

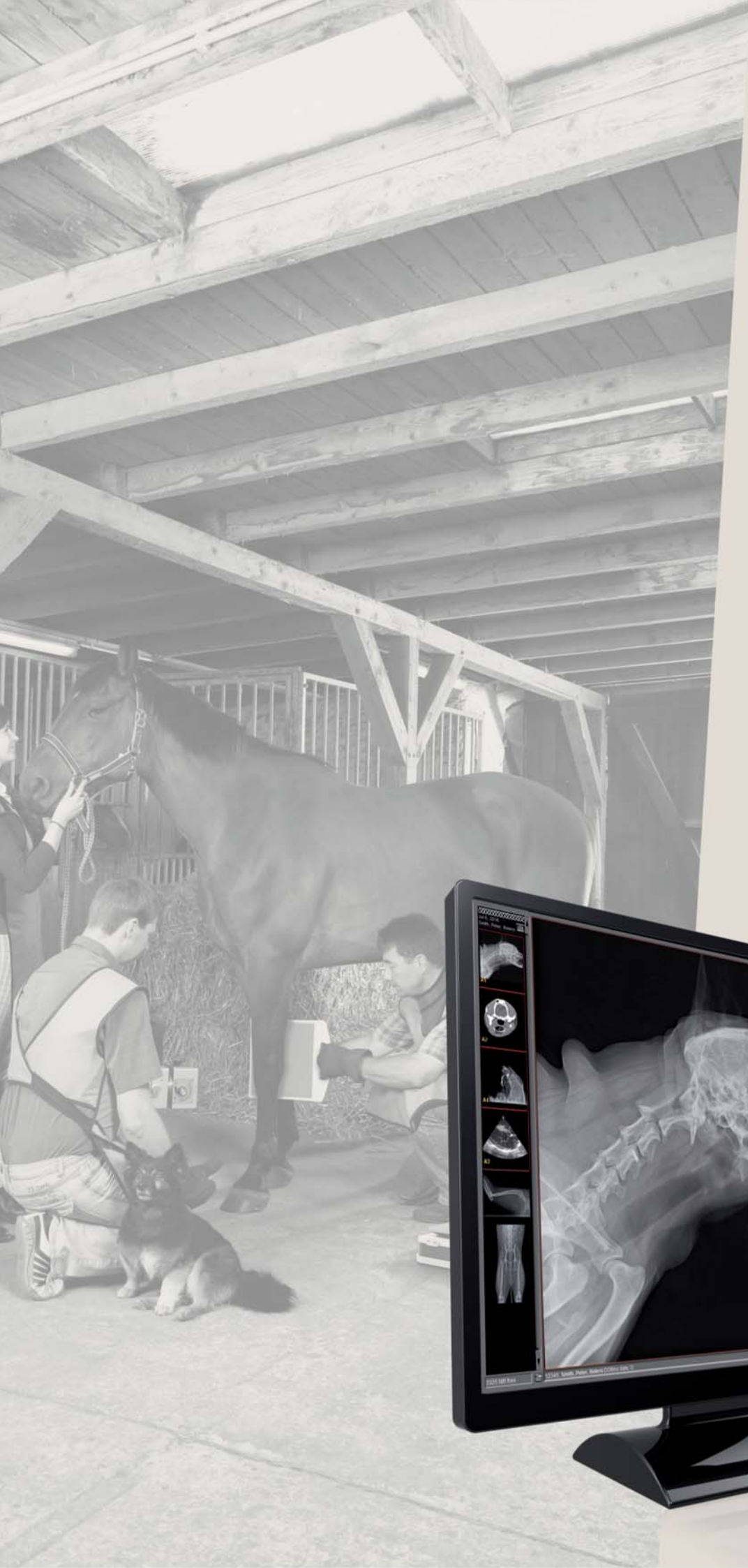
# Digital Radiography and Image Management

A guide for veterinary practices, clinics and hospitals



any

Dangerously  
**sharp**



# Digital X-ray images time, anywhere

in clinics, practices and stables



## **Amadeo X-ray systems**

Mobile & stationary full systems as well as portable X-ray units for digital radiography without cassettes

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## **Leonardo DR suitcase systems**

Compact, lightweight suitcase and backpack solutions for wireless and portable X-ray imaging

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## **Medici DR retrofits**

Digital retrofits for existing X-ray systems

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## **Divario CR systems**

Compact, high-speed desktop units for digital radiography using imaging plate cassettes as well as CR dental systems

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## **Dental systems**

Digital retrofit solutions for the existing dental X-ray unit with DR dental detectors and CR dental systems

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## **X-ray accessories**

Mobile stands, cassette holders, and X-ray tables (partly collapsible and mobile) designed to make work effortless and more efficient

*page 33*



## **dicomPACS® DX-R X-ray acquisition software**

Acquisition and diagnostic software for X-ray systems with user-friendly graphical interface

*page 37*



## **dicomPACS® vet image management and diagnostics**

Software for processing, transferring and archiving images

*page 43*



## **ORCA® cloud solutions**

Cloud-based teleradiology and storage for images and patient records

*page 49*







OR Technology is your partner in digital radiography for innovative X-ray systems and customised solutions in equine and small animal medicine – tried and trusted worldwide



# Many excellent reasons

to place your trust in OR Technology

## Active since 1991

... as a manufacturer of digital X-ray technology and developer of image management systems. Our professional solutions are used in over 100 countries for stationary and mobile radiography in large and small animal practices, equine clinics and hospitals, as well as university facilities.

## Comprehensive know-how

... based on decades of experience developing software for digital image processing in combination with specialised expertise in X-ray technologies. Close working relationships with physicians and universities significantly contribute to our innovative approaches.

## Made in Germany

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

## Exceptional image quality

... made possible by excellent image processing using our inhouse acquisition and image management software and the valuable experience we have gained from several thousand successfully installed digital X-ray systems.

## User-friendly handling

... even for staff with limited training. The X-ray positioning guide assists with patient positioning and software settings.

## Best service

... for customers and distribution partners. OR Technology does not rely on external call centres. Our service department with approx. 20 employees offers multilingual support (e.g., in Arabic, English, French and Spanish).

## Low maintenance

... because there are no mechanical parts in the X-ray system that require regular maintenance (depending on the system).

## Ideal

... for all applications; ranging from mobile systems for stables to compact, all-round X-ray equipment for animal hospitals, and small systems for confined spaces in small veterinary practices. OR Technology has the widest product range on the market.

## Tried and tested

... 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. On a daily basis, 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.





Amadeo X-ray systems



## Stationary full systems and portable X-ray units for digital radiology without cassettes

Our Amadeo full systems are specially designed for use in veterinary practices and include all components and functions necessary for digital X-ray imaging without cassettes. Stationary Amadeo X-ray units are available for conventional radiography with CR systems as well as for fully integrated digital systems with fixed or wireless flat panel detectors.

The integrated *dicomPACS®DX-R* console software offers all tools necessary for working with the X-ray system: from generator control to the display of high quality images for diagnostic evaluation. All settings are adjusted at a single control panel.

The professional image processing software produces images of outstanding quality and can be adapted to special customer needs. High-performance image processing allows organ-specific optimisation and guarantees top-quality X-ray images. Everyday veterinary care is made easier by an array of integrated functions (e.g., a multimedia X-ray positioning guide) and an intuitive design.

Furthermore, the *dicomPACS®DX-R* software can readily be interfaced with existing patient management systems. → See detailed description of software beginning on page 37

In addition, we offer portable, lightweight monoblock X-ray machines for greater flexibility. The generator's integrated interface for connecting to digital X-ray detectors makes these portable Amadeo systems suitable for a wide range of radiographic applications.



## Amadeo V *mini II*

*Are you looking for a space-saving full X-ray system with a completely flat table top for your small animal practice?*

# Space-saving X-ray solution for small animal practice

**Amadeo V mini II** - Our bestseller with swivelling monitor, level table top and LED status display

The Amadeo V mini II X-ray unit was specially developed for the small animal practice. The completely flat 4-way floating table without upstands as well as many other features (rotatable light visor – 180° swivelling and height-adjustable touch screen monitor incl. X-ray software – automatic collimator light – drawer for positioning aids and much more) will inspire you.

