Dental Excellence
in every area

Practice equipment
KaVo treatment units and lights, dental chairs, patient communication system, dental microscope and additional operatory accessories

Instruments
Dental straight and contra-angle handpieces, turbines, air polishing systems and small equipment for all application areas including diagnosis, prophylaxis, restorative, surgery, endodontics and instrument care

Imaging
Intraoral X-ray equipment, sensors and imaging plate systems, panoramic and cephalometric in combination with CBCT, as well as dedicated CBCT devices for every indication in dentistry

KaVo DIAGNOcam™ Vision Full HD
Three instant diagnostic images from one shot

Awarded with the

GERMAN INNOVATION AWARD '22 GOLD

3 IN 1

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www.kavo.com

KaVo — Dental Excellence
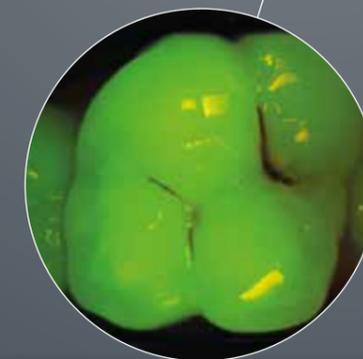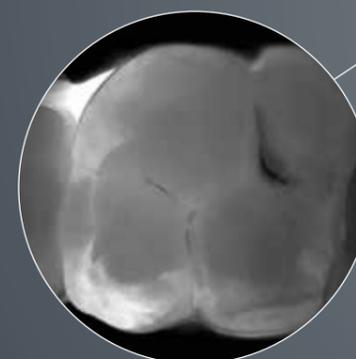
Innovation in a beautiful package:
The all-in-one camera DIAGNOcam Vision Full HD

Imagine taking three different diagnostic images with one camera — sharp quality every time, in less than one second, as easy as one, two, three. You call it amazing — we call it the DIAGNOcam Vision Full HD.

3 clinically relevant images in 1 shot
Combining an intraoral camera, a transilluminating device for caries detection and a fluorescence instrument for final caries check into one device.

Sensitive, customisable control panels
Two touch panels on the top and bottom for easy image capturing on the upper and lower jaw — customisable to hand size, your personal preferences and if you are left or right handed.

Lightweight, perfectly balanced
A light, perfectly balanced camera for comfortable, ergonomic handling and stress-free recordings.

One tip for the whole workflow
Thanks to its patented design, you can use the tip for the transillumination mode and for all capturing modes. No need to waste time changing the tip.

