Solution Catalog

Contributing to the development of medical care with the latest technology.

We are committed to contribute for advancing in Medical Solutions with the latest Technologies.



Contributing to the development of medical care with the latest technology.

We are a total solution company specializing in the design of advanced medical imaging systems, including 3D systems for medical surgical robots and imaging/information network systems.

With a wealth of expertise and a network of diverse collaborating companies, we have successfully introduced and consistently supported all stages of product development, system construction, and operation in over 300 national and public hospitals and facilities across the country.

We provide a one-stop solution by leveraging our extensive know-how with collaborative partnerships.

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3D Monitoring and Recording System for Surgical Robots

The 3D Monitoring and Recording system for surgical robots projects the primary surgeon's surgical images onto external 3D monitors so that all surgical staffs can see the surgical field imagery in 3D. To capture a sense of three-dimensionality and distance, it allows visual accurate supports for the primary surgeon and improves accuracy and safety.



3D control device dedicated to surgical robots

Unified adjustment for 3D parallax. Simultaneous output of Line-by-Line and Side-by-Side methods. Supporting additional 3D monitors, recording devices, and image distribution.

Accurately reproduces the unique visuals specific to surgical robots

Faithfully displays the robot's original output visuals in either 2D or 3D format.

Choose the monitor size according to the application or purpose

For the assistant doctor, select a 32-inch monitor, and for the surgical staff and observers, choose a 55-inch monitor.

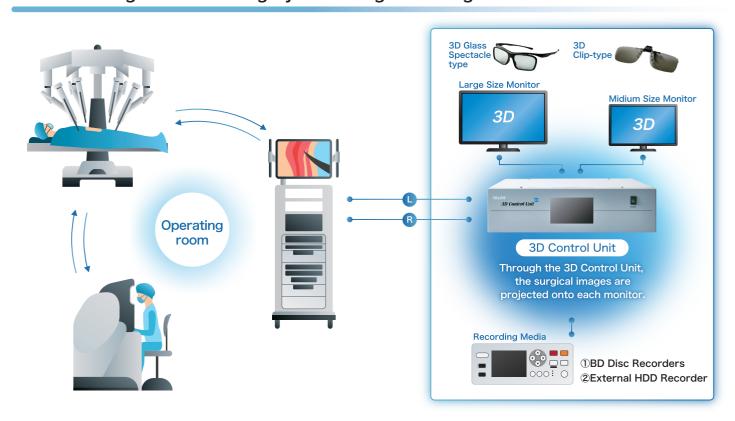
Simple connections between the robot body and each device, and Easy to maintain

The system is designed with multiple output channels and alternative connections in preparation for potential malfunctions, with a focus on safety measures.

Recording devices can be selected to meet your needs and budget

Dedicated local recording equipment, server-compatible recording systems. Wide selection of media for recording, including BD, memory, and external HDD. Recorded video can be played back on consumer BD players.

3D Monitoring and Recording System Image for Surgical Robot



Apollo21 Remote Support Solution

The Apollo21 Remote Support Solution is a medical webinar system originally developed to meet the needs of hospitals, which allows conventional conferences and seminars to be held online. It enables to share live endoscopic images during surgery with conference participants both in and out of the hospital, and can also be remotely connected online with physicians and vendors who are registered with the system.

The system supports more comfortable and efficient work environment for medical staffs which is enables two-way audio communication through voice calls, by using the annotation function writing directly on the surgical field images with clear instructions down to the smallest details.





Starlink (Communications Satellite) is also available

Feature

Remote-sharing

Live surgical images from the panoramic cameras, and other multiple systems in the hospitals can be shared with all conference participants. The system also has voice call function, annotation function, and speech control functions.

Annotation Function

Conference participants can freely enter text and draw figures. The User name of the person writing by hand on the screen can be seen clearly who is doing the handwriting.

Privacy Protection Function

The distribution of personal information can be masked as confidential, preventing the leakage of information outside the hospital. Communication data is encrypted using SSL of world-standard security technology, and tampering is detected.

Support for Starlink Use

Available anywhere in the world, it is compatible with Starlink, a satellite high-speed broadband Internet connection developed by SpaceX. Satellite communications create a comfortable network environment and allow you to work more efficiently in communication-poor areas that are inaccessible with conventional terrestrial networks.

