OR Technology

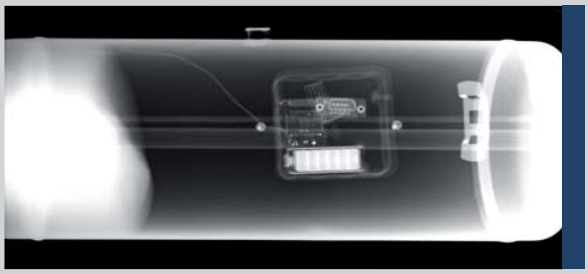
X-ray systems for mobile security applications

A guide to the security sector: targeted operations
for counter terrorism, civil defense and forensic science

Applications

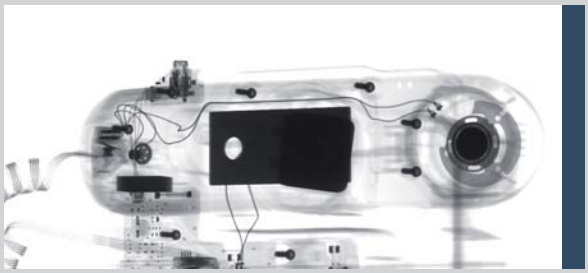
Scenarios in security industry

IED, EOD



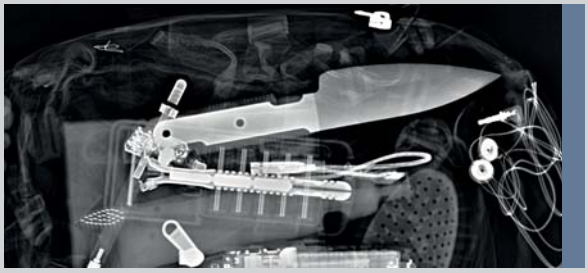
Contraband: drugs, cash, weapons

Electronic counter-measures



Crime scene investigations

Private security



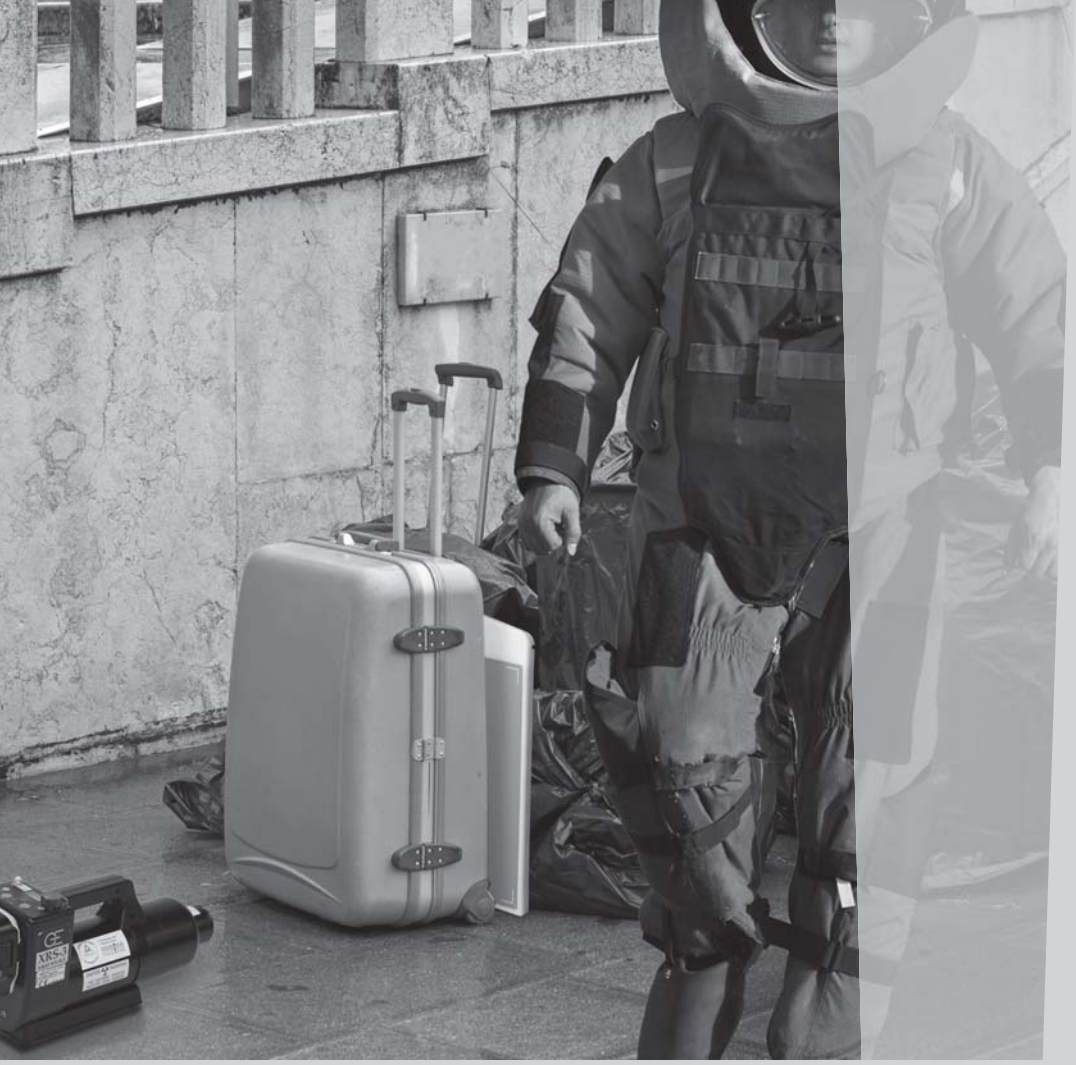
Advanced

Digital Radiography in security industry

The security industry is a globally growing market that includes many business fields, from antiterrorism to road safety, from forensic science to civil defense. Whether public authorities, embassies, municipal bomb squads, airports or corporations, they all use radiography to examine suspicious objects in different locations. In previous years the recording medium was X-ray film.

Radiography today includes Computed Radiography (CR) and Direct Radiography (DR) as digital imaging systems, which represent the latest technology standard. While CR systems use an imaging plate in a cassette as capturing device, Direct Radiography (DR) systems often use flat panel detectors (FPD) that show the X-ray image immediately on a monitor – by simply clicking on a button. The digital panels require less time and radiation than traditional X-ray films.

OR Technology pioneered the advancement of radiographic methods in the 90s, starting as a developer of medical technology, later expanding to NDT and the security sector. Our portable digital Leonardo suitcase and backpack X-ray systems and mobile lightweight Amadeo full X-ray solutions generate images in the highest quality for detecting minimal abnormities for your safety requirements.



OR Technology is your local partner for innovative X-ray systems
and tailor-made solutions for mobile security
apllication – proven worldwide thousands of times over

Many excellent reasons

to place your trust in OR Technology

Experience since 1991

... as a manufacturer of digital X-ray technology and developer of image management systems. The highly professional solutions for digital stationary and mobile X-rays, image management (DICOS) and cloud-based archive solutions for industry, security and medicine are used in more than 100 countries.

Comprehensive know-how

... based on decades of experience developing software for digital image processing in combination with specialised expertise in X-ray technologies. A close dialogue with experts and universities is an important part of innovation activity.

Made in Germany

... means excellent quality and first-rate service for hardware and software.

Exceptional image quality

... with in-house developed acquisition and control software with excellent image optimisation and the experience from several thousand installed digital X-ray systems.

Best service

... for customers and distribution partners. OR Technology does not rely on external call centres. A support team with over 20 employees offers multilingual information and assistance (e.g., in Arabic, English, French and Spanish).

