

TOTOKU

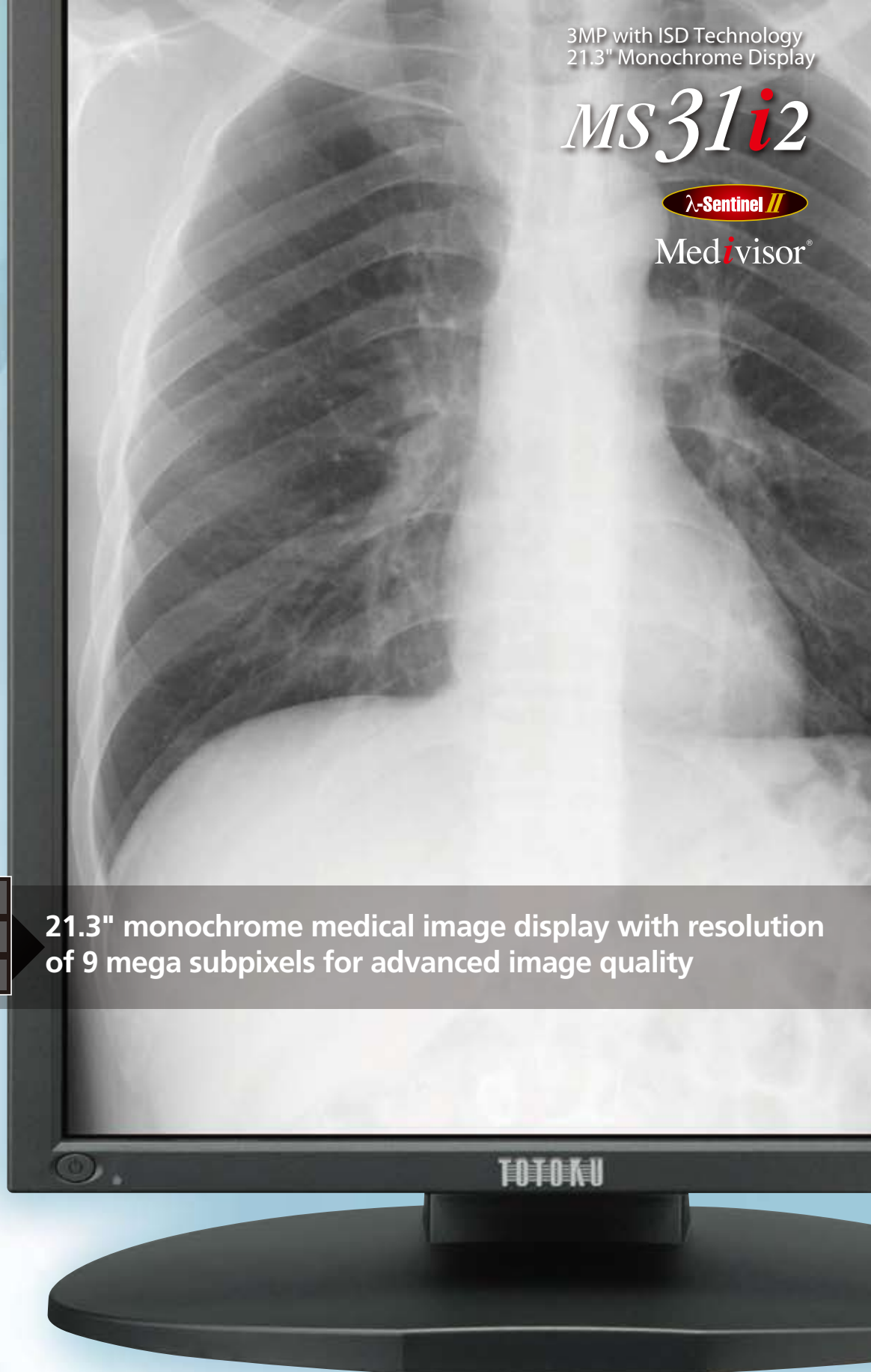


3MP with ISD Technology
21.3" Monochrome Display

MS31i2



Medi**i**visor®



ISD TECHNOLOGY

21.3" monochrome medical image display with resolution of 9 mega subpixels for advanced image quality

NEW

9M

*Independent
Sub-pixel Drive*

Simultaneous display of 1276 shades of gray for smooth rendering
Special AR coating for film-like black and enhanced sharpness

- 21.3"
- Digital Input
- 1450 cd/m²
- 900:1
- Calibration function
- 1276 Step grayscale
- OSD
- Luminance Uniformity Correction
- Hardware Pivot
- LED Indicator
- Special AR Coating

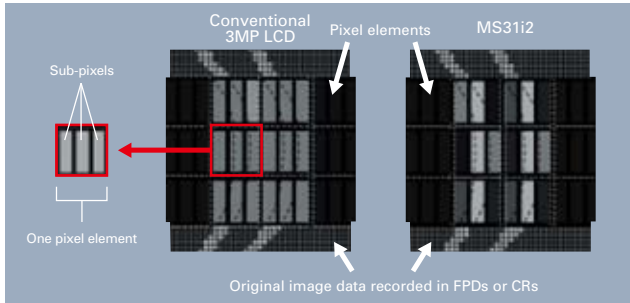
High resolution of 9M sub-pixels realized by ISD technology

While a pixel pitch of a 3MP display is 210 μ m, MS31i2 achieves 70 μ m in a sub-pixel chain direction by ISD technology to realize faithful reproduction of image details.

