Digital Radiography and Image Management

A guide for veterinary practices, clinics and hospitals
Digital X-ray images
time, anywhere
in clinics, practices and stables

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

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

Medici DR retrofits
Digital retrofits for existing X-ray systems

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

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

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

**dicomPACS®DX-R X-ray acquisition software**
Acquisition and diagnostic software for X-ray systems with user-friendly graphical interface

**dicomPACS®vet image management and diagnostics**
Software for processing, transferring and archiving images

**ORCA cloud solutions**
Cloud-based teleradiology and storage for images and patient records
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
90 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 minimize 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 dicom/PACS®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 dicom/PACS®DX-R software can readily be interfaced with existing patient management systems. See detailed description of software beginning on page 31

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.
Mini full solution for small animals

Amadeo V-DR mini - Space-saving full system with adjustable monitor that plugs into standard electrical sockets

The Amadeo V-DR mini X-ray system is specially designed to meet the requirements of veterinary practices, and particularly suited for small animal practices. The patient table is equipped with silent brakes and a floating tabletop. The floating tabletop allows for nearly unrestricted movement and can be operated from the front panel. The height-adjustable monitor stand can be rotated by 180°, providing easy access to the dicomPACS®DX-R acquisition and diagnostic software.

To save space, the 230 V (110 V*) high-frequency generator is incorporated directly into the X-ray table. The compact build of the Amadeo V-DR mini makes it the perfect solution for confined spaces.

* optional
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 tabletop

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, 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 31-35

The Amadeo V can function as a DR or CR X-ray system. Its compact build allows installation in confined spaces. To save space, the generator is incorporated directly into the X-ray table. The system is user friendly and versatile.

For more detailed information please see: www.or-technology.com
Further information about Amadeo P units 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).
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-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

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

dicomPACS®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®DX-R software can readily be interfaced with existing patient management systems.
Looking to switch from digital imaging using computed radiography to direct digital radiography?

Leonardo DR mini II

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 17" built-in high-resolution laptop and the integrated acquisition and diagnostic software guarantee excellent image display. See detailed description of software on pages 31-35.

An optional reporting module for pre-purchase X-ray examinations makes this system very attractive for equine appraisal (page 40).
Leonardo DR nano

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

Super lightweight backpack 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.

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: www.or-technology.com
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 31.

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 to the display of high quality images for diagnostic evaluation. See detailed description of software on pages 31-35.
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

For more detailed information please see: [www.or-technology.com](http://www.or-technology.com)
Divario CR Systems
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 \textit{dicomPACS$^\text{®}$ DXR}, the compact and lightweight CR system provides a complete suite of image processing tools.

\textbf{See detailed description of software beginning on page 31}

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.
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 running 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 31-35
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 µm

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 µm 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® 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 running 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 31-35

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

Detailed information about Divario CR-Tm is available here:
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 canine teeth 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 dicomPACSG®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 31
Further information about Medici DR Dental System is available here.

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 veterinary 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 31-35
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 31-35

For more detailed information please see: [www.or-technology.com](http://www.or-technology.com)
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.
Further information about top-quality X-ray tables is available here.

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

X-ray accessories

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

For more detailed information please see: [www.or-technology.com](http://www.or-technology.com)
**dicomPACS® DX-R** is an acquisition software for X-ray systems 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).
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
- 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, integrated HD measurement, 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.
Das *dicomPACS® 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.
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**
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 tool measures and optimises the slope of the tibial plateau for domestic dogs.

**HD measurement technique for dogs**
**dicomPACS® vet** provides a special tool that quickly and reliably measures the Norberg angle and provides documentation. One click suffices to insert (and modify) all relevant lines and angles on an image.

**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® 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® vet software can help your dream of a paperless veterinary practice come true. With dicomPACS® 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® vet software can easily be integrated into all common practice management systems.

The dicomPACS® 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® vet is the perfect solution for simple image processing tasks and complex radiological networks alike.
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*® *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*® *vet* package further includes several documentation modules (prosthesis documentation, report module for X-ray services relating to equine pre-purchase examinations), special filters and measurement tools (TPLO, TTA, HD, heart score, MMP), as well as statistics and video modules, and teleradiology capabilities.
Benefits of the basic package at a glance

- *dicomPACS*® *vet* includes special measurement tools and filters (see detailed description on page 31) 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

For more detailed information please see: [www.or-technology.com](http://www.or-technology.com)
Thorough and seamless documentation

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

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<sup>®</sup>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
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.

For more detailed information please see: www.or-technology.com
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** (OR Technology Cloud Archiving), a platform based on cloud computing, is specially designed for storing, viewing and sharing medical images.

With **ORCA** there are many ways to make everyday work in veterinary practices, animal clinics and hospitals easier, cheaper and more sophisticated. **ORCA** 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** provide third parties with hassle-free access to images and data, it is straightforward to use and helps optimise workflow. **ORCA View**, included in the **ORCA** package, is a cross-platform program for all browsers and mobile devices. Using **ORCA 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 View** is web-based and requires no local software installation.
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:
Communication platform and tele-medicine solution

Easy viewing and transferring of images for veterinarians using the DICOM cloud with ORCA Share

ORCA makes everyday work in veterinary practices and animal clinics easier, cheaper and more sophisticated. ORCA 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 Share is a platform for communication with external partners. Images and findings reports can be shared with staff, colleagues and specialists via ORCA. ORCA 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 Share is available here: [www.or-technology.com](http://www.or-technology.com)