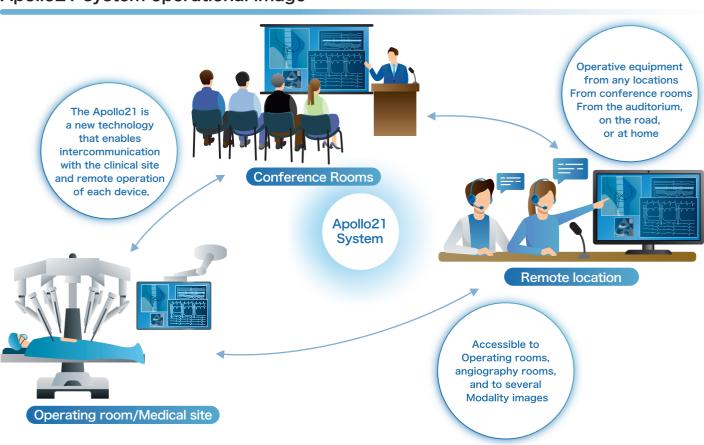
Capable of acquiring image from other systems

Full Images can be acquired from panoramic cameras, image switchers, our remote distribution system, image synthesis systems and surgical image information systems installed in the hospital.

Remote control of other systems possible

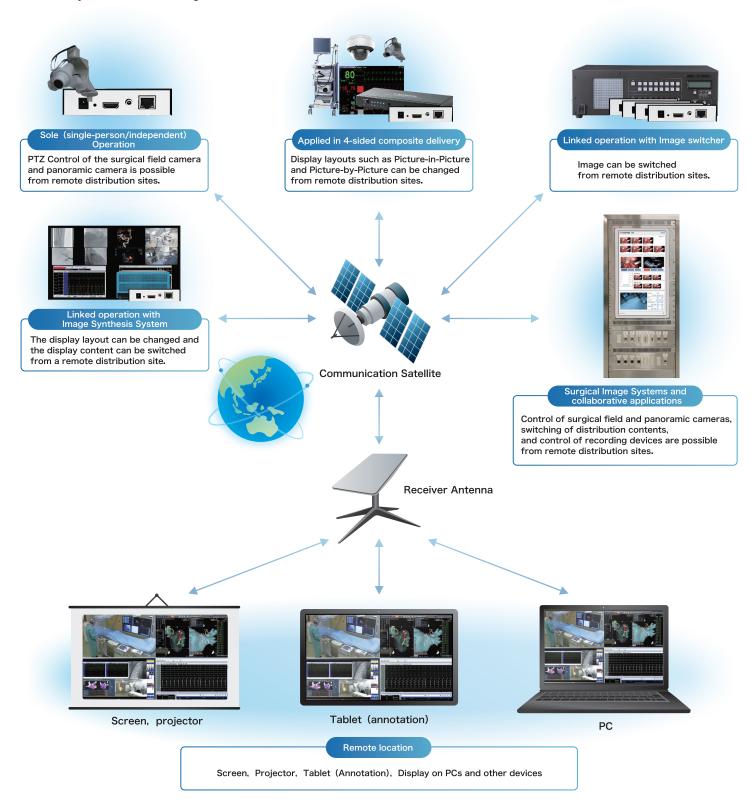
Video switching from remote locations, layout of remote distribution system and video composing system are also available.

Apollo21 system operational image



Example of Apollo21 in conjunction with other systems

In addition to medical information such as vitals, electronic medical records, and PACS, camera images in the operating room can be distributed in real time, and cameras in the operating room can be operated from a different location via Apollo21, which enables two-way voice communication. In addition, even in remote areas where it is difficult to access the terrestrial network, a stable high-speed Internet environment can be created by using Starlink's satellite communications. Furthermore, detailed instructions can be confirmed in real time by writing directly on the surgical image using the annotation function. The acquired image screen can be switched layouts and the recording can be edited.



Features of Starlink

High Speed Internet

Starlink provides high-speed Internet connections close to fiber-optic speeds, with download speeds of up to 1 Gbps.

Global coverage

It enables high-speed Internet access anywhere on the planet, allowing internet access between remote areas and during times of disasters.