Easy operation of the system

... even for radiologically less trained personnel. The modern graphical user interface (GUI) is intuitive to use and offers an optimal workflow with customisation.

Low maintenance

... because there are no mechanical parts in the X-ray system that require regular upkeep (system dependent).

Needs-based

... for all possible uses, whether mobile security applications for counter terrorism, forensic science and civil defence or DR upgrade kits for digitising an existing X-ray system.
OR Technology offer the widest range of products on the market.

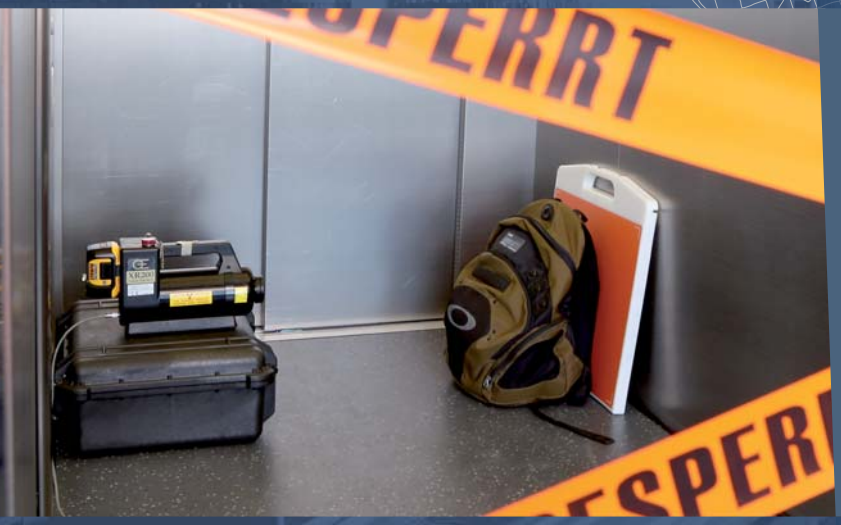
Tried and trusted

... worldwide. OR Technology's X-ray systems and software meet highest international quality standards.

Corporate sustainability

... with equal emphasis on environmental, social and economic aspects.
Every day we rise to the challenge of developing our company in a sustainable manner and creating a positive working environment for our employees.
We continuously strive to minimise our ecological footprint.

Further information about OR Technology is available: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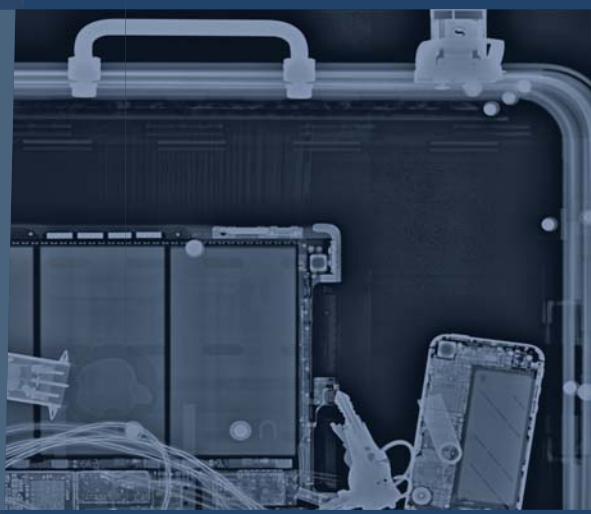

Application Scenarios

Explosive Ordnance Disposal & Improvised Explosive Device Disposal

Improvised explosive devices (IEDs) will be used often for terrorists acts or unconventional guerilla operations. They pose a more frequent hazard for people, communities, and social life as well as for military forces in a peace mission. Detecting and determining explosives (e.g. regarding detonator or chemical charge) are preconditions for EOD/IEDD.

Workflow optimised portable X-ray systems make a significant contribution to counter-IED capabilities and homeland security.

Our product solutions for EOD / IEDD

Leonardo DR mini II *[page* 18-19]
Portable, robust suitcase solution (from 8.9 kg) with 17" premium notebook incl. X-ray detector and ORsecure acquisition and control software

Leonardo DR nano *[page* 20-21]
Very light, practical backpack solution (only approx. 9 kg) with tablet-PC or notebook (15" or 17" inch) incl. X-ray detector and ORsecure acquisition and control software


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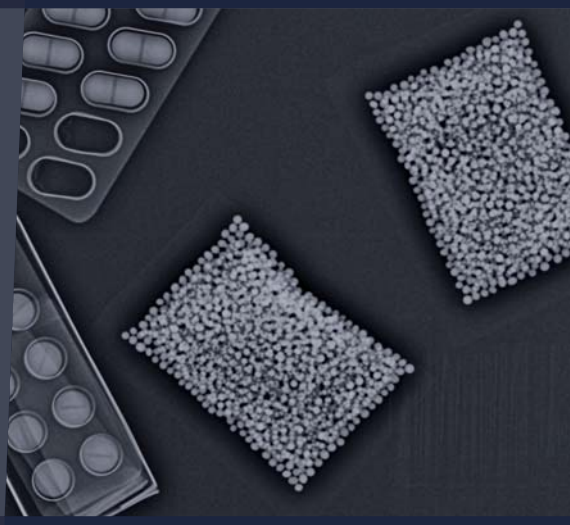

Application Scenarios

Contraband: drugs, cash, weapons

Customs and border security control cross-border traffic and protect the vital economic hubs of land, air and sea frontiers (ports of entry).
They identify suspicious individuals and organisations using rapidly deployable DR units for non-destructive testing at customs or border inspections. Special software tools by OR Technology aid the detection of relevant materials and simplify the workflow.

Our product solutions for Contraband

Amadeo M-DR mini *[page* 22-23]
Slim, digital complete X-ray solution with all necessary components such as X-ray detector, X-ray generator, image processing workstation including ORsecure acquisition and control software

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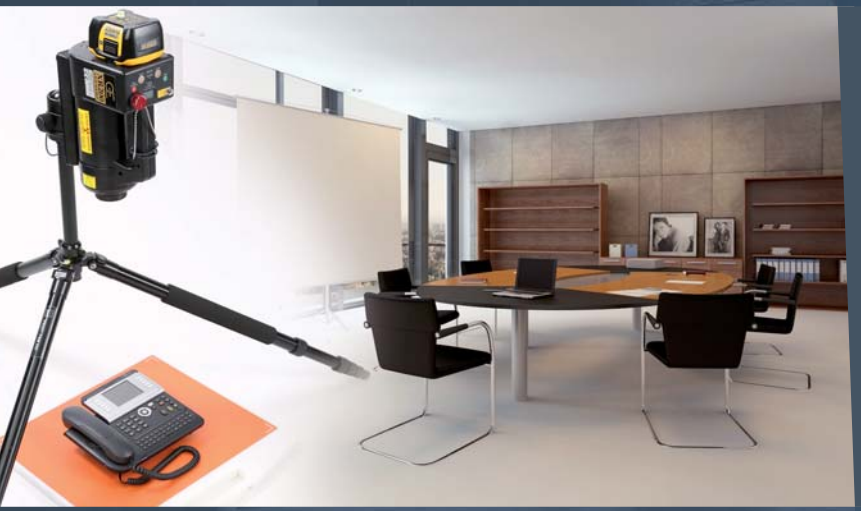

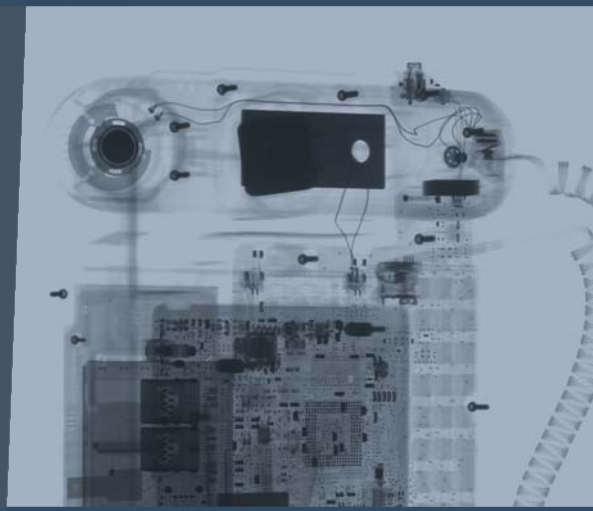

Application Scenarios

Electronic counter measures

Surveillance has become easier in the age of high technology and networking. To ward off spying activities in offices or conference rooms via fingernail sized electronics – often hidden in communication devices resp. things that you cannot physically dismantle for checking (e.g. foam seats) – portable DR systems are the most conclusive (i.a. non-destructive) technology that deliver instant results on site.