This veterinary X-ray system has been entirely developed "Made in Germany" by OR Technology and the result of close cooperation with veterinarians and university institutions.

The 3-stage LED status display on the X-ray stand provides simple visualisation of the operating status. The X-ray shot can be prepared and triggered with of the 2-step foot switch.

→ See description of software on pages 37-41

Further information about the Amadeo V mini II system is available here:





Now with  
**Automatic  
HD measurement** –  
based on  
Artificial Intelligence  
[more tools  
in development]





## Amadeo V nano II

*Do you need an inexpensive, small digital X-ray system that can be operated with a standard socket?*

# Cost-effective full X-ray system for small practices

**Amadeo V nano II** - Space-saving X-ray system for standard wall socket operation with floating table top

The Amadeo V nano II X-ray unit was specially designed for the requirements in veterinary medicine and is particularly suitable for small animal practices. The completely flat 4-way floating table without upstands will inspire you. This veterinary X-ray system is again an in-house development "Made in Germany" and the result of close cooperation with veterinarians and university institutions. The 5.6 kW high-frequency generator is directly integrated in the X-ray table and has a rotatable light visor. The table top can be moved very easily via the foot brake.

The *dicomPACS®DX-R* control console takes over all functions for the operation of the X-ray system (except for the AX version): [→ See detailed description of software on pages 37-41](#)



Further information about the Amadeo V nano II system is available here:



## Amadeo V Systems

Searching for a full X-ray system with integrated patient table for small animal radiography in your veterinary practice?

# Full X-ray system for small animal veterinary medicine

**Amadeo V** - The professional solution with patient positioning table and floating table top

The Amadeo V system includes all components and functions necessary for digital X-ray imaging without cassettes – including a patient positioning table with floating table top, three-phase X-ray generator, PC, computer monitor, and the *dicomPACS®DX-R* acquisition and diagnostic software. The multimedia X-ray positioning guide assists with patient positioning and software settings. → See detailed description of software on pages 37-41

The optimised workflow of the Amadeo V system reduces the number of work steps. To save space, the X-ray generator is integrated directly into the X-ray table and the compact design allows installation in confined spaces. The system offers very good handling and flexibility for different types of images.



Further information about the Amadeo V system is available here:





 Amadeo P Systems

*Searching for a portable X-ray unit ideal for working in the stable or in the field?*

## Lightweight, portable X-ray machines

**Amadeo P** - High frequency X-ray generators for portable X-ray imaging in veterinary medicine

High-quality X-ray images are no longer a problem for portable monoblock X-ray units. The state-of-the-art, high-frequency technology offers high performance in miniature format using only standard power connections (220V/110V).

Low weight, user-friendly operation, and an integrated interface for connecting to digital X-ray detector systems make the Amadeo P ideal for the multifaceted demands of small animal practices and equine clinics.

Amadeo P X-ray units are available with and without batteries (depending on the version).



Further information about Amadeo P units is available here:





## Overview of Amadeo P X-ray units:

### **Amadeo P-90/20VB – portable, battery-operated monoblock X-ray unit with high frequency technology**

extremely lightweight, portable X-ray unit (approx. 7 kg including battery), extra bright collimator and integrated timer

### **Amadeo P-100/20HB – portable, battery-operated monoblock X-ray unit with high frequency technology**

only 11.2 kg including battery, no AC power supply necessary, approx. 300 exposures possible between charges

### **Amadeo P-100/35HB – battery-operated, portable monoblock X-ray unit with high frequency technology**

compact, battery-operated X-ray unit, approx. 14 kg including battery, 3000 mAh power output without recharging, PROM memory, battery status indicator, mAh energy level display and dual laser collimator

### **Amadeo P-125/100 VB – portable monoblock X-ray unit with high frequency technology**

Weight ca. 18.6 kg, fulfils a wide range of requirements, lithium battery 32,4V sufficient for approx. 100 shots (50kV, 80mA, 20ms), max. charging time 4h, standby time approx. 7h, nomina power 5,6 kW

### **Amadeo P-110/100H – portable monoblock X-ray unit with high frequency technology**

approx. 19.6 kg, high performance capacitor for a stable and reliable power supply, non-stop operation during brief power outages and relocation, max. power requirement 5.0 kW, 0.1-100 mAh

### **GIERTH HF 80/20 ULTRA LIGHT high frequency X-ray unit for equine practices**

only 6.5 kg, max. 20mA at 80 kHz, with full-wave inverter system, ideal for radiological examinations in equine veterinary clinics and hospitals

### **GIERTH TR 90/20 battery-operated high frequency X-ray unit**

only 6.8 kg, max. 20mA at 100kHz with full-wave inverter system

### **GIERTH TR 90/30 – Maximum power with minimum size for equine practices**

only 6.5 kg, with full-wave inverter system

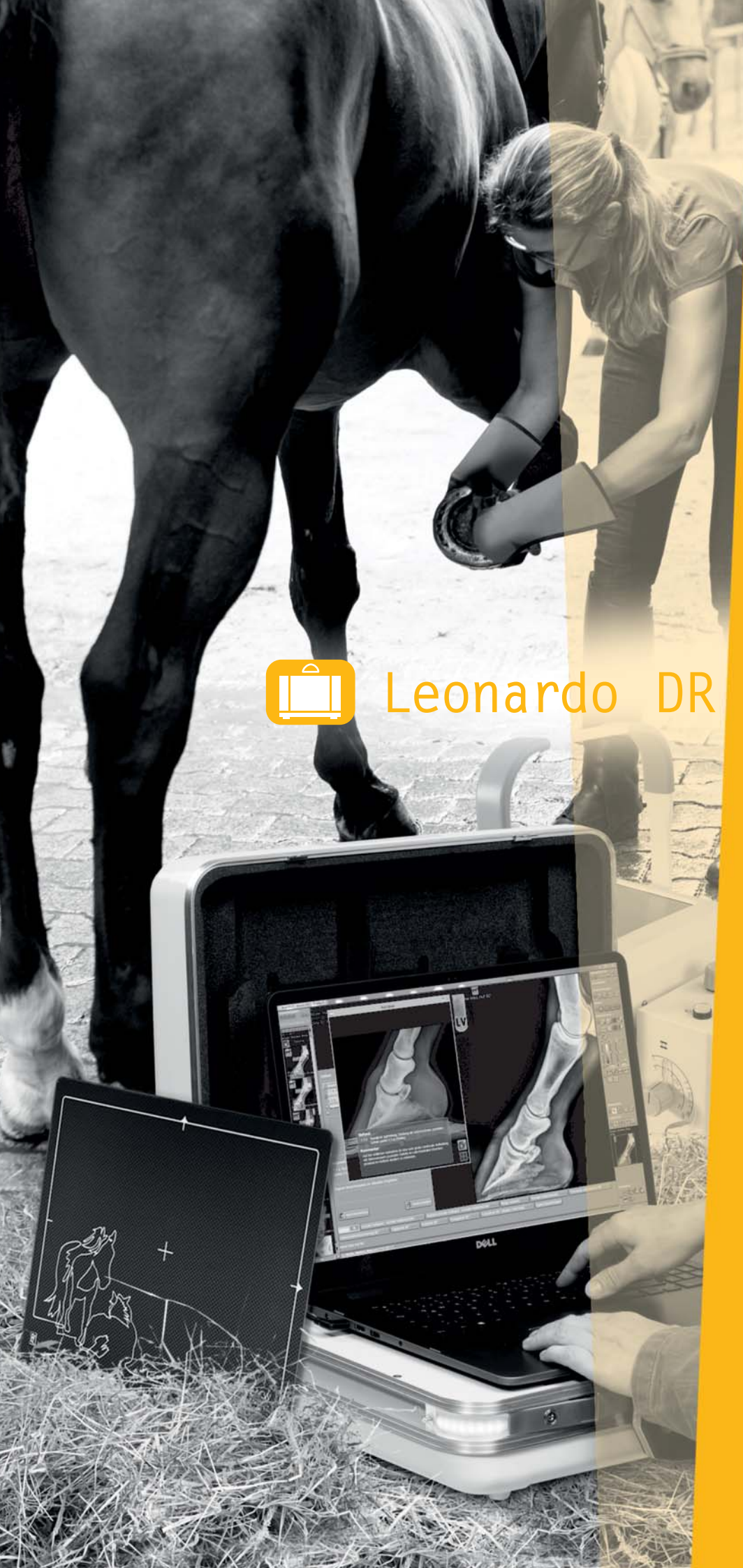
### **GIERTH RHF 200 ML – the all-purpose, resonance high frequency X-ray unit**

only 11.2 kg, shorter exposure times, reduced radiation exposure

### **GIERTH HF 400 with dual laser pointer and rotating collimator**

approx. 21.8 kg including light beam collimator and dual laser pointer, very high-powered HF X-ray unit with full-wave inverter system, max. frequency 100 mA





Leonardo DR Systems







## Compact suitcase, case and backpack solutions for equine and mixed animal practices

Leonardo DR suitcase and backpack solutions represent efficient and space-saving alternatives for ambulatory veterinary patient visits. All necessary components, including cables, are neatly tucked away in the suitcase and backpack. Just open the case, turn on the machine – and off you go!