Low latency

Low latency due to the use of satellites placed in low orbit, making them suitable for real-time applications.

Flexibility

Mobile Satellite is also mobile, enabling high-speed Internet access even when on the move, such as at sea or in a vehicle.

Economy

Economical Installation costs are much lower than conventional lines, and the system can be used from the same day.

Expandability

Connectivity to or combination with terrestrial lines is possible.

Comprehensive Imaging Solution for Surgical Operating Rooms

Comprehensive Imaging Solution for Surgical Operating Rooms enables to manage all at once on one touch panel screen includes various images of 4K surgical field camera, panoramic cameras, endoscopes, operating microscopes, medical records/PACS, ultrasound equipment, and bioinformation.

Feature

Customizable user interface and flexible scalability

In addition to checking the progress of surgery, the system efficiently records, plays back, and edits surgical image in high image quality. We also provide one-stop solutions, including installation of cameras and equipment and countermeasures against possible failures, to help achieve smooth introduction and operation

Delivery server system is as reliable as a bank

Servers are constantly monitored using an active standby cluster system. In the event of a failure, the server is automatically switched over within one minute, with no impact on business operations.

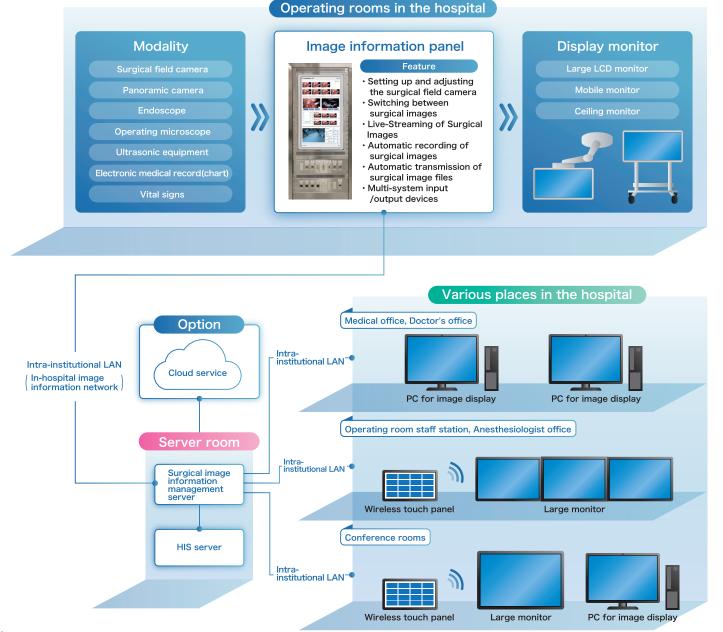
Strong Security and System Safety

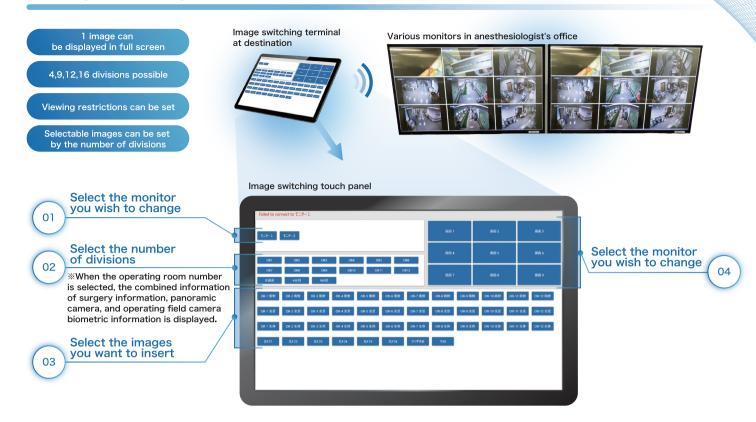
For the first time in Japan, by adopting Android, a Linux-based operating system, for the control system in the operating room and the receiving terminal image switching tablet at the distribution destination, it enables to secure overwhelmingly higher security and freeze-free stability than conventional Windows.