Our product solutions for electronic counter measures

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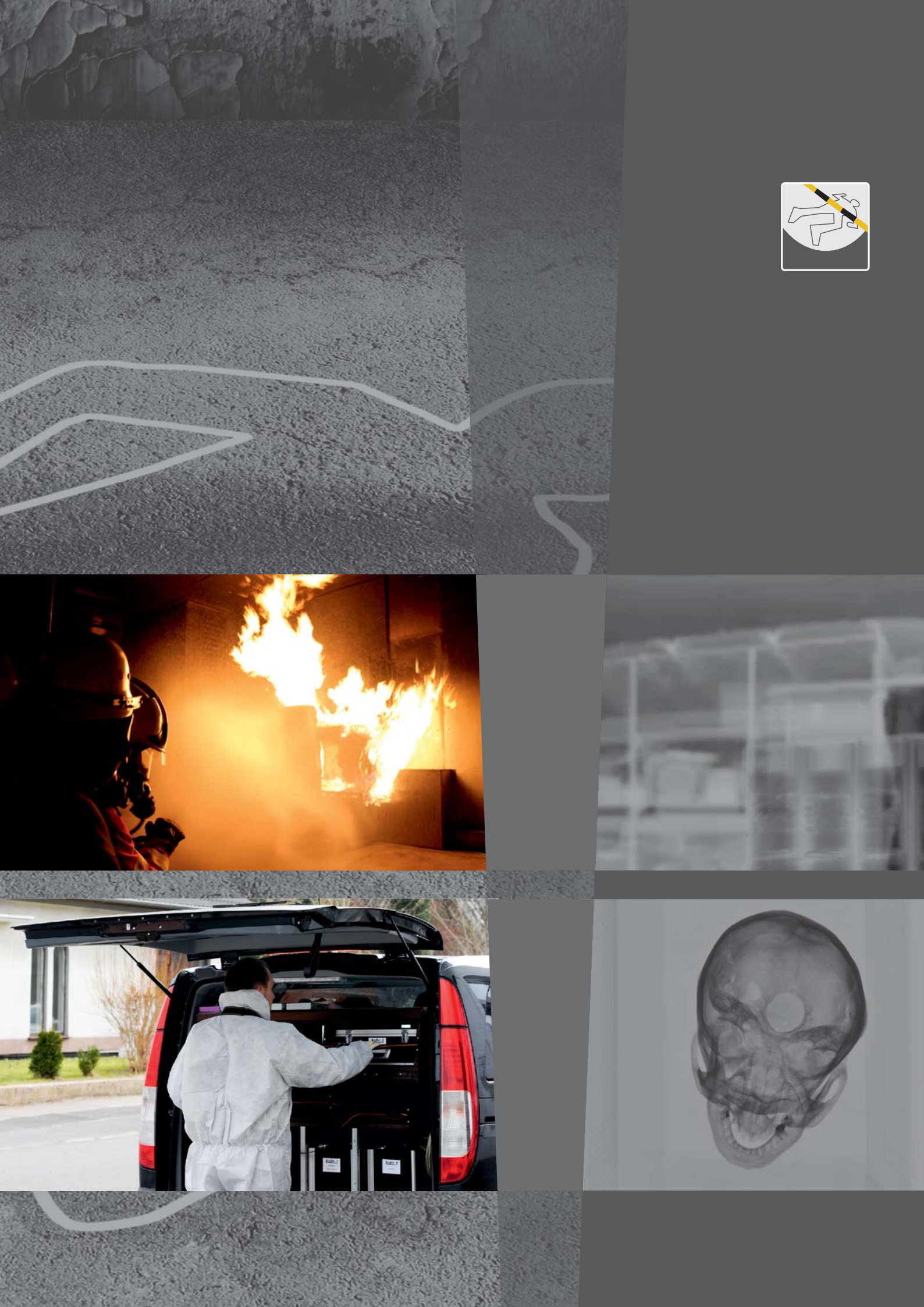

Application Scenarios

Crime scene investigations

Crime scene inspection intends crime reconstruction to collect evidence. Forensic radiology is widely used in victim's identification (e.g. if disfigured, charred or wrapped), age estimation, establishing a cause of death, or even causes of fire/explosion and art fraud.

Our product solutions for crime scene investigations

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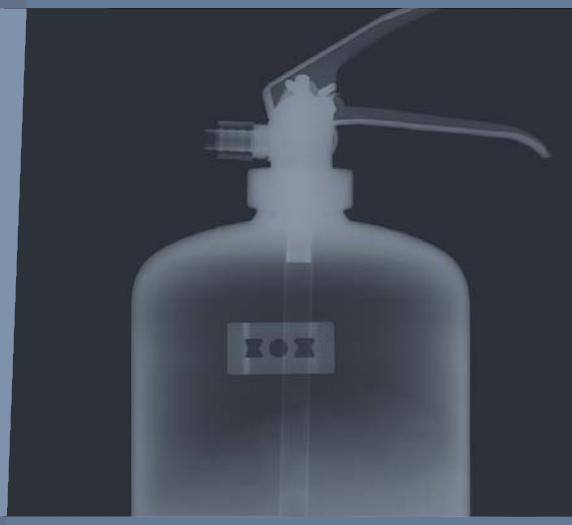
XR200



Application Scenarios

Private security

The private security market grows in the same measure as the general risk of attacks increases. Protecting critical infrastructure (e.g. corporate buildings, business events) and single persons or groups from terrorist actions is a complex challenge for private security teams today. Portable digital radiography systems help security staff to counteract harmful intentions with quick response.

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1. Product solutions

Compact suitcase and backpack X-ray systems as well as lightweight and portable full X-ray solution for mobile security applications

Our mobile and portable X-ray systems enable a fast and professional radiographic examination, cost-saving work and a constant and excellent image quality. Bomb technicians, EOD/IEDD specialists and other safety experts can quickly obtain the necessary data to make critical decisions on site. Potential threats are identified directly from the acquisition screen.

The **very light Leonardo DR suitcase and backpack solutions** are a digital and space-saving addition to portable X-ray equipment and the solution for the changeover from CR to direct digital X-ray. All necessary components including cables are stored in a space-saving case or backpack

The **mobile complete X-ray system Amadeo M mini** is ideally suited for mobile use in forensic science and drug investigation. This X-ray unit was especially designed for mobile use and can be easily transported.

The heart of each system is the ORsecure X-ray imaging and control software developed by OR Technology. → See detailed description of software beginning on page 38 This software takes over the complete control of X-ray generators and X-ray detectors from different manufacturers, thus enabling an orderly and optimal workflow. An intuitive and user-friendly interface via touchscreen or mouse control completes the system.