Clear operation
Integrated LED shows the status of the camera: white during operation, blue for standby, red for malfunction.
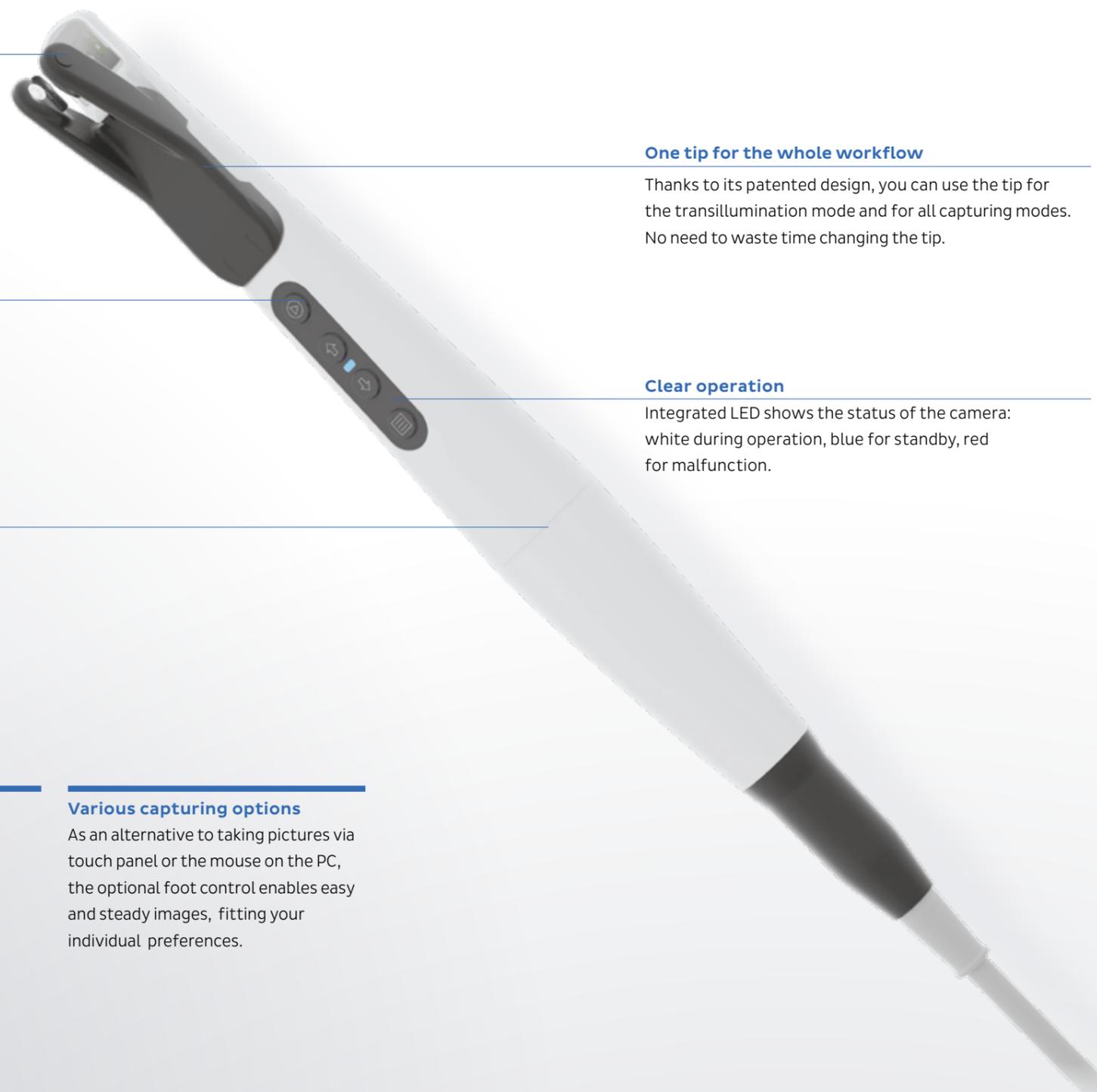
Combinable recording modes
You can select to record an intraoral, transilluminating or fluorescence image individually — or combine two or three modes together in one shot.

All images in Full HD quality
Thanks to a true HD resolution of 1,920 x 1,080 pixel, all captured pictures are displayed in absolute sharpness.

Various capturing options
As an alternative to taking pictures via touch panel or the mouse on the PC, the optional foot control enables easy and steady images, fitting your individual preferences.

Permanent autofocus

"There are many cameras that have an autofocus function to take a sharp image. But most of the time it takes too long to get a clinically relevant shot as you have to wait for the image to sharpen. The permanent autofocus function of the DIAGNOcam Vision Full HD is completely different. It is always on, there is no need to press a button or to adjust anything. It focuses automatically and without interruption — I always get a sharp image instantly.

The result is impressive. You can barely take an image that isn't perfectly sharp — in Full HD quality. This is true regardless of whether you use the DIAGNOcam Vision Full HD as an intraoral camera, as a transilluminating device or if you are working in the fluorescence mode — or combining all of them in one shot."

Jochen Kania
Dental practitioner

See more and show it all:
Three diagnostic images instantly from one shot

Intraoral images for the first visual caries diagnostic, true insight views into the dental structure via transilluminating technology and fluorescence images — all captured in a single shot and instantly displayed in Full HD resolution on your screen.