Maintainability in case of failure and Full-fledged Follow-up System

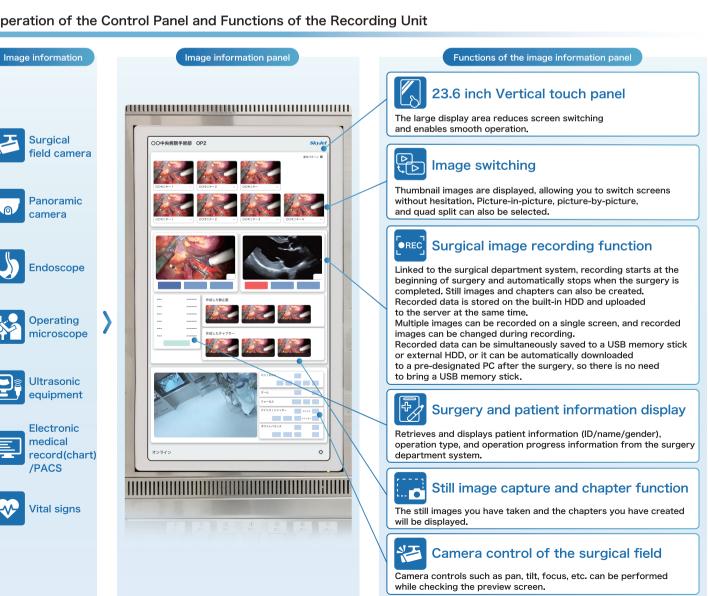
In case of software failure, Quick response through remote maintenance is possible. In the event of hardware failure, technicians will repair and replace by our technicians on site. We provide full follow-up services through periodic inspections.

Comprehensive Imaging Solution Image for Surgical Operating Rooms





Operation of the Control Panel and Functions of the Recording Unit



Imaging Solution for Angiography Room

Image Management Systems

Remote Image Distribution Systems

Image Management Systems

Patented: Patent No. 7016068

Feature

This system centrally controls each modality's images on a large screen of a large monitor connecting multiple modalities used in catheterization rooms or operating rooms to the "Image Management System".

The image management function provides an easy-to-view layout for the surgeon's point of view. As well as switching between pre-registered layouts according to the progress of cases and procedures, it is also possible to manage operations for each imaging sources in the current layout such as zoom in, zoom out, move, add, delete, etc.,

Free and lexible Layout and Registration

Instead of fitting images into grid-like spaces on the platform, the layout can be arranged in any position according to your preferences and needs.

Automatic search and addition of input signals possible

Supports input up to 25 analog and digital imaging signals. Even when adding a modality during surgery, instrument information can be instantly loaded and displayed. Automatic resolution detection simplifies equipment setup, allowing hospital staff to make connections with ease.

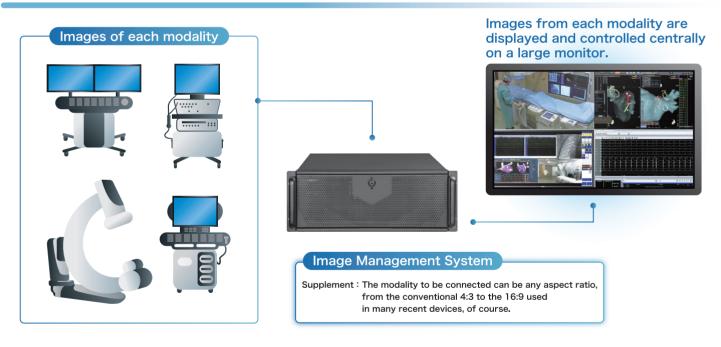
Control Multiple Devices with a Single Mouse

Layout of multiple imaging sources (modalities) used in the medical field on one large screen contributes to stress-free, safe, and accurate procedures.

High-Quality Imaging Output

Four outputs of 4K image and two outputs of full high-definition image in standard specifications. The same surgical image can be easily shared not only by the surgeon, but also in various locations such as operation rooms, conference rooms, doctors' offices, and hospital wards.

Image of Image Management System



Monitor Size Lineup

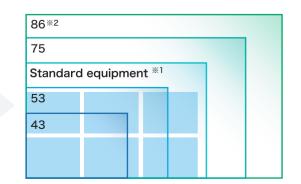
Up to 86 inches

A large 65-inch display with 4K resolution is a standard fixture, and a wide range of displays from 43 inches to 86 inches are available. You can choose the one that best suits your environment.

