

DEFINA

EPK-3000 video processor

Enhance your vision by stepping into a HD and i-scan world

PENTAX
MEDICAL





DEFINA – improve the quality of endoscopy by choosing the right technology

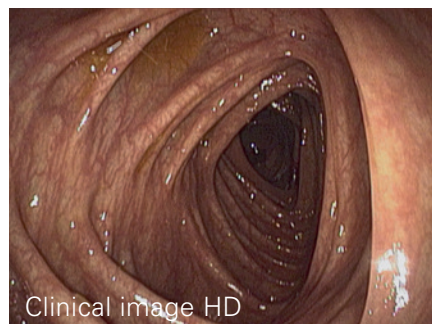
The new High-Definition EPK-3000 DEFINA video processor, equipped with xenon light and the i-scan function, is your daily support for performing routine procedures. Advanced features such as i-scan and dynamic range expansion for excellent far field illumination will ensure the best diagnostic and clinical outcomes.

During the procedures the best still image can be captured with the help of the freeze scan function. In addition, the user-friendly interface and the compact size ensure easy operation and storage of the DEFINA high performance system.

If you are planning to upgrade your equipment from standard definition to High-Definition, then the DEFINA EPK-3000 video processor, with i-scan and advanced endoscopic imaging, is the optimal choice.



Clinical image SD



Clinical image HD

DEFINA – optimize your daily clinical practice with the High-Definition EPK-3000 video processor

The High-Definition DEFINA system merges sharp and clear image quality with i-scan technology for fast detection and precise demarcation, to support characterization and the adequate patient treatment.



1

Excellent visualization

Brilliant, **High-Definition** images with powerful **xenon light** for a clear and more detailed visualization of the mucosal structures.

Dynamic range expansion provides excellent illumination to improve far-field visualization.

2



i-scan

Enhanced diagnostic

High-Definition image combined with **i-scan technology** for faster detection, easier demarcation and characterization.

3

Ease of operation

Capture the best still image during the procedure with the **freeze scan function**. In addition, the DEFINA video processor has a compact ergonomic design and user-friendly interface.

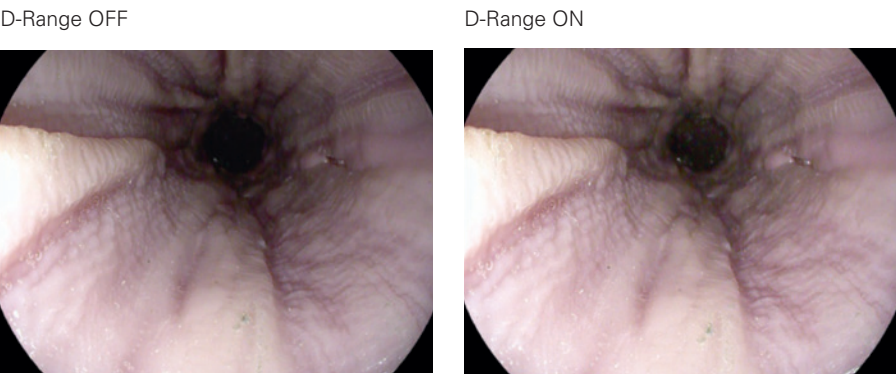
Excellent visualization

High-Definition image

HD image with excellent illumination of xenon light ensures better visualization during daily procedures.

Dynamic range expansion

Dynamic range expansion is a software enhancement that provides improved far-field visualization. This can be useful when trying to image a distal lumen, when it is not possible to get a proximal view.



Enhanced diagnostic

Enhance your diagnosis and clinical outcome with i-scan

i-scan is a digital image enhanced endoscopy technology as well as a virtual endoscopy tool. Operated with just the touch of a button, it is easy to use. It offers rapid imaging results and real-time processing. Based on proven clinical studies and feedback from key opinion leaders in the field of endoscopy, the HD imaging combined with i-scan technology offers great advantages: it improves the ability to **detect**, **characterize** and **demarcate** the suspicious lesions in lower and upper GI and helps to provide targeted intervention at an **early stage**.

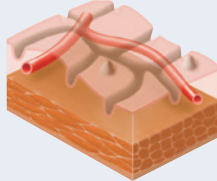
Clinical studies have already shown that i-scan technology can significantly improve:

- **Adenoma Detection Rate (ADR)** especially of **colon polyps located in the right colon**, namely the **flat and depressed adenoma and serrated polyps**.^{1), 2)}
- i-scan supports better prediction of **Inflammatory Bowel Disease (IBD)**.³⁾
- In **Gastroesophageal reflux disease (GERD)** i-scan is able to detect minimal changes and accurately characterize the identified lesions (inflammation vs. neoplasia) during ongoing endoscopy.⁴⁾
- In **Barrets’ oesophagus** i-scan improves dysplasia detection which is superior to random biopsies.⁵⁾