**Intraoral mode** **Transillumination mode** **Fluorescence mode**
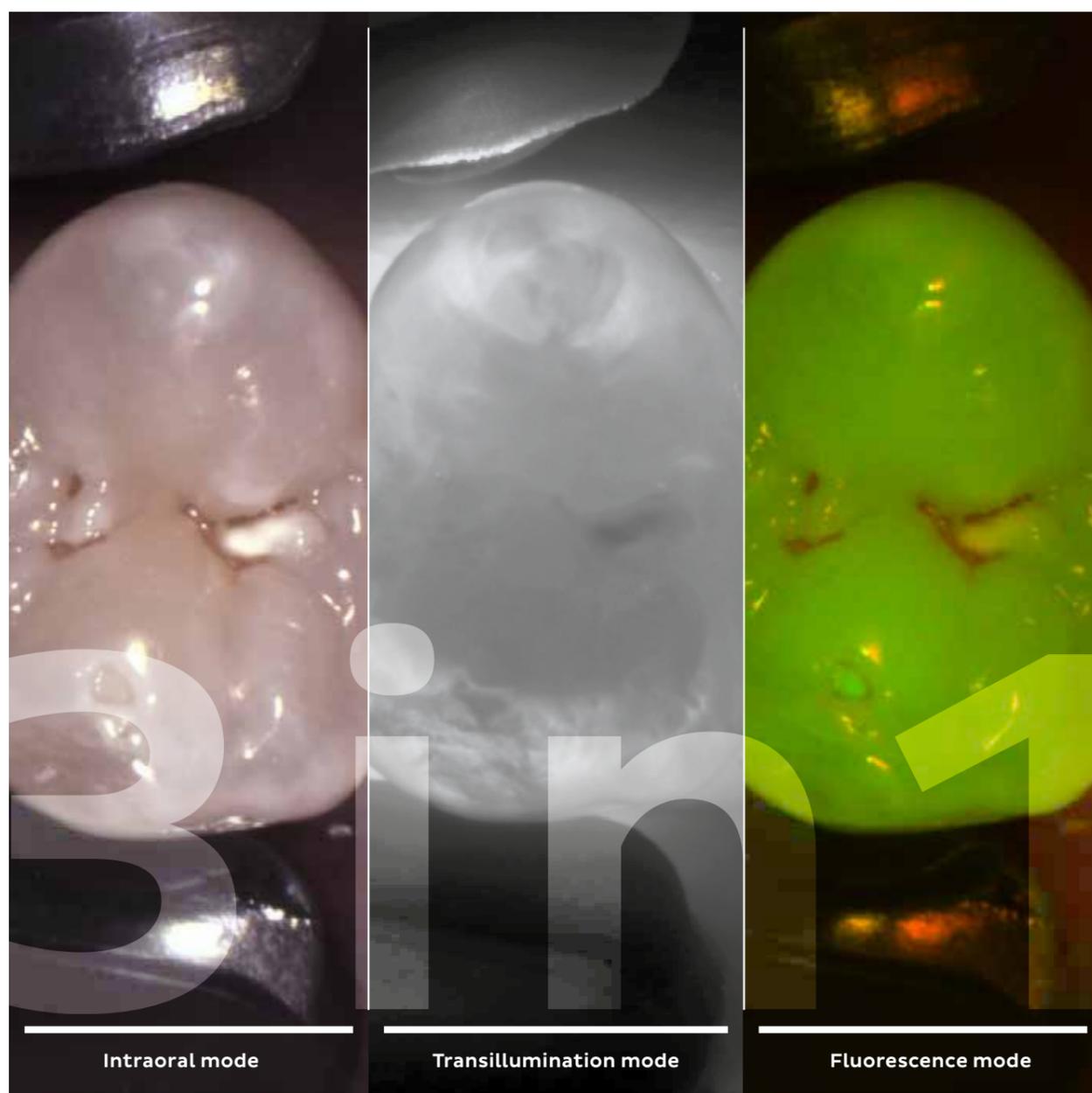
Triple effective diagnosis, wow effect included
Simultaneously captured, immediately displayed: all photographs are recorded in Full HD resolution. Depending on the dental situation and the step of your workflow, you can choose the specific image mode you prefer or combine two or all three of them in one shot. Giving you a clinically relevant overview, like never before.

Always sharp without setting
The permanent autofocus is always on — inside as well as outside of the mouth — and creates extremely precise, clinically relevant images without delays caused by focusing, thus avoiding retakes.
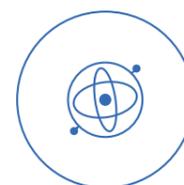
Gyro sensor for easy orientation
The image is always displayed in correct position, because the integrated gyro sensor recognizes whether you are taking a shot on the left or right side, upper or lower jaw — and aligns the recording automatically.

Best image selection integrated
To minimize the susceptibility to blurry image, the camera automatically saves recordings directly before and after the shot, selects the image with highest quality and displays it on the screen.

