The DR system in a suitcase for mobile veterinary X-ray

total weight only ca. 26 kg

Doggone great!
OR Technology has been active in the fields of digital X-ray technology and image management for veterinary and human medicine for over 15 years. Large veterinary clinics and universities as well as smaller surgeries in more than 36 countries are using our solutions with great success.

**LEONARDO DR 4336R vet** - portable digital X-ray system with outstanding features

The compact suitcase solution **Leonardo DR 4336R vet** is a fast and space saving alternative for ambulant digital radiography.

The handy, robust suitcase made out of shock proof materials, is easy to handle and transport with its extendable handle and the integrated wheels. It also offers the option to integrate a fold-out table.

An integrated 17” notebook with a very high resolution guarantees a qualitative good image viewing and image diagnosis.

The integrated and robust 4336R flat panel detector is suitable for rapid mobile radiography systems. The detector only weighs 3.6 kg and is based on the new Gigabit-Ethernet-Interface. The images are displayed on the work station within seconds.

**Areas of application:**
- Mobile veterinary practices
- Equine clinics
- Universities
- Both large and small animal practices
Professional software for image acquisition and diagnostic:

- Can be used intuitively - developed in cooperation with acknowledged horse specialists
- Image acquisition, work flow and diagnosis within one software
- Automatic display of recommended X-ray data (KVP, mAs etc.) for every image - depending on the X-ray equipment used
- Over- or underexposure are adjusted automatically
- Option to capture frequently repeated examination processes as makros, e.g. pre-purchase examinations
- Retake mode to repeat an image without interrupting the work flow
- Integrated radiographic positioning guide for correct preparation of each examination
- Outstanding image quality due to the special DX-R image filter technology for each examination
- Easy adaptation of the image filters to the specific viewing habits of different doctors
- Option to suppress grid lines
- Integrated professional diagnostic software dicomPACS®vet - tried and tested on over 5,000 workstations worldwide
- Extensive measuring functions, including specialised orthopaedic measuring tools
- Compilation of patient CDs
- Extensive archiving and search functions
- Synchronisation with other databases
- Integrated remote maintenance software
- Option to integrate the dicomPACS®vet web server for image distribution via the internet
- Full DICOM 3.0 functionality for integration with other PACS systems
- Option to upgrade to PACS, incl. connection of all modalities (DICOM or non-DICOM) e.g. MRI, CT, NUK, arthroscopy, endoscopy, ultrasound etc.

The suitcase:

- Very small and robust thanks to special developed materials and excellent workmanship
- Easy to transport
- Very light - only 26 kg incl. flat panel, notebook and cables
- Highest possible resolution and diagnostic image quality by the large 17" display (at least 1,600 x 1,200 pixel)
- Very quick - only approx. 4 to 5 seconds wait for the image and just approx. 2 seconds before the next exposure can be taken
Leonardo DR
4336Rvet operation:

For this solution, the images are received by so called flat panels. The systems are called DR (direct radiography) systems. The flat panels are usually connected to the computer (notebook) by cable.

All necessary components, cables included, are housed in a sturdy, compact case. Open up - switch on - ready!

A range of DR detectors of various sizes are available for various needs, and can be integrated in the case system as required for the application in question.

Such a compact system enables you to quickly create excellent images in DICOM format, as well as to process, diagnose and archive them.

You will save time, space and money; repeat visits to the patient are avoided; the system operates under almost all conditions and is nearly maintenance free.

A number of different DR detectors in various sizes are available for different requirements, which can be integrated into the suitcase solution as required.

For more detailed information please visit www.or-technology.com or please feel free to contact us by info@or-technology.com
Construction of **Leonardo DR 4336Rvet** system

1. The pull-out trolley handle allows easy transport from vehicle to treatment site.

2. To set up the system, push in the trolley handle and lay the case on the ground.

3. Open the bottom latches and unfold the table.

4. All the components, i.e. detector, laptop, cable etc. are neatly arranged in the case and at hand for immediate use.

5. Just switch on the laptop, connect the detector with the X-ray unit and start making exposures.

The case containing the system can be detached from the work table segment and the trolley handle attached to the system case. This allows the use of the system e.g. in the operating theatre as well as taking the system on board of an airplane as hand luggage.
The correct settings for horses, dogs and cats – are available at a mouse click.

Switch to planning X-ray jobs for cats, horses or small animals/ exotic animals.

Provides numerous hints on patient positioning, central ray, tips and tricks, common mistakes etc.

Chart for the planning of an individual X-ray job.

Shows an image of a correct X-ray examination.

**Screenshots**

Leonardo DR 4336R vet with DX-R Acquisition Software - Portable X-ray Systems for the Future
Leonardo DR 4336R vet
Portable X-ray Systems for the Future

Screenshots

The generator panel displays all values and settings (kVp, mAs, focus etc.) recommended for a specific examination.

dicomPACS® DX-R generator control

Integrated professional dicomPACS® Viewer for image diagnosis

Easily upgradable to the professional, integrated image management system (PACS)

Further processing and storage of images in an SQL database incl. image manipulations, export options, layout adjustments, freely configurable user interface and much more.
In action
Flatpanel

- **Type:** Varian PaxScan 4336R flat panel detector
- **Pixel area:** 42.7 x 35.6 cm (16.8 x 14.0 inch)
- **Pixel Size/ Pixel Pitch:** 139 µm²
- **Matrix/ Pixels:** 3,072 x 2,560
- **Method/ Receptor Type:** Amorphous Silicon with Charge Well Pixel™ technology
- **Dimensions:** 46.0 x 38.4 x 1.5 cm (18.1 x 15.1 x 0.6 inch)
- **Weight:** 3.6 kg

17” Laptop

- **Operating system:** Windows XP Pro Sp2 or higher
- **CPU:** At least Core Duo 2,4 GHz
- **Main storage:** 2048 MB DDR2 SDRAM
- **Graphics card:** NVIDIA® Quadro® FX 2700M onboard or comparably
- **Hard drive:** At least 250 GB SATA (7,200 rpm)
- **Optical device:** Fixed Internal 8x DVD+/-RW Drive
- **Battery:** 9 cell 80 Wh Li-ION primary battery for an especially long battery life
- **Display:** 17” UltraSharp display 1,920 x 1,200 Pixel (3 Megapixel)
- **Network connection:** WLAN Internal Wireless
- **Service:** 3 years NBD International (Next Business Day)

Above the agreed period through 1 year CAR (Collect and Return)

Extensive software package included

- **dicomPACS® DX-R Console Software**
  The package includes the console software, an interface for one flat panel, organ specific image processing, a Diagnostic Module Standard and the multimedia radiographic positioning guide

- **dicomPACS® DX-R DICOM Patient CD**
  Creates patient CDs, which include DICOM DIR structure and a viewer (free of charge)

- **dicomPACS® DX-R DICOM Send SCU**
  Automatic distribution of images to one DICOM recipient, e.g. PACS

- **Remote maintenance software**