Leonardo DR mini II

Portable, highly functional X-ray suitcase

Leonardo DR mini II - robust, digital suitcase solution for portable radiographic examination

The Leonardo DR mini II is a portable, digital X-ray system for outdoor use. With its approx. 8.9 kg, it is one of the lightest X-ray suitcase systems in the world. This system can be used for X-raying outdoors and in confined spaces; it requires only a few simple steps to set up on site and be ready for use.

The handy hard case with the shock-absorbing, dirt-repellent plastic coating comes with an included shoulder strap for easy transport.

A built-in 17" premium notebook with touchscreen and high screen resolution as well as the integrated acquisition and control software ORsecure guarantee an excellent image display. → See page 38-41 for a detailed description of the software

Further information about Leonardo DR mini II is available here:

Highlighted features

Basic information

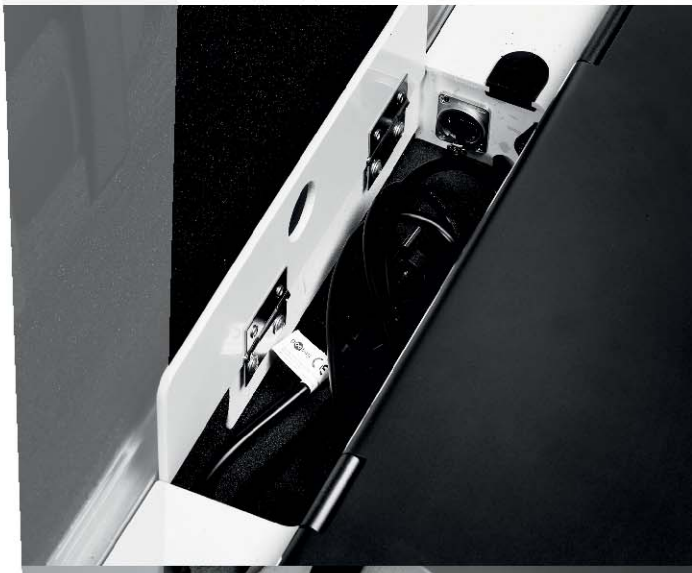
- Total weight of 8.9 kg
- Dimensions 39.5 cm x 49 cm x 18.5 cm
- Convertible 2-in-1 premium notebook with large monitor, newest 8th generation Intel® Core™ i7 processor, 16 GB RAM, 17,3“ full HD touchscreen monitor, keyboard with background lighting, SSD hard disk 512 GB
- Shoulder strap
- Built-in room for accessories

Hardware highlights and features

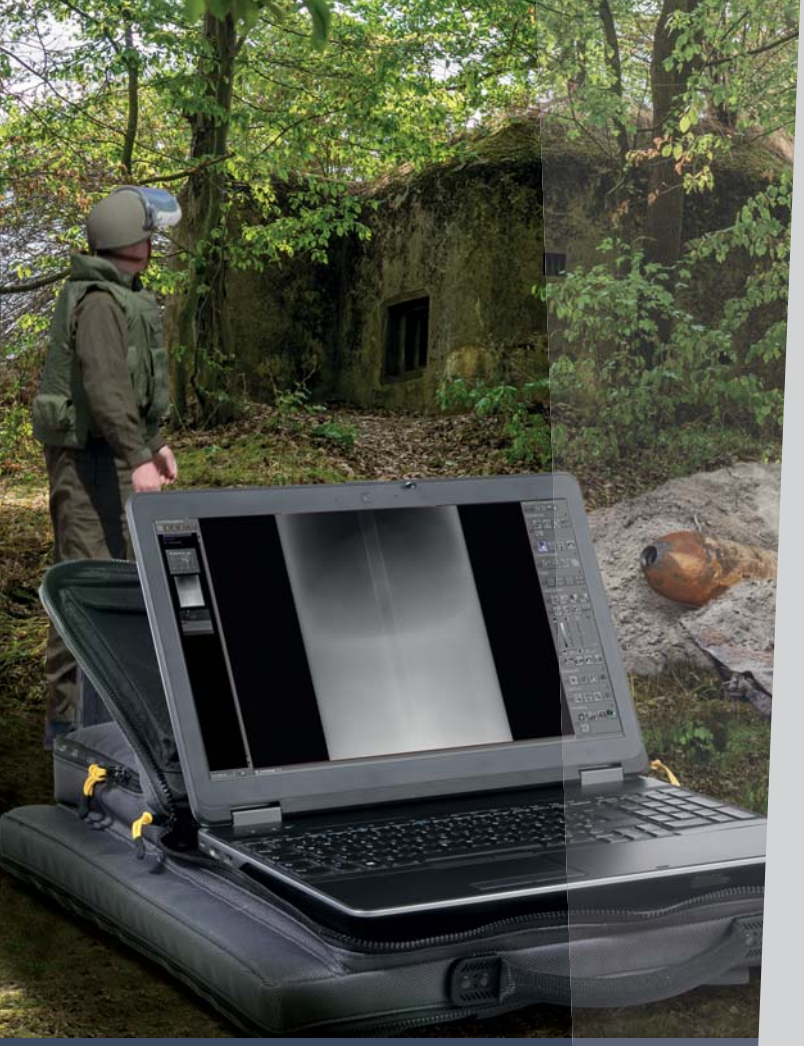
- Fully battery-operated
- Easy charge of the complete system
- Long operation lifetime
- Very robust and suitable for all terrain and weather
- Visible and audible: Software status display via large 4-colour LEDs on the corners of the suitcase and audio output on status change.
- 17" laptop can easily be removed from its secured location within the case and can be used as a tablet during presentations
- Special designed protection cases and bags for the detectors
- Support of various detectors of all sizes (12" x 10", 14" x 17", 17" x 17")

Scope of delivery

- Leonardo mini II suitcase
- Professional ORsecure acquisition software
- Convertible notebook
- Detector 12" x 10" or 14" x 17" or 17" x 17
- Shoulder Strap
- Special protection case for the detector



For more detailed information
please see: **www.or-technology.com**



Leonardo DR nano

Super lightweight backpack X-ray system

Leonardo DR nano - one of the world's lightest portable X-ray solutions for Security sector

The Leonardo DR nano consists of only two components, a wireless X-ray detector and a laptop with integrated acquisition and control software.
→ See page 38-41 for all details

With about ca. 9 kg (fully packed, backpack incl. laptop, accessories and X-ray detector), the system is one of the world's lightest portable X-ray solutions. The X-ray system enables users to perform mobile digital material testing at almost any location at any time. Restricted freedom of movement and tangled cables are now a thing of the past. Comfortable use is ensured even in confined spaces.

The system is stored in a well-thought-out, sturdy backpack. Easy transport is possible to any location, even in rough terrain.

Further information about Leonardo DR nano is available here:

Highlighted features

Basic information

- Total weight ca. 9 kg
- Dimensions 50 cm x 49 cm x 12 cm
- Notebook
- Shoulder strap (backpack can be turned into a handle bag → The shoulder straps can be hidden quickly and easily)
- Built in room for accessories

Hardware Highlights and Features

- Fully battery-operated
- Long operation lifetime
- Very robust and suitable for all terrain and weather
  - → robust insulation offers shock protection for the notebook
  - → flat panel detector is stored securely in a separate well-padded compartment
- Specially designed protection cases for the detectors and bags for accessories
- Support of various detectors of different sizes (12" x 10", 14" x 17")

Scope of Delivery

- Leonardo DR nano backpack
- Professional ORsecure acquisition software
- Notebook
- Detector 12" x 10" or 14" x 17"
- Special protection case for the detector
- Optional additional bag for accessories

Amadeo M-DR mini

Professional X-ray on suspicion of bodypacking

Amadeo M mini - lightweight and portable all-in-one solution for both portable use

The lightweight, digital complete X-ray solution is ideally suited for quick radiological diagnostics. The razor-sharp X-ray images can be viewed, magnified and processed with the X-ray software for the human sector integrated in the system. The mobile all-rounder contains all necessary components and is very easy to operate.

