



PES 2.1

The compact and versatile endoscopy system
Optionally with integrated LED light source

otopront®

PES 2.1

The PES 2.1 relies on proven design and technology, and has been further optimized in terms of its functionality and detailed specification.

The PES 2.1 thus has the advantage of being a compact, versatile video endoscopy system **with integrated memory for photo and video images** as well as an **integrated LED light source** (optional).

In addition to its **outstanding video quality**, intuitive operation, versatile connectivity and integration options (USB, LAN, printer, practice IT system, HL7, etc.). The PES 2.1 is equipped with a full **patient management software** which makes it an all-rounder in its class.



Software-optimized image

The video image produced by the 1/3 inch CCD chip is optimized by a **real-time software filter** so that every area is evenly lit and contrasts are more intensely highlighted. This means that the brilliant image is similar to full HD resolution.

The **camera quick-release connector** enables problem-free connection to any type of rigid or flexible endoscope. The compact size of the camera head allows the user to operate and focus the camera. Making endoscopic procedures much easier



The PES 2.1 can be closed for transport

Straightforward handling and a comprehensive specification

- Live images, **video recording** and still photos
- CCD camera chip with **real-time video optimization**
- Problem-free **integration with HIS/practice IT system**
- Integrated **LED light source** (optional)
- Intuitive software with **patient management**

A menu that is pared down to the essentials ensures convenient operation. You can take **photos** or make **video recordings by pressing a button or using a foot pedal**.

All the functions – such as choosing an image, zoom, white balance, or patient management – can be simply and directly selected by pressing a button.

The user interface is clearly and straightforwardly structured.

Evidence from videos or photos can be compared with previous findings in a **4-image view**.

Data is automatically saved to an internal memory, or alternatively to a USB stick; it can also be printed out immediately. Furthermore, the integration option means that all the findings and patient data can be automatically shared with the HIS or practice IT system.



Straightforward switching between single image and 4-image view



Intuitive operation via one-click menu



Rapid management and documentation of patient data



Clearly arranged patient lists and diagnosis fields

Integrated LED light source

As an optional extra, the PES 2.1 offers an integrated LED light source (e.g. for mobile usage) which is suitable for all commonly used endoscopes. The LED light source provides outstanding **brightness (>300 klx)** and an optimal daylight temperature with a **CRI >93 %**. Its brightness can be regulated, and it is **totally maintenance-free**.



Technical data

Models: PES 2.1

PES 2.1 with integrated LED light source

System

- High-performance system with dual-core processor
- 128 GB internal SSD memory (optionally up to 500 GB) for approx. 30 hours video recording or 10,000 images
- Servicing and repairs can be conducted via remote maintenance

Hardware interfaces

- Data storage on USB stick
- 2 LAN ports for connection to printer and practice IT system
- DVI/HDMI monitor interface
- Connections for mouse and keyboard (with wireless option)

Integrated software

- Otopront Application Manager with PES 2.1 module

Operation

- Clear and intuitive software
- Operated via buttons, mouse or keyboard

Range of functions

- Video recording and still photography (MPEG, JPEG)
- Photos can be taken during video recording
- Management of patient and examination data
- Results can be printed out, saved, or exported via GDT protocol
- 4 images of results can be compared; single image view; zoom

Hardware control

- Several cameras can be controlled; optional automatic switching between cameras (e.g. between microscopy and endoscopy)
- An external monitor can be selected and controlled

Communication interfaces

- Straightforward installation into practice IT system (e.g. Medistar, Turbomed, Albis, etc.) via GDT protocol
- Automatic detection of practice IT system, optionally by pressing a button
- Integration into HIS and PACS via standard interfaces (HL7, DICOM)
- Optional transfer of video data, communication with worklists (e.g. DICOM video, DICOM worklists)

Screen

- Screen can be tilted/folded away
- Size: 12.1 inch
- Resolution: 800 x 600 pixels
- Brightness: 300 cd/m², LED backlight
- Contrast: 500:1
- Viewing angle: 178° horizontal and vertical

Camera

- Up to 2 cameras can be connected
- Sensor chip: the latest 1/3 inch CCD chip technology with real-time software optimization
- Resolution: 752 x 582 pixels, 752 lines, PAL or NTSC
- Lens: 25 mm, quick focus
- Lens connection: C-mount

Integrated LED light source (optional)

- LED; daylight quality thanks to 7-segment LED array
- Optimal daylight temperature [CRI >93 %]
- Brightness: >300 klx; can be regulated
- Lifetime: approx. 50,000 hours

Casing

- Material: sheet steel, painted
- Choice of colors

Dimensions

- Casing when closed: 330 x 90 x 320 mm
- Weight: approx. 6.5 kg

Hygiene

- Camera (including cable) can be fully submerged in disinfection solution

Rated output

- 110-230 V ~ 50/60 Hz, 150 W

CE mark

- accord to MDD 93/42/EEC

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