5-6 mJ/pulse on the sample, with a 50 Hz repetition rate. High energy and high repetition rate mean a clean burn.
- Laser raster can rapid-sample multiple locations in one test for fuller data.
- Analysis averaging available for multi-shot averaging and data rejection.
- Sample alignment micro-camera and LED Spotlight focus just where you want.



SciAps

190 nm – 420 nm spectrometer

Includes a dedicated spectrometer for superior resolution in the 190 – 230 nm range

MATERIAL TESTING EQUIPMENT

Item # R1500a

Fischer - FMP30 Feritscope



Measurement of the Ferrite Content in Austenitic and Duplex Steel

Sometimes, knowing the exact ferrite content is essential. Especially wherever austenitic steels and duplex steels have to withstand heat, aggressive chemicals and/or high pressure. If the ferrite content is too low, for example in the area of weld seams, this can lead to a loss in strength. On the other hand, too-high ferrite content reduces corrosion resistance, toughness and ductility. But if you check the ferrite content with the FERITSCOPE FMP30, you know for sure.

This handy instrument lets you measure the ferrite content anytime, anywhere – it's fast, precise and non-destructive. The advantages of the robust handheld device come to the fore when used in chemical plants, energy plants and process engineering plants. The wide variety of Fischer probes makes it easy for you to measure the ferrite content, even if the spot is hard to reach. Just apply the probe; the FERITSCOPE FMP30 does the rest.

Simple and Quick Measurements

It is easy to measure the ferrite content accurately when using the FERITSCOPE FMP30. Upon probe placement on the surface of the specimen, the reading is displayed automatically and stored in the instrument. The probe can also be placed onto hard to reach areas. For such applications, the instrument features an "external start" function to trigger the measurements with the push of a button. This is ideal for measurements in pipes, bore holes or grooves.

For easy ferrite content measurements along a weld seam, the instrument offers the "continuous measurement capture" function. When scanning the weld seam with the probe positioned, the continuous readings are captured and stored. This provides a ferrite content profile along the weld seam.

VACUUM BOX TESTING



Item # R1800a

30" Flat & 18" Corner Vacuum Box System

Vacuum box testing is a non-destructive examination used when trying to locate weld seam leaks. A vacuum box and a pump or compressor create a high or low pressure vacuum while a detergent solution is applied to the test area. The detergent bubbles, making leaks visible within the created pressure envelope. QED utilizes systems compliant with ASTM E515.

Simple to Operate

The air ejector has no moving parts and no lubrication is necessary. After applying leak detection fluid along the seam, simply place the vacuum device over the area to be detected and open the air valve.

Rugged Yet Lightweight

Our shockproof Vacuum Devices are built with lightweight acrylic which can be heat formed for special applications. The tough rubber gasket is designed to provide a maximum seal.

Applications

- Lap welds, butt welds, and shell to annular welds
- Piping systems and pressure vessels
- Tank bottoms
- ERW seamed pipe in pipelines
- Objects on which a pressure differential can be created

Kit Includes

- 30" Flat & 18" Corner Vacuum Box
- Vacuum Pump
- 8' Vacuum Pump Hose with Quick Disconnects
- Type 1 SHERLOCK 5-Second Leak Detector, Spray Bottle



HARDNESS TESTING



proceq

equotip®

Item # R1610a

Proceq - Equotip 550 UCI Hardness Tester Kit



Proceq's Equotip enables portable hardness inspection of almost any object, polished parts and heat-treated surfaces. The hardness measurements are made by using the dynamic rebound testing method according to Leeb, the static Portable Rockwell hardness test and the Ultrasonic Contact Impedance (UCI) method. The rugged Swiss-made metal NDT hardness testers are designed for portable hardness testing in the lab, in the workshop, at production facilities or on site. Equotip Live is the latest innovation featuring a wireless impact device, mobile app, real-time data sharing and cloud backup.

Equotip 550 UCI

The leading Ultrasonic Contact Impedance measurement system with advanced capabilities

- Unmatched versatility owed to HV1, HV5, and HV10 test loads in a single probe
- Patented adjustable test load for higher accuracy on a wide range of applications
- Powerful measurement device on the market packed in a rugged chassis

Applications

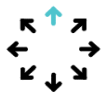
- Ultrasonic Inspection of Welds
- Ultrasonic Inspection of Cast and Forged Metals
- Ultrasonic Inspection of Heat-treated Surfaces

Adjustable test load and a rugged touchscreen with enhanced software and analysis features



Efficiency

Efficiency to the power of 2 thanks to three loads in one single probe HV1, HV5, and HV10 and possible combination with Portable Rockwell and Leeb in one device.



Productivity

Features with wizards, user guidance, personalised views, and on-screen feedback to reduce measurement inaccuracies that can be caused by the operator.



User Experience

User guidance, smart material, and probe selection wizards, and ready-to-go reports through a powerful built-in reporting feature facilitate even short measurement campaign.