The practical X-ray positioning guide integrated in the X-ray software for correct adjustment technology enables even untrained personnel to perform an X-ray examination accurately.

The Amadeo M-DR mini is easy to pull over stairs, can be rotated on the spot without lifting - an advantage in confined spaces and elevators - and is tilt resistant on inclined surfaces.

Further information about Amadeo M mini is available here:

Highlighted features

Lightweight, mobile and ultimately versatile
The Amadeo M mini is one of the most lightweight portable wireless X-ray systems available worldwide. The sturdy system has an integrated DR X-ray detector and is designed for use in diverse conditions. The system is the best choice for X-raying whenever lightweight equipment is a must.

Safe working environment
Due to excellent lead shielding, the radiation leakage from the housing of the Amadeo M mini is minimal. During the X-ray process, the control area is less than 1.5 m. Outside of the small control area, no further radiation protection measures are required.

Advanced industrial design
The innovative and lightweight construction „Made in Germany“ combines excellent stability, mechanical sturdiness and low weight. Its sophisticated design makes the system easy to clean. The laptop and X-ray unit are stored in splash-proof compartments. All electronic components are sealed to ensure safe transport, and, where possible, cables are routed internally. The height of the tube head can easily be adjusted and freely rotated.

User-friendly
The system contains a self-explanatory X-ray software with special measuring functions that can be used free of charge, including integrated X-ray positioning guide for correct positioning of the person to be X-rayed and the X-ray equipment.

Comfortable
The integrated diagnostic software offers a worldwide fast and cost-effective exchange of information and images (via cloud or email) with authorities, Office of the Public Prosecutor etc.

For more detailed information
please see: **www.or-technology.com**

2. RT components/accessories

Components and X-ray equipment for individual requirements of mobile security applications

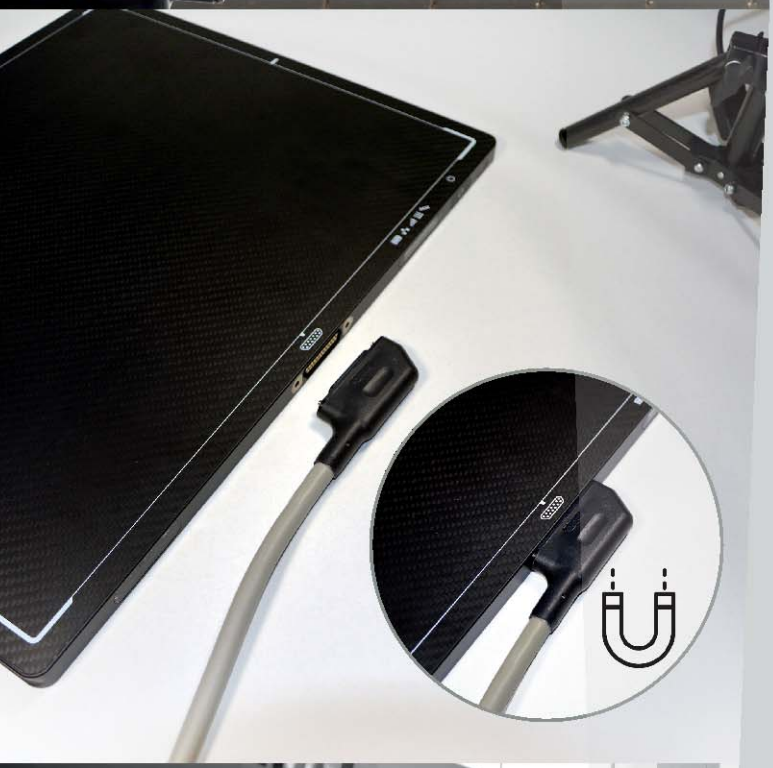
Portable and mobile X-ray equipment for mobile security applications need to perform the X-ray process easily, quickly and safely. In addition, the systems should allow for comfortable working.

Different material types and thicknesses place special demands on an X-ray system. All offered components and the vast assortment of accessories have proven themselves in the security sector and meet the highest quality requirements.

We have developed and produced some components for which there were no solutions to meet our requirements in the market: Made in Germany.

You can choose from a wide selection of variants and systems for different indoor and outdoor radiological applications.

The components and X-ray accessories offered by OR Technology can be combined with all DR and CR systems from the OR Technology product range as well as the software solutions.



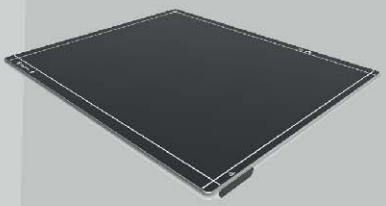
X-ray detectors for the Leonardo and Amadeo product family

Reliable and intelligent wireless and tethered solutions for a quickly investigation

The very light X-ray detectors deliver high-resolution image quality with reduced radiation dosage and usually have an extended range of functions, such as internal image storage and a magnetic docking port.

The detectors are robust and ergonomically designed. Features such as automatic exposure detection, on-board corrections, and wireless access point mode enable fast and easy system integration.

Our X-ray detectors allow for efficient and conclusive examination results with reduced inspection times. High-performance image processing processes of the ORsecure acquisition and control software included in the system enable material- and application-specific optimisation.



	Specifications for the Leonardo and Amadeo DR 1417 wireless detector:	**Specifications for the Leonardo and Amadeo DR 1417 wireless detector:**	**Specifications for the Leonardo and Amadeo DR 1417 wireless detector:**
Detector model	CsI:Tl or GadOx, 17" x 14"	CsI, 17" x 14"	CsI, 17" x 14"
Specification	• Dynamic mode with continuous output of up to 8 fps (optional software) • Acknowledge function: Buffering of acquired images • Magnetic cable connector • Automatic Exposure Detection (AED) • OLED display with Wi-Fi, LAN, battery and sensor indicators • Fast preview image	• Excellent image quality and low noise • Automatic Exposure Detection (AED) • Built-in fold-down handle • Extra long battery life with 1400 shots/charge (10 second interval between shots)and 7-hours standby time	• works with commercially available access points, or as a standalone access point • detector consists of aluminium and carbon fibre and is extremely stable • Automatic synchronisation of detector and generator by AED • IP54 water resistant
Scintillator	Direct deposition CsI:Tl or Gd2O2S : Tb	CsI Direct Deposit	Direct Deposit CsI, Detached CsI
Detector Imaging Area	350 mm × 426 mm	354.8 mm × 433.7 mm	344.16 mm × 427.01 mm
Pixel Pitch	100 µm	154 µm	139 µm
A/D Conversion	16 bits	16 bits	16 bits
Interface	GigE, trigger and power via docking connector and ORSyncBox	Gigabit Ethernet 2.4/5 GHz, 300 Mbps, trigger via ORSyncBox	Gigabit Ethernet 2.4/5 GHz, 300 Mbps, trigger via ORSyncBox
External Dimensions (w/l/h)	384 mm × 460 mm × 15.5 mm	460 mm × 384 mm × 15 mm	383 mm × 459 mm × 15 mm
Weight	3.2 kg (7.0 lbs)	3.7 kg (8.16 lbs)	3.0 kg (6.61 lbs)

*For an **offer** with a **tethered X-ray detector**, please call us at +49 381 36600600 or write an e-mail to info@or-technology.com*

Portable, battery-powered X-ray generators

Generators with connection to control software for radiological investigation of various safety-relevant objects

The portable, battery-powered X-ray devices with and without pulse technology are suitable for the radiological examination of different objects made of different materials. The combination of battery power and minimal weight guarantees excellent handling. The X-ray machines feature a robust housing.