This compact solution allows excellent images in DICOM format to be created, processed, analysed and archived in no time flat. The straightforward user interface enables all personnel to produce optimal X-ray images. The system functions under almost all environmental conditions and requires very little maintenance. Several different imaging surface areas are available for the Leonardo system.

The professional *dicomPACS*<sup>®</sup>*DX-R* acquisition software sports an intuitive and modern graphical user interface. All examinations can be conveniently conducted from a single monitor and all X-ray parameter settings are automatically transferred to the generator (optional).

→ See detailed description of software beginning on page 37

*dicomPACS*<sup>®</sup>*DX-R* generates images of outstanding quality and can be adapted to individual customer needs. High-performance image processing allows organ-specific optimisation. The integrated X-ray positioning guide assists with patient positioning and software settings for each examination (according to the genus of the patient). Furthermore, the *dicomPACS*<sup>®</sup>*DX-R* software can readily be interfaced with existing patient management systems.



## Leonardo DR mini III

*You want to X-ray without breaks and large, razor-sharp X-ray images?*

# The gold standard among the X-ray cases

**Leonardo DR mini III** – Very light X-ray system with large monitor and extremely long battery life

The gold piece of our Leonardo X-ray case series combines everything you want from a contemporary, highly functional X-ray system.

Specially designed for equine practitioners and mixed practices, the Leonardo DR mini III is fantastically lightweight. You can X-ray indefinitely without recharging and view the razor-sharp X-ray images on a 21.5" Full HD touchscreen monitor. The integrated diagnostic and acquisition software guarantees excellent image display.

→ See detailed description of software on pages 37-41

An indestructible 24 x 30 cm detector made of hard-wearing, flexible carrier material completes this extraordinary X-ray case. Large 35 x 43 cm X-ray detectors incl. protection box also find sufficient space in the case.



## What makes this X-ray case so unique?

### Flexible detector sizes

Sufficient space for all 25 x 30 cm and 35 x 43 cm X-ray detectors incl. protection box

### Large images

Anti-glare 21,5" ( Full HD54.6 cm) touchscreen monitor

### Extremely long battery live

Up to 500 shots without charging

### Very low case lightweight

Despite large HD monitor only 9.5 kg (plus detector)

**Razor-sharp X-ray images** thanks to globally proven image processing

Further detailed information on the Leonardo DR mini III can be found here:





## Leonardo DR mini II

*Looking to switch from digital imaging using computed radiography to direct digital radiography?*

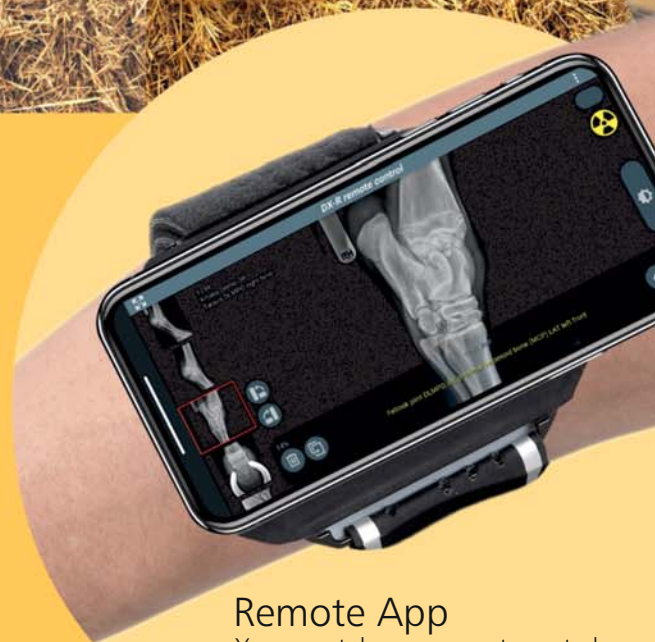
# Portable X-ray system in a suitcase

**Leonardo DR mini II** - sturdy, digital suitcase solution for mobile use in stables & clinics

The compact, extremely lightweight Leonardo DR mini II suitcase solution comes in a custom-made suitcase and is a portable, digital X-ray system for mobile and stationary radiography. With this system, X-rays can be taken in stables as well as other confined spaces.

The system can be set up and ready for use within moments. The built-in 17" high-resolution laptop and the integrated acquisition and diagnostic software guarantee excellent image display. → See detailed description of software on pages 37-41

An optional reporting module for pre-purchase X-ray examinations makes this system very attractive for equine appraisal (page 44).

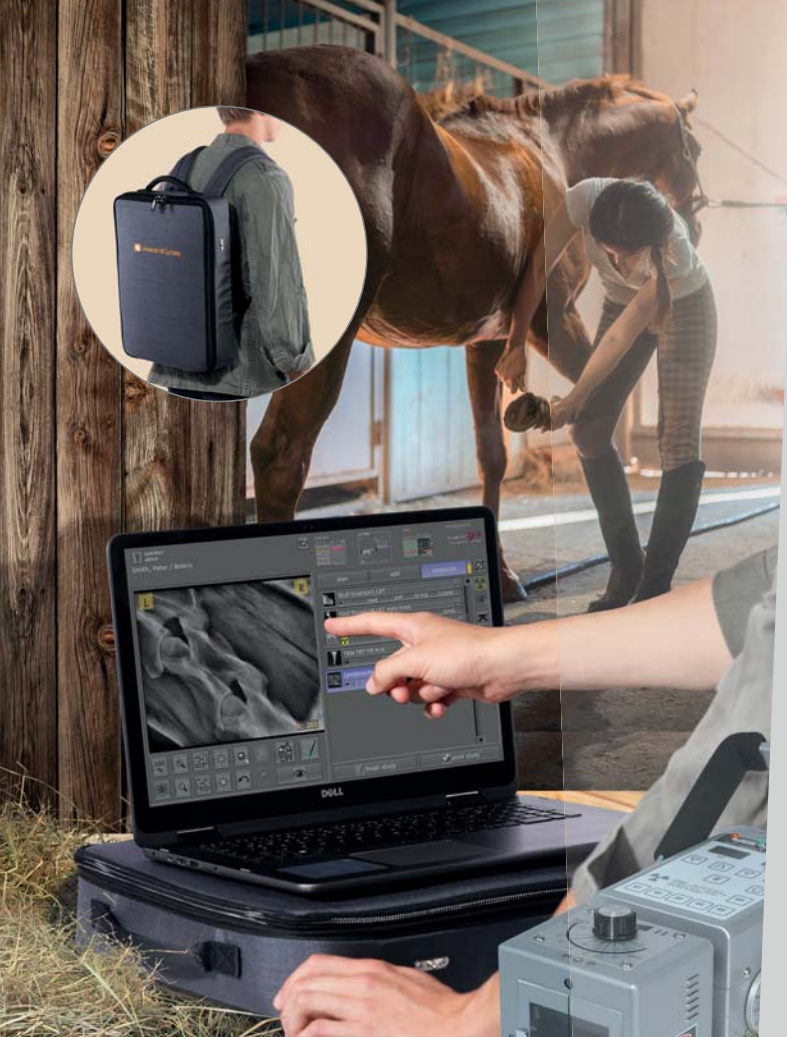


## Remote App

Your smartphone as remote control for taking and viewing images during the X-ray process – available for all Leonardo systems

Further information about Leonardo DR mini II is available here:





## Leonardo DR pico

*You are a equine veterinarian and looking for a light X-ray bag for direct digital X-ray in the outdoor area?*

# Fantastically light-weight X-ray bag

**Leonardo DR pico** - Comfortable, sturdy X-ray bag, also suitable as shoulder bag or backpack

The 17" notebook and the X-ray detector 12" x 10" (30 x 24 cm) with protection box are very space-saving and well padded in the robust bag. With a complete weight of only approx. 7.1 kg, the Leonardo DR pico can be easily transported to any location. The handy X-ray bag is also suitable for stationary use in veterinary practices or horse clinics. You can complete the system with a battery-operated, portable X-ray generator (from approx. 6.8 kg). The X-ray solution is quickly set up on site and ready for use with just a few easy steps.