"The clearer my patients see caries or other findings, the more likely they are to accept my treatment recommendation. The DIAGNOcam Vision Full HD is my most persuasive assistant: As soon as the patients see the three Full HD images that´s enough to secure further treatment — because they see the clinical situation for themselves.

Whether you are treating critical or pregnant patients or kids, all recordings are X-ray-free, so the DIAGNOcam Vision Full HD is perfect for monitoring and gaining immediate acceptance at any appointment, with any patient, on any tooth. It is not only a device for me, my whole team loves to use it. All my dental assistants take images with the DIAGNOcam Vision Full HD — which saves me a lot of time.

In my view, the DIAGNOcam Vision Full HD is the first step for caries prevention. I see more, I can show more — and I can treat caries earlier and less invasively, if needed at all."

Luigi Ciacci
Dental practitioner

Intraoral camera:
High resolution, easy solutions

With the DIAGNOcam Vision Full HD you create remarkably clear and distortion-free Full HD photographs in real time. In addition, all images, from face to macro shots, are optimised to keep their natural colour tones and to remain clear even when enlarged — enabling you to easily view the smallest details.

Face image
Distortion-free portraits, easily added to the patient file documentation of your Patient Management System (PMS).

Smile image
Ideal to capture the lip line and smile line — useful for dental technicians to match the colour and create perfectly aligned aesthetic anterior teeth restorations and for pre-post comparison and documentation for your patients.

Tooth image
The quick and easy way to get a first overview of the dental situation, including fillings, dental prosthesis, extractions, deformities and overall dental hygiene. Perfect for pre-post comparison and documentation for your patients.

Macro shot
Enlargement of the finest tooth and gum structures, recommended for detecting the smallest lesions, defective transitions of filling material or crowns to the tooth as well as for initial examination of root canals.
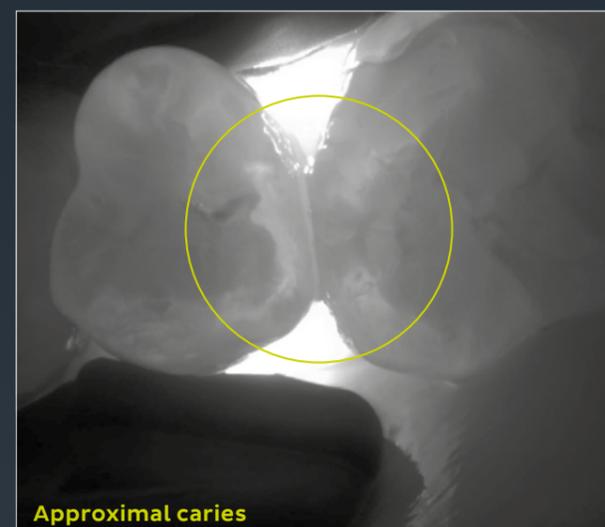
Transillumination mode:
Light years ahead of caries

99 %*
accuracy

Caries diagnosis with transillumination — light years ahead. With the DIAGNOcam Vision Full HD, light waves complement X-rays otherwise needed for caries detection, giving you exceptional image quality and detail.

Occlusal caries

Secondary caries

Approximal caries

Cracks

Detecting caries early is good. Detecting caries early and safely is better. Thanks to the intuitive handling, you can diagnose caries using the transillumination mode of the DIAGNOcam Vision Full HD with an extreme accuracy of up to 99%* — with almost no training at all! Clinically established and proven in practice through countless recordings.

- The light source inserted in the tip illuminates the tooth outwards from the neck of the tooth to the occlusal tooth surface.
- A digital camera shows the captured scenes live on the screen of your choice.
- The tooth becomes a light conductor, making the tooth structures visible. Any caries or cracks that the light comes across on its way to the tooth surface are clearly identifiable and visibly darker.

* Precise diagnosis with DIAGNOcam based on: Kühnisch J, Söchtig F, Pitchika V, Laubender R, Neuhaus KW, Lussi A, Hickel R "In vivo validation of near-infrared light transillumination for interproximal dentin caries detection," Clinical Oral Investigations, May 2016.

Fluorescence mode:
The ultimate check at the end of your workflow

This fluorescent light stimulates the metabolic products of (e.g. cariogenic) bacteria on the tooth´s hard substances. Emitting different colours, the tooth´s hard substance is displayed greenish and metabolic products of cariogenic bacteria are shown reddish. This allows the user to detect caries activity, making it possible to diagnose pathological findings. The mode enables the recording of images in the fluorescence range, in order to diagnose occlusal caries and plaque.