Our ORsecure acquisition and control software has a full integration with Golden Engineering pulse X-ray sources as well various other manufacturer such as Teledyne.

- Fully integrated with ORsecure acquisition software to control generators by software
- Wireless and wired connection to the generators
- Lightweight generators for use in the field
- Optional carrying and protection cases for generators and accessories

Golden Engineering XR200 *[old version also available]*	**Golden Engineering XRS-3** *[old version also available]*	**Golden Engineering XRS-4** *[old version also available]*	**ICM CP120B / CP160B**
Voltage output type			
pulsed potential	pulsed potential	pulsed potential	constant potential
Output voltage			
150 kVp	270 kVp	370 kVp	40 to 120 / 160 kVp
Size (without battery, including handles)			
Height 5.83" (14.81 cm) Width 4.26" (10.82 cm) Length 10.69" (27.15 cm)	Height 5.83" (14.81 cm) Width 4.28" (10.87 cm) Length 14.20" (36.07 cm)	Height 7.05" (17.91 cm) Width 4.80" (12.19 cm) Length 19.26" (48.92 cm)	Height 22.7 / 22.7 cm Width 15.5 / 15.5 cm Length 44.0 / 49.0 cm
Weight (Including battery pack)			
10.7 lb (4.8 kg)	11.8 lb (5.3 kg)	18.3 lb (8.3 kg)	7.5 kg / 9.2 kg
Pulse rate			
10 pulses per second	15 pulses per second	9 pulses per second	–
Focal spot			
3.0 mm	3.0 mm	3.0 mm	0.8 x 0.5 mm / 0.8 x 0.7 mm
Temperature range			
-10 to 120 degrees F (-23 to +50 °C)	-10 to 120 degrees F (-23 to +50 °C)	-10 to 120 degrees F (-23 to +50 °C)	-13 to 122 degrees F (-25 to +50 °C)

Further generators of other manufacturers *are available as well. For more information, please call us at +49 381 36600600 or write an e-mail to info@or-technology.com*

X-ray accessories for mobile application

Wide range of accessories for applications in threat detection

Our numerous functional accessories offer further advantages. Even little things can make a big difference.

Our security team has developed and compiled a wide range of accessories over the last few years to improve the efficiency of mobile application.

All accessories are optional modules that can be purchased and used in conjunction with an X-ray solution from OR Technology, but also as stand-alone solutions.

See for yourself!

Tripod mount with transport cases

- Extremely high, sturdy and lightweight tripod, maximum height of about 250 cm
- Convertible in just a few steps
- Max. load capacity of the tripod approx. 10 kg
- Tripod with central extension tube that can be mounted from below for working close to the floor
- Incl. high-quality ball head → allows free 3D alignment
- Carrying case: extremely resistant, waterproof, unbreakable and dustproof with double-layer, soft-touch handle [case contains 2 tripods]
- Case size (L / W / H): ca. 97 x 45 x 15.5 cm

Detector stand with transport case

- Compact, sturdy and lightweight tripod with 4 adjustable heights (working height max. 150 cm)
- Divisible center column for low working height (ca. 20 cm), load capacity max. 8 kg
- Tripod head with spirit levels for vertical and horizontal alignment
- Incl. high-quality ball head → allows free orientation and placement in the 3D space
- Carrying case: extremely resistant, waterproof, unbreakable and dustproof with layer, soft-touch handle [case contains 2 tripods]
- Case size (L / W / H): 82.8 x 46.7 x 28 cm

Portable mounting system

On security missions in the service of forensic science, civil protection or the fight against terrorism the on-site conditions are very different and flexibility is in demand.

You are well equipped with the VersariX, the detector holder that weighs only 400 g and is quickly ready for use. The VersariX's powder-coated bracket provides secure suspension from hooks, screws, branches and other suitable attachments for a safer grip. The in-house development from OR Technology can also be attached to almost all types of doors.

The stable hook, for suspending the X-ray detector is suspended, is almost infinitely height-adjustable. This means that even special images can be taken easily and professionally in confined spaces.

Parameter:

- Portable and versatile
- Weight: only 403 g
- Dimensions for transport: 20 x 15 x 8 cm
- Easy to clean and resistant to disinfectants
- Materials: Specialised straps made of Kevlar-reinforced neoprene, powder-coated stainless steel/aluminium, sturdy polypropylene straps
- Designed by OR Technology „Made in Germany“

Three attachment options for stepless height adjustments:

- Wall mount using existing hooks and screws
- Door mount with straps
- Mount on objects via supplied hooks

Communication cable

Whenever it is not possible to work in WIFI mode:

- Operate the system wired and stay in safe distance
- Available in different length 50 m,100 m,150 m or 200 m
- Easy to handle and carry

Wireless Link - Controlbox for Golden Engineering XR series

- Transceiver set for connection to a Golden Engeneering XR series X-ray generator with serial interface (7 pin) and PC (USB)
- Wireless generator control, triggering
- LoRa 2.4 Ghz, range free field >100 m
- Power supply via the generator or USB
- Generator connection cable (10 cm) and mounting solution for attachment to the generator

Protection cases

Protection boxes protects flat panel detectors from external shocks and strong vibrations. The housing contains several protective layers to absorb shocks and increase the load capacity. It is also characterised by ist robustness and low weight.

The protective cover is tested in an accredited, independent laboratory for strength and durability.

- Keep your detectors safe
- Patented positive locking to prevent the X-ray detector from falling out
- Simple one-handed operation
- Handle for a flexible use - can be mounted on either side (model dependent)
- Special cases for different tasks

Configuration example I

Wireless set-up

Protection box (wireless X-ray detector inside) with portable mounting system VersariX

Golden XRS-4 X-ray Sources

LoRa (interference-free radio standard with very high range)

Tripod mount incl. ball head for free three-dimensional alignment

X-ray suitcase Leonardo DR mini II incl. 2-in-1 notebook and acquisition software

2nd parallel display unit: rugged tablet PC and acquisition software

Extremely durable, waterproof and dustproof transport case for tripod

Configuration example II

Tethered set-up

For more detailed information
please see: **www.or-technology.com**

3. Software

Software and cloud solutions for acquisition and archiving of DICOS images and controlling security X-ray systems

All offered software products were developed by OR Technology, based on decades of experience in digital image processing and special expertise in X-ray technology. Even the smallest features are programmed in-house at OR Technology: This means software entirely "Made in Germany." Close dialogue with professionals and academia from around the world is also an important part of our software development.

The three most important software products for complete coverage of the needs in mobile security X-ray application incorporate the experience gained from several thousand installed digital X-ray systems:

ORsecure – The heart of every mobile security system is the ORsecure X-ray acquisition and control software. The software takes over the complete control of the X-ray generator and X-ray system thus enabling an orderly and optimal workflow. An intuitive and user-friendly touchscreen or mouse-control interface complete the system.

dicos*PACS*® – The cutting-edges and sophisticated high-tech solution for intelligent image management: The software includes the processing, transfer, and archiving of image material.

ORCA® (OR Technology Cloud Archiving) is a cloud-based platform designed for storing, viewing and sharing DICOS images and documents. With *ORCA*® *Archive* and *ORCA*® *Share,* the cloud offers two attractive uses as an archiving solution and as a platform for communication with external partners.