¹⁾ Neumann *et al.* Virtual Chromoendoscopy With I-SCAN Improves the Detection of Right Sided Colon Adenomas in Comparison to High-Definition White Light Endoscopy. *Gastrointestinal Endoscopy* May 2013, Volume 77, Issue 5, Supplement, Page AB552.
²⁾ Testoni *et al.* High-Definition colonoscopy with i-Scan: Better diagnosis for small polyps and flat adenomas. *World J Gastroenterol* 2012 October 7; 18(37): 5231-5239.
³⁾ Iaccuci *et al.* iSCAN-High-Definition colonoscopy correlates with white light endoscopy and histology assessment in mucosal healing for ulcerative colitis. *Journal of Crohns and Colitis* February 2013; 7:S53-S54.
⁴⁾ Kim *et al.* Efficacy of I-scan Endoscopy in the Diagnosis of Gastroesophageal Reflux Disease with Minimal Change. *Clin Endosc* 2011;44:27-32.
⁵⁾ Hoffman *et al.* Acetic acid compared with i-scan imaging for detecting Barrett’s esophagus: a randomized, comparative trial. *Gastrointest Endosc.* 2014 Jan;79(1):46-54.

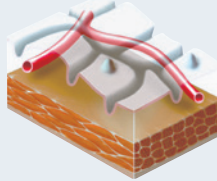
Tailor your i-scan setting to your clinical needs

SE enhances the light/dark contrast which in turn enhances the structure through recognition of the edges.



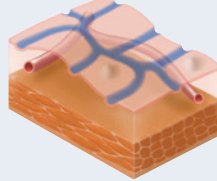
i-scan 1 Surface Enhancement (SE) enhances the mucosa structure in natural color tones to support **detection**, especially of flat lesions, by highlighting abnormalities.

TE alternates discrete parts of light spectrum components (red, green, blue) of a normal image and enhances minute mucosal structures and subtle changes in color.



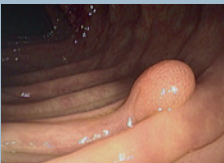
i-scan 2 Tone Enhancement (TE) enhances the changes of vascular and mucosal structure with a color tone change, to support pattern **characterization**.

CE adds the color blue in relatively dark areas (to the edges) by obtaining luminance intensity.



i-scan 3 Contrast Enhancement (CE) enhances the depressed areas and differences in structure through colored presentation of low density areas, to support **demarcation**.

i-scan supporting the diagnostic pathway



i-scan 1 (SE) – detection

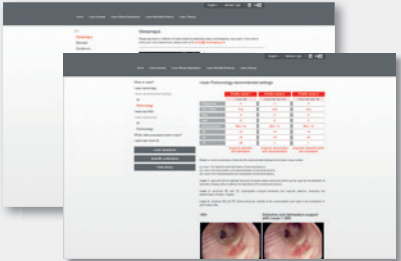


i-scan 2 (TE) – characterization



i-scan 3 (CE) – demarcation

Exchange and expand your i-scan knowledge by visiting the i-scan website



- Available in English, German, French, Spanish, Italian and Russian
- Extensive case video library
- Archive of i-scan scientific studies
- Private membership for exclusive training access
- Frequent i-scan webinars
- i-scan certification provided

www.i-scanimaging.com



Ease of operation

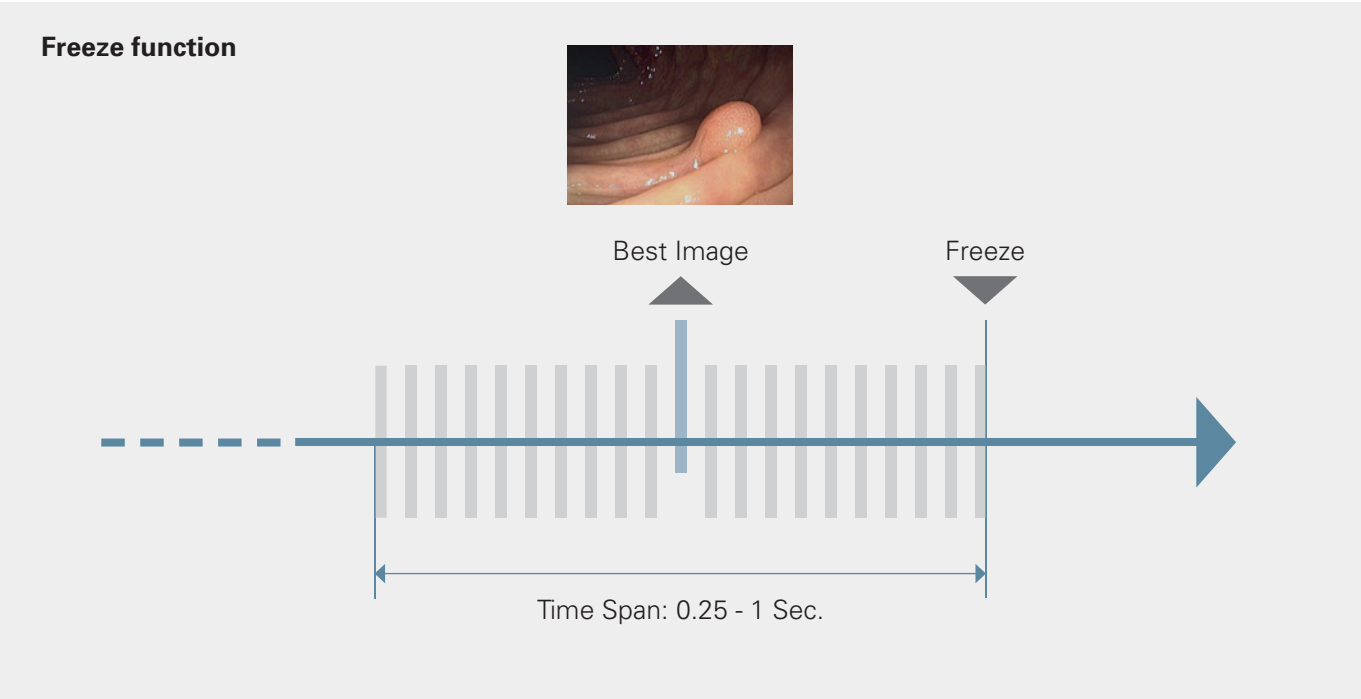
Compact design and user-friendly interface