Software / Workspace App

Tech Specs



Sensor

Tech Specs



SWISS  MADE

Display 7" color rugged touchscreen unit with dual core processor

PC Software Equotip Link allowing direct reporting and custom reports

Memory Internal 8 GB flash memory (> 1'000'000 measurements)

Native Scale HV (UCI)

Available Scales HB, HV, HRA, HRB, HRC, HR15N, HR15T, MPA

Available Probes UCI (Adjustable load HV1, HV5 and HV10)

Combination with other Methods Leeb, Portable Rockwell

Average Roughness Ra (μm / μinch) 12.5 / 500

equotip®

MISCELLANEOUS TESTING EQUIPMENT



Item # R1900a

FLIR - E6-XT Infrared Camera including WiFi Inspection Kit



FLIR E6-XT is the perfect tool for diagnosing electrical, mechanical, and building problems, thanks to its 43,200 (240 × 180) pixel infrared detector and expanded, -20°C to 550°C (-4°F to 1022°F) temperature range. FLIR MSX image enhancement provides extraordinary thermal imaging detail, while the built-in Wi-Fi allows users to quickly connect with the FLIR Tools Mobile app for sharing images and sending reports easily from any location.

Simple, Intuitive Controls

Automatic and focus-free, with clear on-screen navigation to measurement tools and settings

Share Images and Findings Easily

Download standard JPEGs, create reports, and share what you've found via a Wi-Fi connection to the FLIR Tools Mobile app

Built for Your Tough Work Environment

Lightweight and well-balanced, the E6-XT has an IP54 enclosure and easily withstands a 2-meter drop test

Easy to Use

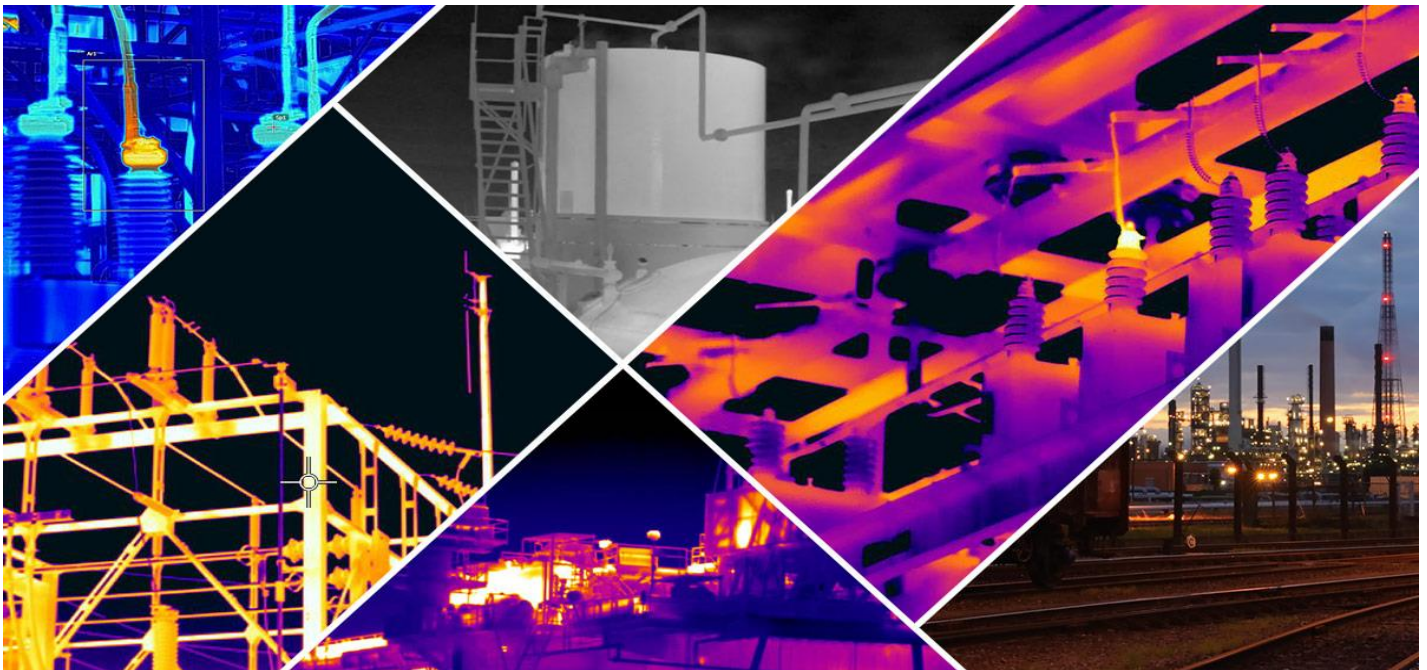
The intuitive graphic interface simplifies measurements in both thermal and MSX mode

Compact and Rugged

Built for portability and safe, efficient use in harsh environments

- Lightweight and well-balanced at just 1.2 lbs.
- Withstands a 2-meter drop test
- IP54 Enclosure provides a high level of protection against dust and water

- Fully automatic and focus-free
- Accurately measure your target using center spot or max/min area box
- Navigate easily to on-screen settings, image modes, and measurement tools using simple button controls
- Activate MSX to enhance IR images with visual detail for better perspective and interpretation





www.qeddirect.com

**"FOR ALL YOUR NDT EQUIPMENT,
SUPPLIES AND SERVICE - THINK
QUALITY"**

REPRESENTING OVER 30 MANUFACTURERS

CarestreamNDT



comet

Mitcorp

Sonatest
Simplicity | Capability | Reliability

WÖHLER



OLYMPUS

proceq

ThermoFisher
SCIENTIFIC



SciAps

MICROTEK

Fischer®

TELEWELD
INC.



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