- %1 65-inch LCD reference size width: 56.5inch / height: 31.8inch
- 86-inch LCD reference size width: 74.8inch / height: 41.7inch

⟨Comparative reference⟩
Pale blue side : Six conventional
21-inch monitors

Pale blue: Standard catheter bed(2500mm)



Remote Image Distribution Systems

Necessary Image information from each modality during treatment in the cardiac catheterisation room can be distributed to conference rooms, auditoriums and remote live sites via hospital LAN or external LAN circuits.

Information sharing through multiple image data enables to check the current status in real time during treatment and

Information sharing through multiple image data enables to check the current status in real time during treatment and it also contributes for the remote treatment support, live demonstrations, clinical research and risk management.

Feature

Live Demonstration

Effective live demonstrations can be performed using image display and voice communication in the cardiac catheterization room, connected in real time to a remote live relay room.

Clinical research

Both Images and audio information can be recorded in real time during in-hospital conferences and remote live webcasts for effective use in clinical research.

Remote Guidance

The system can be connected in real time to the in-hospital conference room for effective remote guidance using images and voice. By Utilizing Image display and audio communications in the cardiac catheterisation room, the system can be connected to the in-hospital conference room in real time for effective remote guidance.

Features of Remote Image Distribution System

Remote two-way communication

Voice interactive communication is possible

A wireless headset allows voice communication between the cardiac catheterization room and the in-house conference room or remote live relay room.

Capable of multi-point connection and image composite display

Multiple images of the medical scene can be simultaneously selected for composite display in a conference room, auditorium, or remote live relay room

Image display function

Multiple image information can be selected and displayed as a composite

It is possible to select and display video information from a cardiac catheterization room in a hospital conference room or remote live relay room, as well as select and combine multiple images at the same time.

Annotation function

Annotation panels can be used to write on Image information in operation rooms, in-hospital conference rooms, and remote live broadcast rooms, Real-time display of the written images enables remote instruction to staff in the cardiac catheterization room.

Multiple camera operations possible

Pan, tilt, and zoom operation of multiple viewing cameras installed in the cardiac catheterization suite in a hospital conference room, auditorium, or remote live broadcast room.

Wireless touch panel for easy operation

A wireless touch panel is used to select video information. Multiple image information selection, composite display selection, and camera operation can be easily customized.

Communication line information

Realized with one single LAN line in the hospital

A single LAN line can be used for information communication between the medical site and the destination.

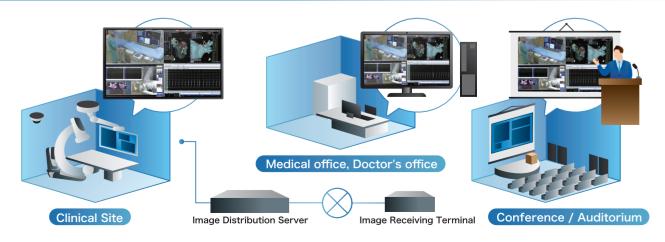
Realized with one single VPN line outside the hospital

Remote live broadcasts can be performed using one single VPN line outside the hospital for image and audio communications.

Realized low load and low latency for image and audio information communication

Realized low load for Image Information Communication bandwidth between the cardiac catheterization room and the in-hospital conference room or remote live relay room at 2 Mbps to 10 Mbps (maximum bandwidth setting: 35 Mbps). Low latency voice information communication has also been achieved and stable connection is also realized by minimizing disruptions and interruptions during voice calls.

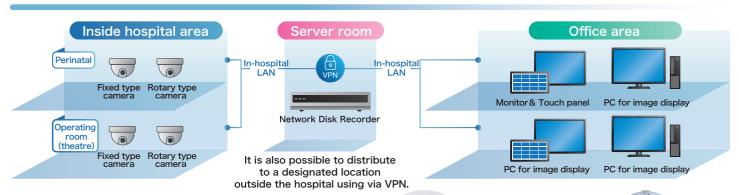
Image of Remote Image Distribution System



(Various) Panoramic Camera

We offer a wide range of panoramic cameras with pan/tilt/zoom, AI, and other unique functions. The high optical magnification zoom allows for clear images of every detail and monitors highly scalable in a wide range of areas throughout the hospital. The system is highly scalable and can be used not only within the hospital, but also to designated facilities outside the hospital via a dedicated VPN line that ensures security and safety functions.