ISD (Independent Sub-pixel Drive)

Driven by each sub-pixel value corresponding to detailed information recorded in an original image, three times resolution enhancement is achieved. (Patent pending) In addition, up to 1276 shades of gray are now simultaneously displayable by the upgraded ISD technology.

*Customized viewer software is required to display images with enhanced resolution by the ISD technology.



High image precision with user-friendly functions

- Luminance equalizer to achieve highly accurate luminance uniformity across the screen
- Calibration function to adjust luminance and gamma to create smooth grayscale to DICOM GSDF
- Simultaneous display of 1276 shades of gray for smooth rendering
- Hardware pivot function for smooth portrait orientation
- IPS panel offering high luminance, high contrast, and wide viewing angle
- OSD information display to check the display's current status
- LED indicator for current operating status
- Enhanced functions such as Advanced Power Saving by utility software

Advanced quality control solution

- Luminance stabilizing system λ -Sentinel II constantly monitoring and accurately stabilizing luminance on the screen through the built-in front sensor
- Calibration with the front sensor
- Remote calibration and monitoring

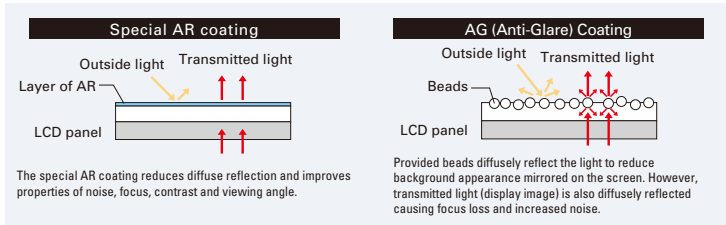


High reliance and a full range of services

- Paring service to match color temperature of two displays
- Worldwide medical safety and EMI standards

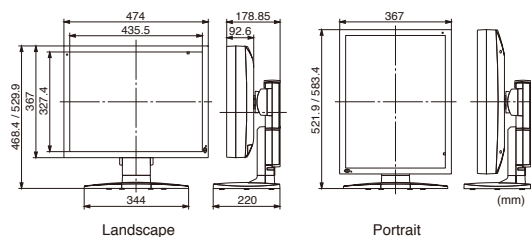
Special AR Coating for Film-like Black and Improved Sharpness

TOTOKU's new special AR coating technology (patent pending) addresses properties of focus, noise reduction, contrast, and viewing angle all achieving film-like black and accurate reproduction of images.



*This chart explains general ideas of each mechanism and may be different from the actual structures.

Model Name		MS31i2
LCD Panel	Technology	21.3-inch, TFT Monochrome IPS Technology
	Display Area	433mm X 325mm
	Pixel Pitch	0.2115mm X 0.2115mm
	Contrast Ratio	900 :1 typ.
	Maximum Luminance	1450cd/m ² typ. calibrated to 410cd/m ²
Visual Performance	Viewing Angle	170° vertical and horizontal
	Available Resolution	UStEXT, 640X480 (VGA), 800X600 (SVGA), 1024X768 (XGA), 1280X1024 (SXGA), 6144 (2048 X 3) sub-pixel X 1536pixel
Input Signal	Input Sync Signal	DVI 1.0 compliant
	Plug and Play	DDC2B compliant
Input Power Supply	Input	AC adapter 100V ~ 240V (\pm 10%) 50/60Hz
	Maximum Power Consumption	95W typ. (with power management feature)
Features	Calibration Control	Luminance, Gamma, Capability of saving 3 sets of LUT settings (An optional calibration kit is required.)
	OSD Information Display	Model name, Serial No., Total operating time, Calibration settings (Operating time from Last Calibration, Luminance, Gamma, etc.), Current luminance, etc.
	USB Hub	USB Rev. 2.0 compliant, Self-powered USB upstream connector (x1), USB downstream connector (x2)
	Other Features	Luminance Uniformity Correction, Hardware Pivot, LED indicator
Approvals	UL60601-1, CSA C22.2 No. 601.1, MDD/CE, FCC-B, VCCI-B (FDA510k): Pending)	
Physical Characteristics	Dimensions (incl. tilt stand)	Landscape : 474.0 (W) X 468.4 / 529.9 (H) X 220.0 (D) mm Portrait : 367.0 (W) X 521.9 / 583.4 (H) X 220.0 (D) mm
	Weight	Net: approx. 11.2kg, Without tilstand: approx. 7.0kg
	Tilt stand	Tilt, Swivel, Portrait / Landscape
	Mount	100mm VESA mounting
	Security Slot	On the back of the panel and the tilt stand
LCD surface treatment	Special AR Coating	
Accessories	AC adapter, Power cord (3P), DVI cable, USB cable, Operation manual	



Viewer Software

MS31i2 supports 9M-ISD and 3M-normal modes. To use MS31i2 in 9M-ISD mode, customized viewer software is required.

TOTOKU

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Additional product information is available at <http://www.totoku.com/display/>

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TOTOKU has obtained ISO14001 and ISO9001/ISO13485 certification which are international standards concerning environment management and quality control respectively.



Please contact the distributor below with inquiries and orders.