**The final check of your dental workflow**

The fluorescence mode of the DIAGNOcam Vision Full HD is a particularly useful supplement to the assessment of occlusal surface caries as well as for a final caries check before placing a filling.

Fulfilling your dental needs regarding fillings

Especially composite fillings are very easy to recognise and are clearly demarcated with the fluorescence mode, to detect even the smallest caries findings at the most critical points between filling and tooth.

Simple, self-explanatory:
The intuitive user interface of the KaVo DIAGNOcam Software

The KaVo DIAGNOcam Software is designed so that all procedures are intuitive and carried out in seconds flat. Integrated functions such as the 3-in-1 shot, the recording assistant and the clear structure with self-explanatory symbols make diagnostics almost as easy as recording itself.
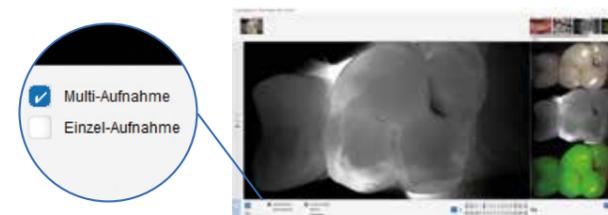
3-in-1 Shot
- Switch between single and multi recording options
- Record a 3-in-1 shot in less than a second in the Intraoral, Transillumination and Fluorescence modes
- Trigger images using the record button on the camera or the foot switch (Foot Control Vision Full HD)
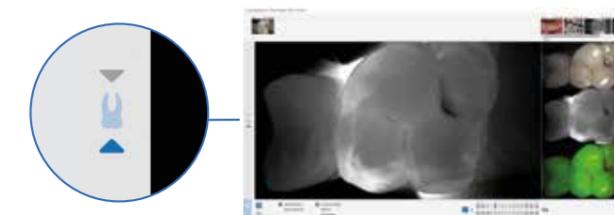
Integrated recording assistant
- Arrow keys above and below the tooth symbol show how to best achieve the perfect distance from the tooth
- · The tooth symbol lights up when the optimal recording position is reached
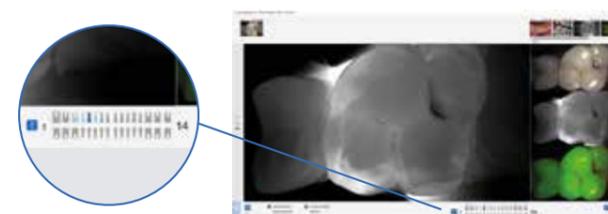
Easy categorisation
- Automatic display of the tooth chart with respective tooth numbers
- Switch between the tooth and deciduous tooth chart options
- Four diagnostics categories for quick diagnosis
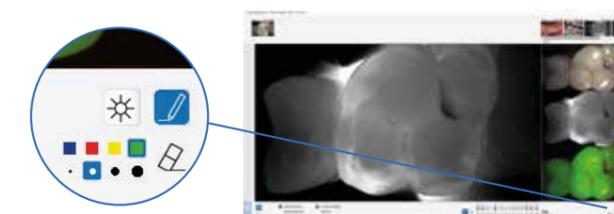
Highly precise visualisation
- Optimised diagnostics thanks to simple contrast (left/right) and brightness (above/below) adjustment
- Ability to mark lesions discovered on tooth images using the pen symbol—for patient conversations that are visibly more compelling

The DIAGNOcam fits seamlessly into your practice's daily workflow: the recordings can be transferred straight to your practice management software using the VDDS interface. In addition, the multi-user option allows you to use the software in different practice rooms.

If you have previously used the KaVo KiD Software or the former KaVo DIAGNOcam Software (version 3.0.1), you can easily upgrade to the new version. The data transfer takes place automatically. The new version of the KaVo DIAGNOcam Software is available to download free of charge from the KaVo website:
www.kavo.com/en/diagnocam-software

Installation faster than ever: Easily integrated into your dental unit or as stand-alone device

Perfectly adaptable to your existing needs

No matter if you have a KaVo treatment unit or one from another brand, if you want to use the DIAGNOcam Vision Full HD as a stand-alone device or integrate it into your Patient Management System or your X-ray software: Just pick it up from your preferred mounting option (wall, table, or treatment unit), detect and show — it´s that easy.