Image of Panoramic Camera



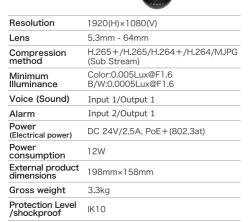
SJM-27SNC81

Resolution	1920(H)×1080(V)
Lens	2.7mm - 8.1mm
Compression method	H.265+/H.265/H.264+/H.264
Minimum Illuminance	Color:0.005Lux@F1.8 B/W:0.0005Lux@F1.8 OLux@F1.8(IR on
Infra-red rays	15m
Voice (Sound)	Built-in microphone input 1/Output 1
Power (Electrical power)	DC 12V/1.5A, PoE(802.3af)
Power consumption	10.5W(IR on)
External product dimensions	128mm×63mm
Gross weight	0.49kg
Protection Level /shockproof	IP66, IK08

SJM-53SNC640-66

Resolution	1920(H)×1080(V)
Lens	5.3mm - 64mm
Compression method	H.265+/H.265/H.264+/H.264/MJPG (Sub Stream)
Minimum Illuminance	Color:0.005Lux@F1.6 B/W:0.0005Lux@F1.6
Voice (Sound)	Input 1/Output 1
Alarm	Input 2/Output 1
Power (Electrical power)	DC 24V/2.5A, PoE+(802.3at)
Power consumption	12W
External product dimensions	170mm×155mm
Gross weight	3.3kg
Protection Level /shockproof	IP66, IK10

SJM-53SNC640



Audio Solution for Medical Facilities

It is a high sound quality intercom system for real-time two-way audio communication to facilitate transactions between medical staffs in remote locations that contributes to operational efficiency and safety management through real-time information sharing.

Do you have any of these problems in the medical fields?

In remote blind areas, it is invisible and not possible to check on the surgery or send instructions.

Patients under local anesthesia might hear conversations during surgery and are unnecessarily attentive.

I wish all the surgical staffs could share more real-time informations.

Intercome System Solves These Problems. Intercome System Medical Office Operating Room (theatre) Control Room

Feature

Two-way voice (audio) communication

At least 2 and up to 10 people can talk at the same time in the operating room (site) or in a conference room.

Hands-free and ready to use

Both hands are free to work with. Installation is easy and smooth. $\,$

Even during local anesthesia operations

Staff members can talk to each other during local anesthesia procedures such as Catheterization without being heard by the patient.

Full Care for impact on medical equipments

As with in-hospital PHS, the 1.9 GHz frequency is also considered to have an impact on medical equipment in the hospital.