The simple operation of the acquisition and diagnostic software from OR Technology pre-installed on the notebook enables even less radiologically experienced personnel to work easily and intuitively.

→ See details on pages 37-41



Further information about Leonardo DR pico is available here:



## Leonardo DR nano

*Searching for a rugged, portable digital solution to complement your existing mobile X-ray equipment?*

# Super lightweight back-pack X-ray system

**Leonardo DR nano** - one of the lightest portable X-ray solutions worldwide

The Leonardo DR nano consists of only two components: a wireless X-ray detector and a laptop with integrated acquisition and diagnostic software.

→ See details on pages 37-41

Weighing just under 8 kg (including carrying case, laptop, accessories and flat panel detector), the system is one of the lightest portable X-ray solutions worldwide. It is ideal for ambulatory digital radiography, any time and anywhere. Getting tangled up in annoying cables is a thing of the past! Working in confined spaces is no longer a problem.

After use, the system is stored in a rugged, custom-made and efficiently designed backpack. The system can easily be carried to any location, even in the field across uneven terrain.



Further information about Leonardo DR nano is available here:







Medici DR Systems







## Flat panel retrofit kit (DR) - transition your existing X-ray system to digital

Medici makes switching from conventional to digital radiography easy. Your existing system can stay as it is: Medici DR systems optimise your workflow, with digital X-ray images appearing on the monitor just seconds after exposure. Cassettes are no longer needed. Customise your X-ray system to meet your needs by choosing the perfect flat panel detector from a wide array of makes and sizes.

The *dicomPACS® DX-R* image acquisition software has a touchscreen interface, is easy to operate, adapts to your workflow, and reliably produces outstanding X-ray images. [→ See detailed description of software beginning on page 37](#)

The software is used to control all functions of the X-ray system. It also includes special functions for veterinary medicine such as integrated MMP and hip dysplasia measurement, special image filters, tools for TPLO, TTA, Buchanan's Vertebral Heart Score and distraction index, as well as an extra dialogue box for patient and owner data.

All Medici systems can be integrated into your practice management software and programmed to transfer X-ray images to an image management system (PACS). Should you lack access to a PACS server but still require images to be distributed (e.g., within your veterinary practice/hospital or to colleagues/owners via internet), our *dicomPACS®* image management system also offers file sharing.



## Medici DR Systems

*Interested in transitioning your conventional, stationary X-ray system to digital with minimal effort?*

# Upgrading stationary X-ray systems

... with a **Medici** system:  
tethered or wireless flat panel detector

Choose a digital upgrade for your existing stationary X-ray system. Medici DR systems are available for nearly every X-ray unit manufactured. By choosing the appropriate make and size of wireless or tethered flat panel detector, the system can be configured according to your needs. The system's auto exposure detection (AED) works without further changes to the running system or to the cable connections. New components are installed in place of the CR cassettes.

The integrated control console offers all tools necessary for working with the X-ray system: from generator control (optional) to the display of high quality images for diagnostic evaluation.

→ See detailed description of software on pages 37-41



Further information about Medici updates is available here:





Our Medici DR retrofits are available in the following versions:

**Retrofit with wireless flat panel detector**

Upgrade your existing X-ray system to digital and configure your system according to your needs with a wireless flat panel in addition to the *dicomPACS®DX-R* acquisition software

**Retrofit with tethered flat panel detector**

Transition your X-ray system to digital with our Medici retrofit with a tethered flat panel in addition to the *dicomPACS®DX-R* acquisition software

**Medici systems include:**

one flat panel detector (wireless or tethered), the *dicomPACS®DX-R* acquisition software, as well as a control console with touchscreen



Divario CR Systems





## Digital radiography with cassettes for standard X-ray examinations in veterinary medicine

With the purchase of a cassette-based radiography system (CR), you can keep your existing X-ray system and simultaneously benefit from the excellent quality of digital X-ray images.

Computed radiography uses imaging plates in cassettes of the same size and shape as conventional film cassettes. After the normal X-ray exposure, the cassette is placed into an X-ray scanner and read out.

The resulting digital image is stored and can be viewed seconds later on the computer monitor. CR imaging plate systems permit low-cost entry into digital radiography and pay off within a short period of time. The existing X-ray system does not have to be modified.

When used in combination with the professional image acquisition software *dicomPACS®DX-R*, the compact and lightweight CR system provides a complete suite of image processing tools.

→ See detailed description of software beginning on page 37

The tailor-made software substantially improves and accelerates the daily workflow. During the design phase, priority was given to exceptional image quality and maximum flexibility. As a result, the integrated intelligent image processing software can easily be individualised to meet the specific wishes and requirements of the physician for each X-ray examination. This function guarantees the best image quality for any given purpose.



## Divario CR -T2

*Interested in going digital without changing your existing radiography workflow?*

# Compact and quick CR desktop unit

**Divario CR-T2** with high cassette throughput for small animal practices and veterinary clinics

At 73 cassettes per hour, the Divario CR-T2 has an impressive maximum processing capacity. Divario systems are easy to use and increase the efficiency of examination procedures. The desktop systems are unobtrusive, have a compact design, and are small enough to fit on any desk, shelf or even in a vehicle. The CR system is portable and suited for mobile use.

OR Technology's integrated image acquisition software includes a complete suite of image processing tools and guarantees excellent image presentation. The solution can easily be integrated into the workflow of a clinic or research institution, for example to handle overflow and act as a backup in an existing DR or CR system.

→ See details on page 37-41



Further information about Divario CR-T2 is available here:



## Divario CR -Tm

Looking for an easy way to digitise the X-ray imaging with cassettes with high resolution?

# CR desktop unit with superb resolution of 50 $\mu\text{m}$

**Divario CR-Tm** for evaluating of X-ray images of small objects, e. g. cat and dog paws

The Divario CR-Tm is a CR desktop system for use in veterinary medicine with a maximum throughput of 73 cassettes per hour, in high-speed mode (5 pixel/mm). The Tm version also delivers extremely high-resolution images with 50  $\mu\text{m}$  pixels. This high image resolution is particularly helpful when evaluating X-ray images of small objects, for example cat and dog paws.

When used in combination with the professional image acquisition software *dicomPACS<sup>®</sup>DX-R*, the lightweight and compact CR system provides a complete suite of image processing tools. The solution can easily be integrated into the workflow of a practice, for example to handle overflow and act as a backup in an existing DR or CR system.

→ See detailed description of software on pages 37-41



Detailed information about Divario CR-Tm is available here:





Dental Systems





## High image quality & convenient operation with digital upgrade solutions for existing dental X-ray units with DR dental detectors and CR dental systems

Interoral X-ray imaging is an important tool in veterinary medicine and a prerequisite for precise diagnostics and effective treatment. Our DR and CR upgrade systems make it easy for you to transition existing X-ray systems to digital.

High-quality dental X-ray images of single teeth including roots as well as entire jaws are now possible. In most cases, pathological changes occur in hidden areas of the root and tooth neck (e.g., resorptive lesions in cats and root abscesses of eyeteeth in dogs). In these situations, proper diagnosis is only possible using imaging techniques.