The EPK-3000 DEFINA video processor has a compact ergonomic design which needs less space and fits better into an existing clinical environment. Its user-friendly interface ensures easy operation and handling.



Freeze scan

In order to provide the best captured image, PENTAX Medical has developed an algorithm to automatically select the best image. The image is selected based on clarity and sharpness. This ensures better documentation and sharing of clinical findings.



i-scan HD+ solutions: A range that meets all needs

HD processors

Premium
EPK-i7010 – OPTIVISTA



A complete diagnostic tool, bringing together the best of digital and optical enhancement for complimentary use in pattern and vessel visualization.

Classic
EPK-i5000



A High-Definition video processor that offers standard functionality supported by state-of-the-art imaging technology.

Performance
EPK-3000 – DEFINA



The video processor to enter the High-Definition and i-scan world with an excellent price performance ratio.

Endoscopes



Slim caliber, bigger working channel, and Close Focus, all combined in an i10 HD+ endoscope – the high performance endoscopes series, for the day-to-day advanced endoscopy practice.



With the 90i endoscope series, during routine examinations you can experience HD+ images combined with exceptional illumination.



The 90k endoscope series is the optimal choice for achieving an exceptional, high-resolution image combined with outstanding illumination.

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**EMEA Headquarter
Germany**
PENTAX Europe GmbH
Julius-Vosseler-Straße 104
22527 Hamburg
Tel.: +49 40 / 5 61 92 - 0
Fax: +49 40 / 5 60 42 13
E-mail: info.emea@pentaxmedical.com

United Kingdom
PENTAX U.K. Limited
PENTAX House
Heron Drive, Langley
Slough SL3 8PN
Tel.: +44 17 53 / 79 27 33
Fax: +44 17 53 / 79 27 94
E-mail: medical.uk@pentaxmedical.com

France
PENTAX France Life Care S.A.S.
116 quai de Bezons
B.P. 204
95106 ARGENTEUIL CEDEX
Tel.: +33 1 / 3025 7575
Fax: +33 1 / 3025 7445
E-mail: clients.fr@pentaxmedical.com

Netherlands
PENTAX Nederland B.V.
Edisonring 6
6669NB Dodewaard
Tel.: +31 88 / 5 30 30 30
Fax: +31 88 / 5 30 30 40
E-mail: info.nl@pentaxmedical.com

Italy
PENTAX Italia S.r.l.
Via Dione Cassio, 15
20138 Milano
Tel.: +39 / 02 50 99 58 1
Fax: +39 / 02 50 99 58 60
E-mail: marketing.lifecare@pentaxitalia.it

Spain
SIMMEDICA – Sistemas Integrales
de Medicina, S.A.
Avenida del Sistema Solar 25
28830 San Fernando de Henares · Madrid
Tel.: +34 91 / 301 62 40
Fax: +34 91 / 751 31 15
E-mail: sim@simmedica.com

Russia
Moscow Representative office
of PENTAX Europe GmbH (Germany)
1-ya Tverskaya-Yamskaya ulitsa, 25,
stroenie 1, 6th floor
125047, Moscow
Tel.: +7 495 995 10 91
Fax: +7 495 995 10 91 (fax ext. 234)

Turkey
PENTAX Turkey
Veko Giz Plaza, Meydan Sokak
No:3/43 343396
Maslak – Istanbul
Tel.: +90 212 / 705 05 26
Fax: +90 212 / 705 05 00

Japan
 HOYA Corporation
6-10-1 Nishi-shinjuku
Shinjuku-ku
Tokyo 160-00231