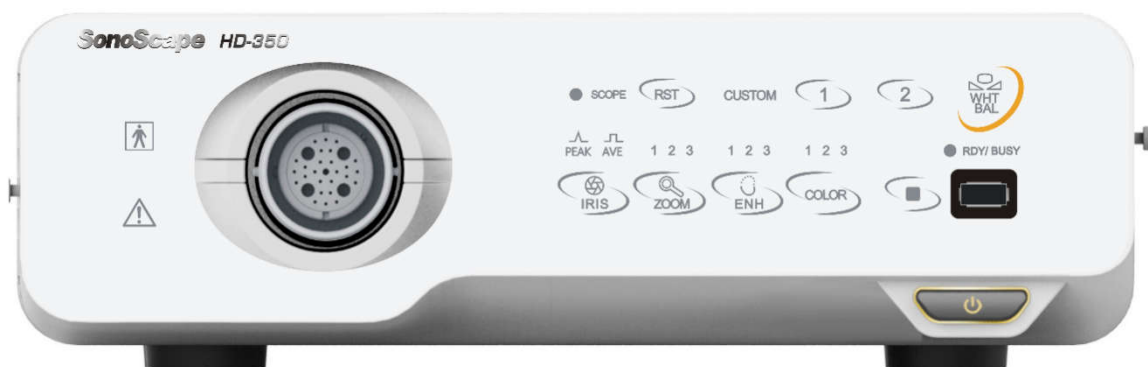


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A02	D00059410	1. Add software function description. 2. Delete the 500 series endoscopes. 3. Update the manufacture address.	2019-06-24	Xu Lin
A01	D00038418	First Release	2017-06-29	Kang Jiajun
Title	HD-350 Series Image Processor Technical Specifications			
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HD-350 Series Image Processor

Technical Specifications



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1 Overview

The HD-350 series image processor (including HD-350, HD-320Plus and HD-350S) adopts the advanced technologies to provide high-quality endoscopic images and videos for diagnosis and treatment.

The built-in workstation of the image processor is used to edit, manage and store medical records and print reports. The image processor can communicate well with the DICOM network information system of a hospital.

The image processor can be maintained and upgraded by updating software to improve product performance.

The image processor is designed to comply with applicable international standards and regulations.

2 Advanced Technologies

- High-definition video and imaging
- Full digital image processing
- Image denoise and enhancement
- Color enhancement

- Automatic equalization of brightness
- Hot plugging of the endoscope
- Capacitor touch control
- Intelligent medical record management
- Endoscope identification

3 Ports

- Connector port (1)
- Video output port:
 - Digital signal:
 - DVI (1)
 - SDI (1)
 - Analog signal:
 - S-Video (1)
 - CVBS (1)
 - VGA (1)
- Remote video print control port (1)
- Footswitch port (1)
- Gigabit Ethernet port (IEEE 802.3) (1)
- USB ports (4)
- Light source communication port (1)
- Equipotential terminal (1)
- Power supply port (1)

4 Specifications

- Resolution:

- Resolution of the output high definition

video: $\geq 1920 \times 1080$ (1080P)

- Hot plugging of the endoscope

- White balance memory

- Automatic white balance

- Structural enhancement

- The structural enhancement includes

structural enhancement A and

structural enhancement B.

- The structural enhancement A enhances

routine structures and the structural

enhancement B enhances micro

structures.

- There are three modes (1–3) and the

enhancement levels of each mode

are 0–15.

- Edge enhancement

There are three enhancement modes (1–3)

and the enhancement levels of each mode

are 0–15.

- Color tone adjustment

- R (red): -15 – +15

- B (blue): -15 – +15

- C (chroma): -15 – +15

- Color enhancement

There are three enhancement modes (1–3)

and the enhancement levels of each mode

are 0–15.

- IRIS

- Automatic mode

- Peak mode

- Average mode

- Zoom

There are three zoom levels (1–3),

including $\times 1.0$, $\times 1.2$, $\times 1.4$, $\times 1.6$, $\times 1.8$,

and $\times 2.0$

- Image freeze/ storage

- Real time image freeze

- Methods: remote buttons, keyboard

or footswitch

- PBP function: the image position and size can be adjusted.
- Display modes: standard/full-screen
- CHb: on/off
- Local video recording and playback
- Endoscopic image and text reporting system
 - Patient list management: report viewing, editing, saving, previewing printing and searching
 - Digital image management
 - The image can be acquired, archived, transmitted, displayed, searched and is compatible with the DICOM standard protocol (except the HD-350S image processor).
- Storage capacity: 500GB (standard configuration)
- Support system version update

- Output format
 - Standard definition: PAL, NTSC
 - High-definition: Full-HD, WUXGA

5 Main Screen

- The patient information can be entered and modified on the main screen, including patient name (50 characters are allowed and the historical entered data can be memorized), age (range: 1 – 199), gender (male, female and blank), DoB, applicants (32 characters are allowed and the historical entered data can be memorized), ID (32 characters are allowed and the historical entered data can be memorized), exam number (the unique identification created by the system).
 - More than 10000 patient information can be entered into the system.
- The patient information can be displayed on the main screen, including patient

are 0 – 15.

- Color enhancement includes three adjustable modes and the adjusting ranges are 0 – 15.

- Color tone (R/B/C) adjustment ranges are -15 – +15

- Zoom includes three modes and the adjustment ranges include $\times 1.0$, $\times 1.2$, $\times 1.4$, $\times 1.6$, $\times 1.8$ and $\times 2.0$.

- The customizable functions of the four remote buttons include freeze, zoom, IRIS, image enhancement, color enhancement, CHb, transillumination mode, contrast, AGC, image size, screenshot, video print, record, timer, PBP, information display, fast export and fast upload.

- The functions of the left and right buttons can be customized by the footswitch and the customizable functions include freeze, zoom, IRIS, image enhancement, color

enhancement, CHb, transillumination

mode, contrast, AGC, image size,

screenshot, video print, record, timer, PBP,

information display and fast export and

fast upload.

- IRIS methods: auto, average, peak
- The parameters of the present images can be saved automatically.

- Contrast levels: low/medium/high

8 Work Order List

- More than 10000 work orders can be created and saved into the work order list.
- The work order list can be selected according to exam items.
- The information in the work order list can be re-edited, conducted or deleted directly.
- The work list information can be displayed or hidden.
- Information in the work order list includes

queue can be resent if failed to send it to the DICOM queue.

- Report edit (available only in the HD-350 image processor)

- The patient information can be edited.
- The reports and images can be edited and at most 10 images can be stored.
- Bodymarks and organ names can be added into the report images.
- The view of exam, exam conclusion, biopsy site and suggestions can be edited.
- The items can be selected directly from the glossary and filled into the view of exam and exam conclusion.
- The items in the glossary can be edited.
- The operations for the glossary

include switching items, adding, editing, copying and deleting.

- The exam items in the report can be switched.
- The presently edited view of exam and exam conclusions can be saved into the glossary as new items.
- Several report templates can be selected: 1P-1 × 4, 1P-2 × 2, 1P-2 × 3, 1P-4 × 1 and general.
- The report fields can be set.
- Individualized titles can be set in the report template.
- The report preview page has 22 page scales.

10 Doctor List

- One-hundred accounts can be created into the doctor list.
- Customer operations of the doctor list differ according to different account