Our Divario Dental CR upgrade system is an affordable first step to digital radiography and requires no changes in your daily work routine.

The Medici DR Dental upgrade kit with CMOS dental detector is not only perfect for intraoral dental radiography, it can also be used to generate high-resolution images of paws.

The professional image acquisition software *dicomPACS®DX-R* is convenient, easy to use, and has all necessary image processing functions. The program is specifically designed to provide both excellent image quality and maximum flexibility.

→ See detailed description of software beginning on page 35



## Medici DR Dental Systems

*Interested in going digital without changing your existing dental radiography workflow?*

# Outstanding X-ray images for dental imaging

**Medici DR Dental** system with CMOS Detector for the veterinary practice

The Medici X-ray detector with its modern CMOS sensor was developed especially for general-purpose radiographic diagnosis in the veterinarian practice and is suited for all requirements of intraoral dental radiography as well as for high-resolution X-ray images of small animals' paws.

The sensor surface is protected by a fiberglass plate and guarantees a long service life of the sensor. The easy-to-use X-ray detector is connected via a USB interface and is dust and waterproof. The sensor's rounded corners offer additional comfort for the animal patients. The software dicomPACS® DX-R can be used comfortably on a laptop or touchscreen. It adapts to your workflow and provides high quality X-ray images almost without time lag.

→ See details on page 35-39



Further information about Medici DR Dental System is available here:



## Divario CR-F Dental

*Looking for an easy way to digitise the images from your conventional dental X-ray system?*

# Cost-effective and quick dental system

**Divario CR-F Dental** - high-performance, user-friendly CR system for excellent dental X-rays

The quick and cost-effective Divario CR-F Dental system delivers high-quality digital X-ray images. The system is compact and affordable, and enhances overall productivity in veterinary practices and animal hospitals.

The Dental Reader combines an elegant design with powerful, easy-to-operate technology. The Divario includes an automatic imaging plate (IP) input tray and a complete range of reusable bitewing and intraoral plates for efficient positioning.

The system comes with the dicomPACS® DX-R X-ray acquisition software, which controls the X-ray generator (optional) and establishes a structured and efficient workflow. → See detailed description of software on pages 35-39



Further information about Divario CR-F Dental is available here:







## D-AX Vet Systems

*Are you looking for a flexible solution for dental X-ray in your small animal practice?*

# X-ray systems for intraoral imaging

## **Amadeo D-AX Vet-** Dental X-ray systems for professional dental radiography

The reliable X-Mind dental X-ray systems offer flexible solutions for your small animal practice.

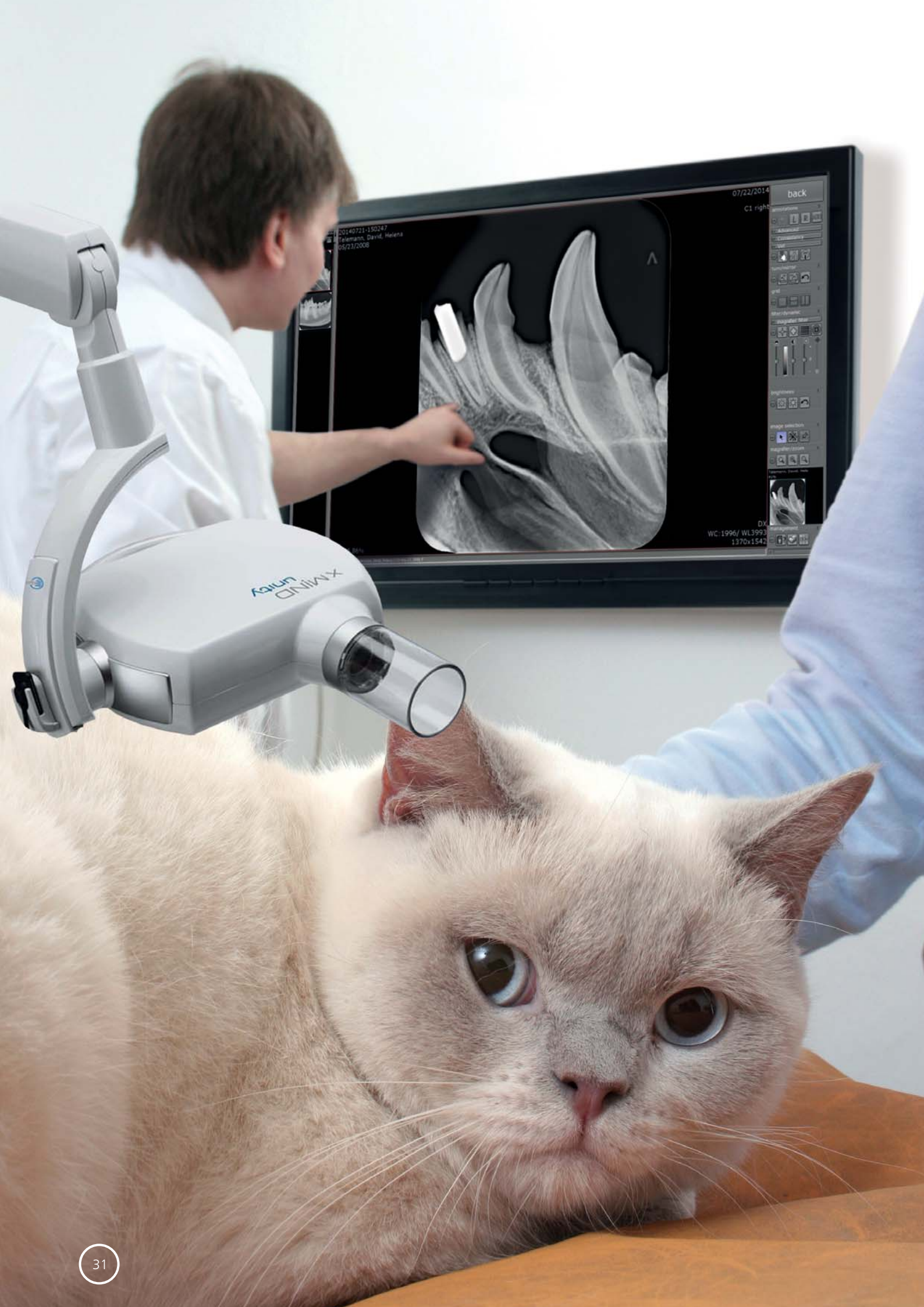
The X-Mind DC X-ray system operates in the high-frequency range with constant power output and therefore achieves maximum dose stability regardless of the respective input conditions. The system is available for wall and ceiling mounting as well as mobile.

The X-Mind Unity also delivers excellent X-ray images - fast, safe and radiation-reduced. The dental X-ray unit combines sophisticated X-ray technology with great comfort and radiation protection. With just one "shot", the user receives high-quality X-ray images that are up to 52% lower in radiation and higher in contrast than with classic X-ray units.



Further information about Amadeo D-AX Vet Systems is available here:







## X-ray accessories





## Mobile stands and patient positioning tables for maximal flexibility in stables and animal clinics

A wide diversity of animal species and patient sizes places special demands on X-ray systems in veterinary medicine. Mobile and stationary equipment in small animal practices and equine clinics must be installed in such a way as to make the X-ray process simple, quick and safe for staff and animals alike.

Systems, tables, and stands must be adapted to the needs of the patient – be it a mouse or an elephant. By switching from analogue imaging to computer-aided radiography, you can take full advantage of technological advances, improve image handling and benefit from an environmentally friendly X-ray system with the lowest possible radiation load.

A large number of systems and versions are available for diverse radiographic applications.

All accessories sold by OR Technology can be used together with OR Technology's DR and CR systems as well as our software solutions.



## X-ray accessories

Searching for a high-quality patient positioning table suitable for small animals as well as XXL dog breeds?