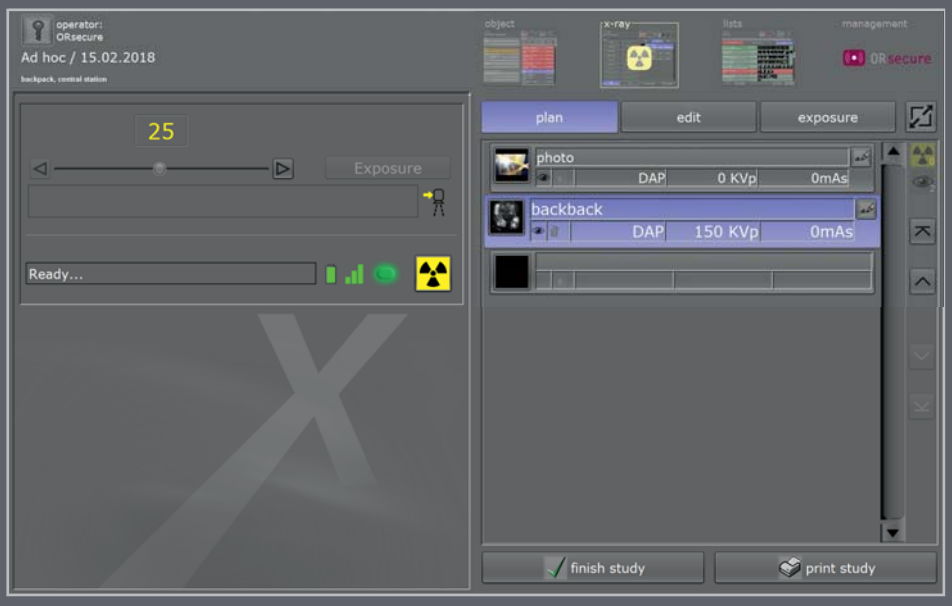
→ detailed description of the ORsecure software:

The heart of each Leonardo security system is the ORsecure X-ray acquisition software developed by OR Technology:

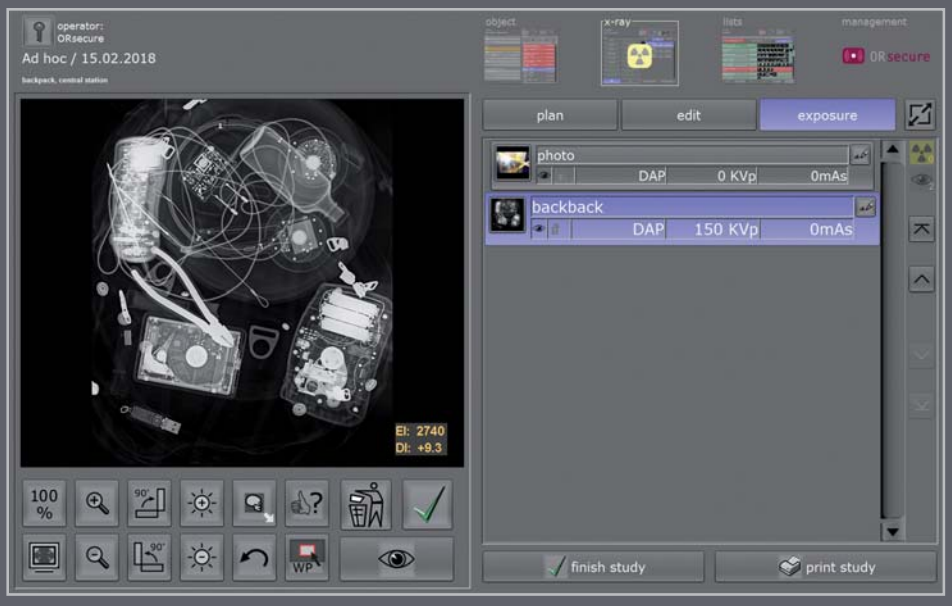
- Intuitive and user-friendly GUI
- User interface can be customised according to the demands
- Full support for touchscreen control
- Available in many languages
- Full integration of various X-ray generators from different manufacturers
- Full integration of wide range of different detectors wired or wireless
- Automatically highest image quality due to ORsecure special image processing
- Support of various international standards
- Connection to ORCA® Cloud solution for image distribution worldwide
- Connection to *dicosPACS*® or any other PACS

Further information about the acquisition software is available here:

ORsecure provides pre-defined examinations that can be adapted to your recurrent tasks. The software stores your individual examination values. Complex procedures can be saved as macros.



ORsecure fully controls your Golden Engineering generator. The software allows easy setting of the pulses and triggering of the exposure. All values e. g. pulses are preconfigurable.



ORsecure provides a quick preview image of the inspected object. Easy access to important software tools e. g. for verifying the exposure or entering the internal viewer.

→ detailed description of the ORsecure software:

Advanced functions for the security sector and key features

- **Full generator control for all Golden Engineering, ICM and other manufacturers**
- **Image comparison**
- **Automatic stitching**
- Pseudocoloring
- FFT - Fast Fourier analysis
- Grayscale profile across line
- Snapshot
- **Image import into OR**secure **via special file import**
- **Multi exposure (SNR improvements)**
- **Completely integrated viewer for image analysis (processing, manipulation, storage, export etc)**
- Measurement of distances / thickness, angles, areas and densities
- **Image annotations (arrows, ellipses, free text etc.)**
- **Highlight ROI**
- Stepless zoom, PAN, magnifier, ROI, rotation, mirror, crop etc
- Adjustment of window / level options and gamma correction,
- Sharpening filter, high pass filter, noise suppression
- Advanced invers (black / white), colour LUT
- Printing of images both on Windows printers and laser imagers via DICOS Print
- **Export of images to JPG, TIFF, BMP and DICOS / DICONDE formats**
- **Support for tablet PC**
- Secure access to the software with login and password
- Organic detection
- **Report and output in various formats like Word and PDF**

Full generator control for Golden Engineering (all models), ICM and other manufacturers

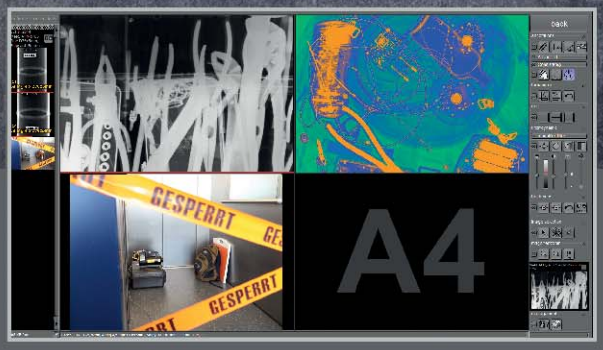
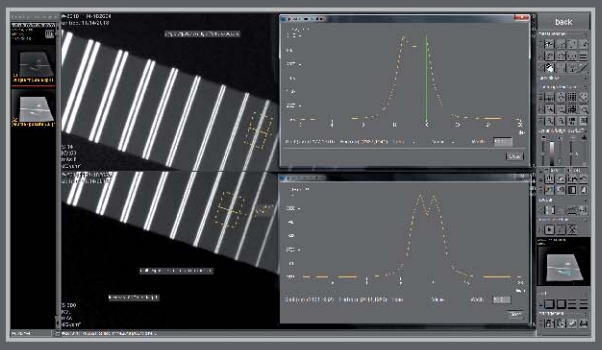
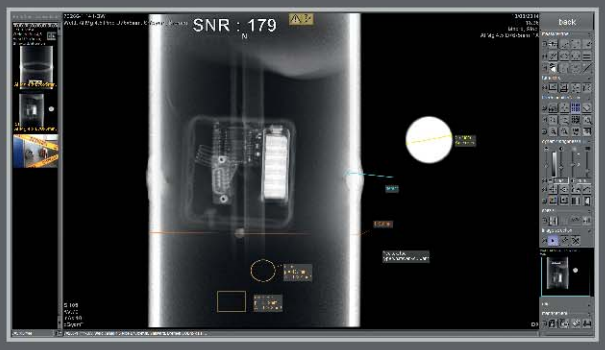


Image import stores photos in DICOS / DICOM format within the inspection study and enable simple and effective documentation



Multi-expsure mode for every sensor - Aquires multi-frame images for SNR and CNR improvements



Completly integrated viewer for image anylysis, image annotation, image manipulation etc.