Pure joy, clear sight: Superior hygiene concept

By using the sheaths, the DIAGNOcam Vision Full HD is protected against contamination. The tip and the fluorescence cover can be easily installed over the sheath, which does not affect the image quality. The tip and the fluorescence cover can be reused after being washed in a thermal disinfector and sterilised in autoclaves, the sheath is disposable and for single use only.

Compatibility and Integration

"Finally, I can focus on identifying caries—and don't have to worry about integrating my camera. The DIAGNOcam Vision Full HD works perfectly with my Windows devices as well as on the treatment unit itself. In addition, my entire practice team is able to use it without the need for lengthy training. Simply connect, snap an image, done."

Dr. n. med. Maciej Mikołajczyk, Dental practitioner

Technical specifications

Power consumption	Max. 0.5 A
Supply voltage	5 V
Tube length	2.5 m
Weight/Diameter	190 g/approx. 30 mm
Interface	USB 2 /USB 3

System requirements

PC	Windows 64 bit (Microsoft Windows 7, Microsoft Windows 10), Microsoft Windows 11
CPU	Quad-Core 2.8 GHz or higher (e.g. Intel Core i5/i7)
Main memory	8 GB
Disk space	10 GB free disc space recommended
Display	Full HD 1,920 x 1,080 or higher
Graphic card	3D backing (OpenGL® 3.3) and 2 GB or more free disk space recommended (at 4K displays: 4 GB)

Order options	Item No.
DIAGNOcam Vision Full HD	1.011.1213 (2.5 m standard tube for stand-alone)
	1.013.1500 (1.3 m tube for use at treatment units)

Included in standard package (and/or to reorder)

Tip Vision Full HD	1.013.5708 (1 piece)
Fluorescence Cover Vision Full HD	1.013.5712 (1 piece)
Cradle Vision Full HD	1.013.5500 (1 piece)
Sheath Vision Full HD	1.013.5711 (100 pieces)

Additional accesories (not included in standard package)

Tip Vision Full HD	1.013.5709 (4 pieces)
Fluorescence Cover Vision Full HD	1.013.5715 (4 pieces)
Wall Mount Vision Full HD	1.013.0400 (1 piece)
Foot Control Vision Full HD	1.013.4952 (1 piece)

Tip
Vision Full HD

Fluorescence Cover
Vision Full HD

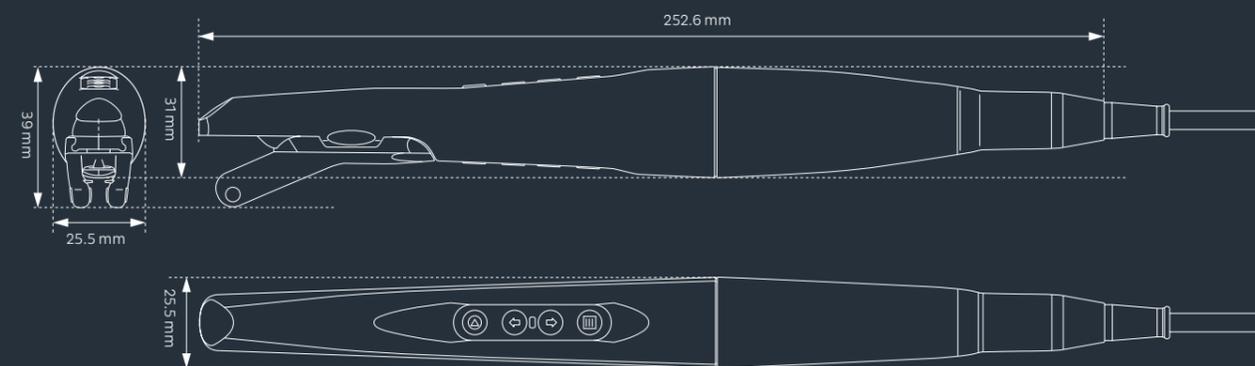Cradle
Vision Full HD

Wall Mount
Vision Full HD

Foot Control
Vision Full HD

Sheath
Vision Full HD

Dimensions

252.6 mm

39 mm

31 mm

25.5 mm

25.5 mm