# Patient tables for diverse species

Patient positioning tables for mobile and stationary X-ray systems

Our new generation of X-ray tables offers maximal convenience and flexibility. All accessories can be combined with OR Technology's DR and CR systems as well as our software solutions. A large number of systems and versions are available for diverse applications:

- *Simple, rolling X-ray tables with cassette / grid holder, sliding cassette holder with grid tray for all formats up to 35 x 43 cm, generator mount*
- *X-ray tables with integrated tube stand and sliding cassette holder with grid tray for all formats up to 35 x 43cm, plus generator mount - partially height-adjustable / rotatable*



Further information about top-quality X-ray tables is available here:



## X-ray accessories

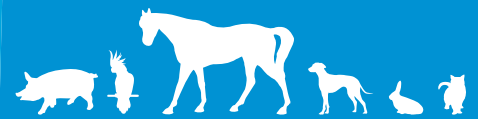
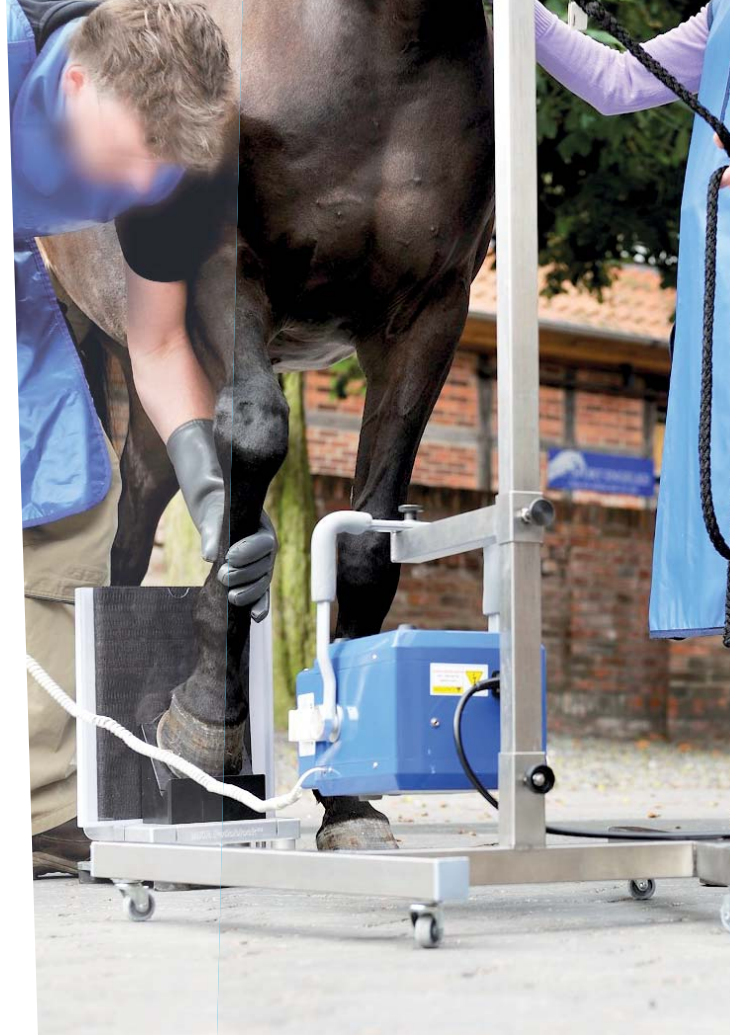
Searching for radiographic stands for your mobile or stationary X-ray system?

# Mobile stands, cassette holders & wall mounts

Accessories for maximal flexibility in stables and animal clinics

A wide diversity of animal species and patient sizes in veterinary practices and animal clinics places special demands on the manufacturers of X-ray equipment and accessories. Our new generation of X-ray accessories offers maximal convenience and flexibility. All accessories can be combined with OR Technology's DR and CR systems as well as our software solutions:

- *Collapsible mobile stands for portable X-ray units, assembly in less than 10 seconds*
- *Collapsible mobile stands for X-ray detectors (DR) and CR systems*
- *Articulating arms for mounting portable X-ray units on walls or ceilings*
- *Diverse stands for cassette holders*



Further information about mobile stands and cassette holders is available here:







*dicomPACS®* **DX-R**  
*X-ray Acquisition Software*



The **heart**  
of the  
OR Technology's  
X-ray systems



## The professional acquisition and diagnostic software for static and dynamic X-ray with DR and CR systems

*dicomPACS®DX-R* is an acquisition software for X-ray systems for static and dynamic imaging with a straightforward and user-friendly graphic interface controlled via touchscreen and/or mouse. The software package is included in all Amadeo, Leonardo, Medici and Divario systems (excluding Amadeo P systems). The software also controls the operation of X-ray generators and X-ray units, and thus establishes a structured and efficient workflow.

*dicomPACS®DX-R*'s professional image processing produces images of outstanding quality and can be adapted to special customer needs. The high-performance software includes organ-specific optimisation, which further enhances image quality.

Everyday veterinary care is made easier by multiple integrated functions – including a multimedia X-ray positioning guide - and an intuitive design. The software also offers an array of special tools including filters for bones and soft tissues as well as measurement tools for TPLO, TTA, MMP, distraction index and heart measurement (Buchanan's VHS).

Furthermore, the *dicomPACS®DX-R* software can readily be integrated with existing patient management systems. X-ray images can be evaluated using the *dicomPACS®* viewer module within the acquisition software. Thus, the system can function as a fully-fledged diagnostic work station with the option to upgrade to a PACS (Picture Archiving and Communication System).



→ detailed description of the software:

## Benefits of our internationally proven acquisition software:

- Modern graphical user interface (GUI), readily **adaptable to new languages**
- **Touchscreen operation** – ensures quick, efficient and structured workflow
- Patient data is captured via **DICOM Worklist, BDT/GDT, HL7** or other protocols – data can also be captured manually
- **DICOM procedure codes** are used to transfer all data relevant to an examination directly from associated information management systems (e.g., HIS/RIS)
- Body parts already stored in the system can be **freely configured** using **over 400 projections** and a multitude of parameters
- Reliable and quick **registration of emergency patients**
- Enables single image acquisition as well as the acquisition of image sequences (**dynamic X-ray**)
- The order of **scheduled examinations can be modified in order** to avoid unnecessary patient repositioning
- Images can be appended to an examination record later
- Special tools for veterinary medicine; including a dialogue box for patient and owner data, **automatic HD measurement (AI-based)**, **special image filters**, **multiple generator control** to facilitate switching between mobile and stationary X-ray units and much more....
- User-defined **macros for recurring examinations**, e.g. equine pre-purchase examinations
- **Fully integrated, multimedia radiographic positioning guide** for all examinations including helpful hints, photographs, videos and sample X-ray images
- **Wireless remote control** of the digital X-ray system; with worklist, image thumbnails to preview X-rays and much more...





## Benefits of flexible image acquisition:

- Integration of **diverse flat panel, dental and CR systems** (including dental systems) produced by different manufacturers, includes an **electronic X-ray log**
- **User-configured generator interface** can control X-ray generators and X-ray systems from diverse manufacturers, generator settings are adjusted via software
- **Parallel operation of flat panel and CR systems** is a standard feature of the system. Users can choose whether the next exposure is taken by the flat panel or the integrated CR system. This flexibility also functions as a excellent backup in case of a defective flat panel detector.
- **Integrated dose area product (DAP) meter**; DAP measurements are automatically saved to the image
- All **X-ray parameters can be automatically adjusted** for each projection using **AEC** (automatic exposure control) and **APR** (anatomical programmed radiography); manual adjustments are also possible

## Automatic image processing for optimal quality

- Perfect images at all times using the **automatic image optimisation** of the integrated software – **further adjustments are rarely necessary**
- **Professional image processing** that can be adapted to meet the needs of each examination and customer
- Our image processing has special features that **provide virtually constant image quality under a wide range of X-ray parameter settings** (allows for dosage reduction)
- Bones and soft tissue in the same image – **details of fine bone and tissue microstructures** significantly improve diagnosis

Further information  
about the  
acquisition software  
is available here:





→ detailed description of the software:

The **dicomPACS<sup>®</sup>DX-R** Cognition Optimised Processing (COP) comprises:

**ADPC – automatic dead pixel correction**

Automatically eliminates dead pixels – this reduces the need to calibrate the flat panel

**AIAA – automatic image area analysis**

Automatically analyses each image for soft tissue and bone structures and applies the most suitable image processing algorithms

**MFLA – multi frequency level analysis**

Analyses each image on various frequency levels for ideal sharpness and high subtle contrast

**ANF – automatic noise filter**

Algorithm for optimal noise reduction

**GLI – gridless imaging**

Exposures without grid: enables the display of an image as if it had been taken with a grid – this is useful for supine chest exposures (bedside).