Automatic and manual stitching mode e. g. for long objects, large indefinable items etc.

Allows image export in various formats including JPG, TIFF, BMP, PNG and DICOS

Support for tablets and mobile devices

Reporting tool helps to easily create disposal protocols and security reports

dicosPACS®

Digital image management for mobile X-ray

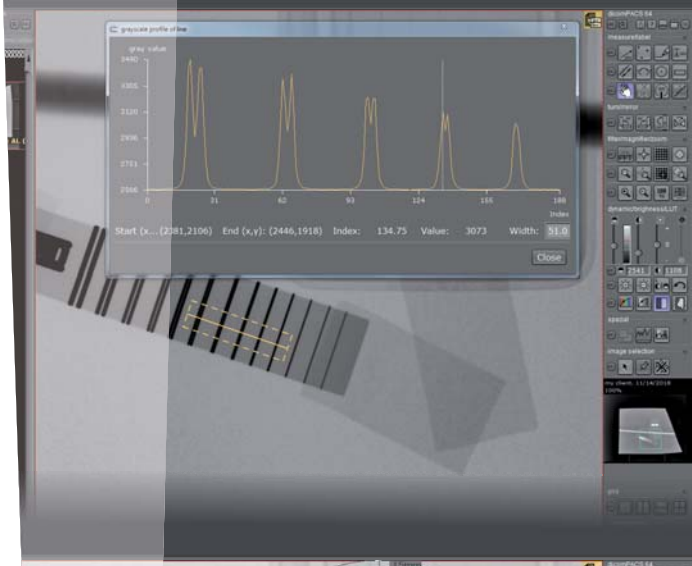
Digital Imaging and Communications in Security (DICOS) – software for mobile X-ray imaging

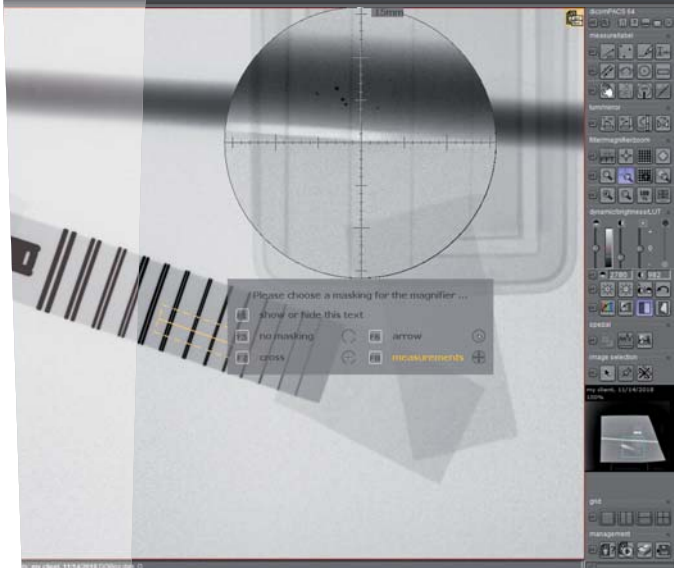
The software *dicosPACS*® is an easy-to-use, sophisticated instrument for the examination of security-relevant objects and includes the archiving, processing and transmission of image material. Thanks to the wide range of functions with many special solutions for security services, *dicosPACS*® enables you to set up your working environment within the scope of object protection, personal security as well as border controls and airport security.

Reports can easily be shared with specialists via email and cloud services. Our carefully designed archive and backup solutions guarantee quick access to all data and high security standards. Furthermore, the software can easily be integrated into all common DICOS systems.

Highlighted features

- User-friendly, well structured and highly usable
- The user interface can be customised according to the demands
- Common functions can be assigned to hot keys for greater efficiency
- Special features for mobile security application
- „Perfect memory“ - images retain all previous markings and settings, including zoom and alignments
- Storage of all images and documents exclusively according to international DICOS standards
- Reports with images in Word and pdf





For more detailed information
please see: **www.or-technology.com**

ORCA®

The DICOS cloud for images and documents

Archive and share images and documents via cloud

The cloud archiving of security-relevant data from digital imaging and communication is a sensitive topic in the security industry. But a specialised cloud allows you to simplify your IT infrastructure. With our *ORCA*® Cloud, there are many options for making processes simpler, more cost-effective and more advanced. With *ORCA*® it is possible to centrally archive DICOS images and documents. This cloud supports you, for example, in the management of material-specific information as well as the tracking of trace recognition signatures and allows for a central threat assessment in compliance with all rules and procedures, which we can customise for you. You only pay for the capacities that are actually used (pay per use). The storage space can be individually adapted to current needs.

ORCA® Archive

Cloud-based archiving of DICOS images

ORCA® Archive transfers and stores image files from direct sources e.g. digital X-ray as well as from Picture Archiving and Communication Systems (*dicosPACS*®). *ORCA*® Archive can be used as a backup solution.

ORCA® Share

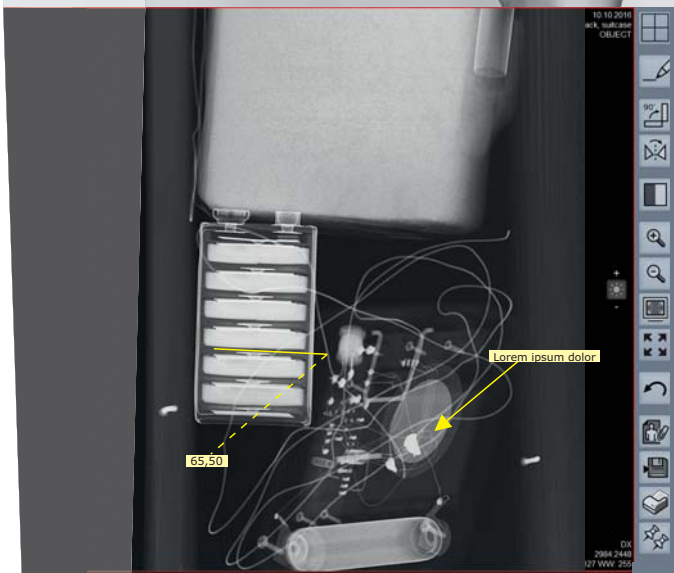
Communication and monitoring platform

At the same time, *ORCA*® is a platform for sharing data with external partners. The application *ORCA*® Share facilitates exchanging images and findings with staff, colleagues and specialists.
ORCA® *Share* can also be used to give access to DICOS reports and images. Recipients are sent an access link to specific files via email. There is no need to install software locally.

Highlighted features

- Online image archive
- Share images with other specialist or clients
- Images and reports are available from any PC
- Professional presentation of your results to end customer
- Straightforward and intuitive user interface
- Ideal for mobile workstyles
- Optimised for mobile devices

Please get in touch with us if you would like to receive a demo access.



For more detailed information
please see: **www.or-technology.com**

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