**AGLS – automatic grid line suppression**

Automatically removes gridlines from flat panel images – suitable for grids from 100 LPI to 200 LPI

**IBC – intelligent brightness control**

Automatically displays the image at the ideal level of brightness

**ACO – automatic contrast optimisation**

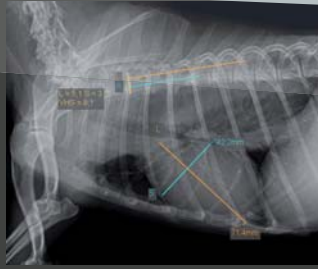
Automatic contrast equalisation across the entire image – this enables the optimal display of soft tissue and bones at the same time

**ABBS – automatic black border shutter**

Automatically darkens all parts of an image outside the collimated area – varying degrees of transparency are available and manual adjustments are easy to make.



**Dynamic X-Ray:** Imaging and diagnosis/  
archiving of image sequences



Buchanan's Vertebral Heart Score



HD measuring technique for dogs



Measuring the distraction index



Automatic  
HD measurement,  
based on  
Artificial Intelligence  
[more tools  
in development]

## Special measurement tools and filters:

Digital X-ray images have the advantage that exact measurements can be made at the computer monitor and that image processing techniques can be used to improve image quality. *dicomPACS® DX-R* offers an array of special software tools:

### **Modified Maquet Procedure (MMP) tool**

The MMP tool calculates parameters for the placement of the MMP wedge for dogs with cruciate ligament disorder.

### **Pre-operative planning with the prosthesis documentation module (optional)**

This module facilitates planning and documenting operations. Active images are displayed in the size of the original (identical to analogue film images). The prosthesis template can be displayed on the image as an annotation or existing prosthesis template films can be held in front of the monitor.

### **TTA (Tibial Tuberosity Advancement) tool**

The TTA measuring technique is used to apply the translated length measurements at the tuberositas tibiae in dogs.

### **Automatic HD measuring technique for dogs with AI support**

To ensure a very fast and reliable determination incl. a documentation of the Norberg angle, *dicomPACS® vet* provides a special tool based on Artificial Intelligence. The HD measurement remains editable after automatic insertion. Thus, the centre of the femoral head, the circle for determining the joint margin and the Norberg angle can be corrected manually.

### **TPLO (Tibial Plateau Leveling Osteotomy) tool**

The TPLO tool measures and optimises the slope of the tibial plateau for domestic dogs.

### **Distraction index tool**

This tool measures the displacement of the femoral head from the joint socket of the hip joint in dogs.

### **Buchanan's Vertebral Heart Score**

This annotation is a simple and reliable method to determine the size of the heart, specifically for cats and dogs. The height and width of the heart are put in relation to the individual's vertebral body width. Thus, the examination takes into account anatomical differences between races.



*dicomPACS<sup>®</sup>vet*





## Innovative digital image management solutions for veterinarians

*dicomPACS<sup>®</sup>vet* is a picture archiving and communication system that connects, controls and manages everything having to do with your X-ray images: ranging from exposure and image analysis to archiving and communication.

The *dicomPACS<sup>®</sup>vet* software can help your dream of a paperless veterinary practice come true. With *dicomPACS<sup>®</sup>vet*, images and all types of documents (e.g., medical findings and reports, faxes) are stored in a digital patient folder and readily accessible.

Our sophisticated archive and backup solutions guarantee both quick access to all data and high security standards in keeping with international guidelines for human medicine. Furthermore, the *dicomPACS<sup>®</sup>vet* software can easily be integrated into all common practice management systems.

The *dicomPACS<sup>®</sup>vet* software acquires, analyses, transfers and archives images. The program was designed, developed and tested in cooperation with medical practitioners in order to provide a sophisticated, user-friendly tool for everyday diagnostics.

With thousands of installations worldwide, the system has proven itself many times over. *dicomPACS<sup>®</sup>vet* is the perfect solution for simple image processing tasks and complex radiological networks alike.



 *dicomPACS<sup>®</sup>vet*

*Searching for an intelligent image management system with a reliable archiving and backup solution?*

## PACS basic package for professional image diagnostics

... An image management system ideal for editing, analysing, transferring and archiving images

In addition to basic functions such as image and patient management, image optimisation, and the ability to measure, highlight, edit, import, export and print, the *dicomPACS<sup>®</sup>vet* software includes a DICOM receive/archive module for DICOM images and a patient CD module that creates CDs from which patients can view their X-rays using a complementary viewer software. A module for connecting to film and document scanners is also included.

The *dicomPACS<sup>®</sup>vet* package further includes special filters and measurement tools (TPLO, TTA, HD, heart score, MMP). Optional components include documentation modules (prosthesis documentation, report module for X-ray services relating to equine pre-purchase examinations), as well as statistics and video modules.



Further information about *dicomPACS<sup>®</sup>vet* is available here:



## Benefits of the basic package at a glance

- dicomPACS® vet includes special measurement tools and filters (see detailed description on page 39) as well as professional tools for the analysis of image slices (e.g., MPR and MIP)
- Fully functional versions of the diagnostic software at all work stations in your practice (no „light“ versions)
- User-friendly interface, logical and intuitive structure requiring little training
- User interface can be individualised according to your specialisation and needs
- Flexible assignment of shortcut keys for many functions to expedite everyday tasks
- Parallel processing (e.g., image analysis can continue while burning a CD)
- All images and data are permanently available in the network – no need to store old images on CD
- „Perfect memory“ – images are reopened with all previous markings and settings (including zoom and orientation)
- Multiple windows can be opened simultaneously, allowing the concurrent analysis of several patient records without loss of performance - depending on computer hardware
- External documents including doctor's letters, faxes and X-ray images can be imported – no additional modules are required
- Installation possible on systems using Windows, UNIX, LINUX and Apple Macintosh operating systems
- Optimal data security, speed and compatibility made possible by standardised SQL database technology
- All images and documents are compliant with international DICOM standards







Searching for a software program  
to make pre-purchase examinations and  
documentation easier?

# Thorough and seamless documentation

... with the report module  
for X-ray services for equine  
pre-purchase examinations \*



Further information  
about this  
documentation module  
is available here:



Pre-purchase and pre-sale examinations for horses are particularly challenging for veterinarians. These specialised examinations must be carried out meticulously and documented seamlessly in the greatest of detail. After all, the horse owner justifiably expects a professional and comprehensible presentation of the results. Together with renowned specialists, we have developed a report module specifically for X-ray services relating to pre-purchase examinations.

The *dicomPACS® vet* KU module expedites the report-writing process by automatically assembling X-ray images and structuring the report according to the X-ray guidelines of the German organisations "Gesellschaft für Pferdemedizin e.V." (non-profit organisation for equine medicine) and "Bundestierärztekammer e.V." (Federal Association of Vets).

*\*only available in Germany*



*Do you require a viewer for mobile applications or worldwide access to your complete image database?*

## Web-based viewer for all devices

Images and documents any time, anywhere

The web-based viewer *dicomPACS® MobileView* is one of the many extension modules of the *dicomPACS® vet* diagnostic software.

This application can be used with practically all browsers to view image material on mobile devices both in and outside of animal and equine clinics and practices. The vet's staff can access all image files in the database via internet worldwide.

In addition to image diagnostics, the viewer can generate and export diagnostic reports. Similarly, documents can be attached and exchanged using the software. When viewing a patient record, all reports for the patient are displayed. Individual findings may be selected, formatted and exported.



Further information about *dicomPACS® MobileView* is available here:





ORCA®



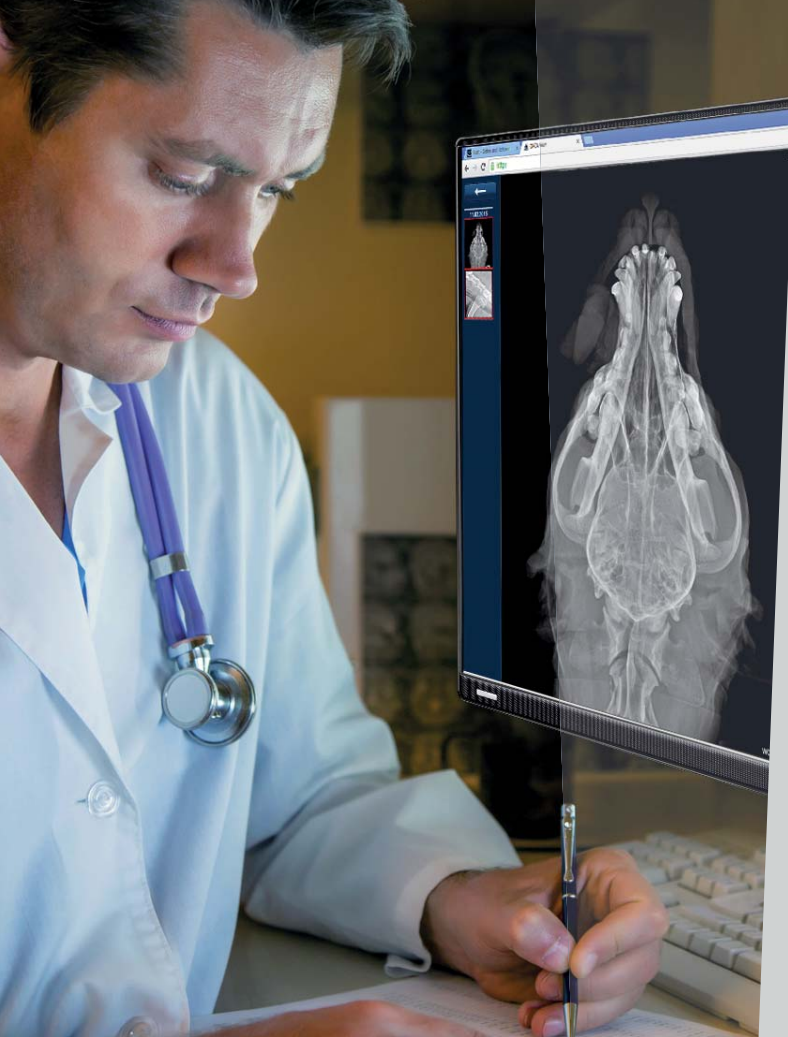
## Cloud-based archiving, viewing and transferring of veterinary images

A daily challenge in veterinary medicine is processing the large volume of images generated by modern equipment. Veterinary diagnostics greatly benefits from advanced, high-quality imaging techniques and at the same time is faced with ever-growing data volumes.

*ORCA*<sup>®</sup> (OR Technology Cloud Archiving), a platform based on cloud computing, is specially designed for storing, viewing and sharing medical images.

With *ORCA*<sup>®</sup> there are many ways to make everyday work in veterinary practices, animal clinics and hospitals easier, cheaper and more sophisticated. *ORCA*<sup>®</sup> archives medical images and documents on its remote servers and allows you to share these files with other veterinarians and authorised persons online: This can include vets requesting equine pre-purchase examinations, pet owners, appraisers for breeding associations, and colleagues providing a second opinion.

Not only does *ORCA*<sup>®</sup> provide third parties with hassle-free access to images and data, it is straightforward to use and helps optimise workflow. *ORCA*<sup>®</sup> *View*, included in the *ORCA*<sup>®</sup> package, is a cross-platform program for all browsers and mobile devices. Using *ORCA*<sup>®</sup> *View*, images can not only be viewed, but also processed and analysed using various measurement tools. The program also provides diverse templates for generating findings reports. *ORCA*<sup>®</sup> *View* is web-based and requires no local software installation.



ORCA® Archive

## Cloud-based archiving of X-ray images

Archiving and backup solution  
**ORCA® Archive** for veterinary practices, clinics and hospitals

ORCA® Archive provides storage for image files from direct sources (e.g. digital X-ray, CT, MRI and ultrasound machines) as well as from Picture Archiving and Communication Systems (PACS) in a cloud-based archive. ORCA® Archive can also be used as an additional backup solution.

Wherever the internet is accessible, images archived in the cloud can be viewed and analysed at maximal resolution and quality (DICOM) via the integrated, browser-based ORCA® View program and our diagnostics software *dicomPACS® vet*.

If you are using a different PACS, images can be downloaded from ORCA® for viewing locally.



Further information about ORCA® Archive is available here:







**ORCA**<sup>®</sup> Share

# Communication platform and tele-medicine solution

Easy viewing and transferring of images for veterinarians using the DICOM cloud with **ORCA**<sup>®</sup> Share

**ORCA**<sup>®</sup> makes everyday work in veterinary practices and animal clinics easier, cheaper and more sophisticated. **ORCA**<sup>®</sup> Share is a tool for sharing images and medical findings with doctors and other authorised persons. The service is scalable, allowing adjustments in storage space as demand grows.

**ORCA**<sup>®</sup> Share is a platform for communication with external partners. Images and findings reports can be shared with staff, colleagues and specialists via **ORCA**<sup>®</sup>. **ORCA**<sup>®</sup> Share can also be used to give patients access to medical reports and images. Recipients are sent a secured access link to specific files via email. There is no need to install software locally.



Further information about **ORCA**<sup>®</sup> Share is available here:

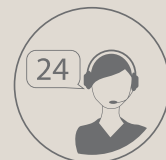




Perfect image quality



Rapid amortisation



Support - whenever & wherever needed



Reduced radiation exposure



Systems and software developed in Germany



Uncomplicated workflows

# FAQ

## X-ray systems & software from OR Technology

With veterinary, digital X-ray machines by OR Technology, you can produce perfect X-ray images quickly and easily with reduced radiation exposure. The handling is intuitive and with the integrated X-ray helper for the correct setting technique, every X-ray assistant can achieve the best results.

The quickly amortising digital X-ray technology is durable and requires little maintenance. For prices and costs of our veterinary equipment contact our Team below. If something does go wrong, you can rely on our extensive support, even after office hours.

### **How to guarantee a low-interference workflow? What to do in case of failure of X-ray system or software?**

Our X-ray systems are designed to not require any regular maintenance (in particular). If you do face a problem, you can contact us at any time. OR Technology has its own support centre with over 20 employees. You will receive help via remote service, maintenance problems with the software can be solved almost instantly. Our technicians in the field will take care of it soonest if something needs to be repaired or replaced on site.

### **International certification standards**

The successful certifications of the systems from OR Technology vouch for the fact that the strict, structured processes in research, development, production, sales and service have been consistently adhered to. This guarantees that the quality of our products and services is always consistent and traceable.

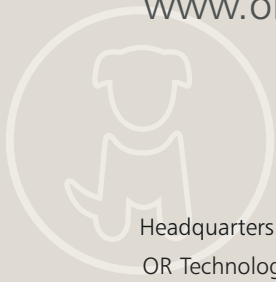
### **How does the exchange service work in the event of damage?**

OR Technology offers a special exchange service for X-ray detectors so that you can resume your work immediately in the event of a malfunction. This includes the free loan of a comparable replacement detector for the period of repair of the detector for which the service package was ordered. This service applies regardless of whether the detector is still under warranty or not.





www.or-technology.com | X-perts in X-ray



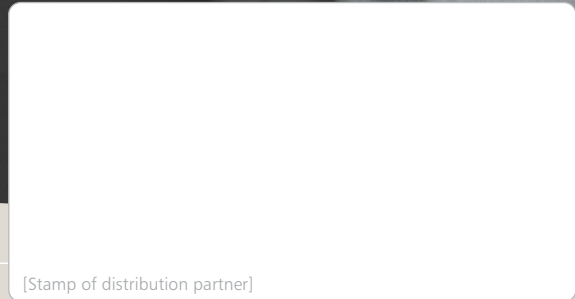
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