Various Monitors

		32 inch	1 55 inch	65 inch	
Model Number		SJMD323D40	SJMD553D40	SJMD65D40	
LCD Size		711.5(H)mm x 401.5(V)mm	1209.6(H)mm x 680.4(V)mm	1428.5(H)mm x 803.5(V)mm	
Resolution		3840 x 2160	3840 x 2160	3840 x 2160	
Backlight		LED	LED	Active Matrix Color TFT	
Pixel Pitch		0.1845mm x 0.1845mm	0.42mm x 0.315mm	0.372mm x 0.372mm	
Brightness (St	tandard)	700 cd/m²	350cd/m²	490cd/m²	
Contrast Ratio)	1350:1 1200:1		4000:1	
Aspect Ratio		16:9	16:9	16:9	
Viewing Angle	(Standard)	178°,178°	178°,178°	178°,178°	
Display Colors	3	Approx. 1,073,740,000 colors (10-bit)	Approx. 1,073,740,000 colors (10-bit)	Approx. 1,073,740,000 colors (10-bit)	
Response Tim	е	8ms	8ms	8ms	
Power Supply		AC100V ~ 240V,50 ~ 60Hz	AC100V ~ 240V,50 ~ 60Hz	AC100V,50 ∼ 60Hz	
Rated Electric	al Capacity	Approx. 150W	Approx. 130W	Approx. 230W	
Standby Mode	•	Less than 0.5W	Less than 0.5W	Less than 0.5W	
RGB		0	1	1	
DVI		2	1	-	
HDMI (2.0)		1	2	3	
Audio		0	1	-	
DisplayPort (1	.2)	3	1	2	
Operating Environment	Humidity	$20\sim80\%$ (Without condensation)	$20\sim80\%$ (Without condensation)	20 ~ 80% (Without condensation)	
Conditions	Temperature	$0 \sim 40^{\circ}$ C	$0 \sim 40^{\circ}$ C	0 ~ 40°C	
Storage Environment	Altitude	3000m	3000m	3000m	
Conditions	Temperature	-10 ∼ 60°C	-10 ~ 60°C	-20 ∼ 60°C	
Humidity		$10\sim 90\%$ (Without condensation)	$10\sim90\%$ (Without condensation)	$10\sim90\%$ (Without condensation)	
Weight		Approx. 13.4kg	Approx. 14.97Kg	Approx. 40.6Kg	
Dimensions		764.3mm x 468.7mm x 79.0mm	1246.9mm x 79.9mm x 725.3mm	1457.1mm x 79.4mm x 832.1mm	
Packed Weigh	t	Approx. 16.4kg	Approx. 23.2Kg	Approx. 50.8Kg	
Packaging Dimensions		917mm x 65.7 mm x 211.0mm	1385mm x 163mm x 825mm	1736mm x 280mm x 1033mm	
Mounting Hole	es	100mm x 100mm(200mm) M4x4	300mm x 200mm(200mm) M6x4	400mm x 400mm M8X4	
Other		-	-	Connection ports USB2.0 2Port / USB CMI 2Port Micro SD 1Port	

		1 75 inch	▮86 inch	
Model Number		SJMD75D40	SJMD86D40	
LCD Size		1649.66(H)mmx 927.94(V)mm	1895.04(H)mmx 1065.96(V)mm	
Resolution		3840 x 2160	3840 x 2160	
Backlight		Active matrix color TFT	LED	
Pixel Pitch		0.43mm x 0.43mm	0.4935mm x 0.4935mm	
Brightness (St	tandard)	450cd/m²	330cd/m ²	
Contrast Ratio)	1200:1	1200:1	
Aspect Ratio		16:9	16:9	
/iewing Angle	(Standard)	178°,178°	178°,178°	
Display Colors	5	Approx. 1,073,740,000 colors (10-bit)	Approx. 1,073,740,000 colors (10-bit)	
Response Tim	ie	8ms	8ms	
Power Supply		AC100V,50 ~ 60Hz	AC100V ~ 240,50 ~ 60Hz	
Rated Electric	al Capacity	Approx. 195W	Approx. 500W	
Standby Mode	Э	Less than 0.5W	Less than 0.5W	
RGB		1	1	
OVI		-	-	
HDMI (2.0)		3	1,HDMI1.4x2	
Audio		-	1	
DisplayPort (1	.2)	2	1	
Dperating	Humidity	$20 \sim 80\%$ (Without condensation)	$20 \sim 80\%$ (Without condensation)	
Environment Conditions	Temperature	0 ~ 40°C	0 ~ 40°C	
torage nvironment	Altitude	3000m	3000m	
Conditions	Temperature	-20 ∼ 60°C	-10 ~ 60°C	
Humidity		$10\sim90\%$ (Without condensation)	$10\sim90\%$ (Without condensation)	
Weight		Approx. 52.6Kg	Approx. 78Kg	
Dimensions		1681.2mm x 71.1mm x 956.9mm	1988mm x 99.6mm x 1178mm	
Packed Weigh	t	Approx. 65.5Kg	Approx. 105Kg	
Packaging Dimensions		1830mm x 280mm x 1190mm	2211mm x 280mm x 1370mm	
Mounting Holes		400mm x 400mm M8X4	800mm x 600mm M8X4	
Other		Connection ports USB2.0 2Port / USB CMI 2Port Micro SD 1Port	-	



[Safety Precautions] To ensure the safe use of this product, please read the "Instruction Manual" carefully before use.

● This product is for indoor use only. ● Do not install it in places with high humidity, moisture, steam, or oil fumes. This may cause fires, electric shocks, or malfunctions. ● The LCD panel is manufactured using highly precise technology, but please be aware that there may be image defects or pixels that remain lit continuously. ● Notes in the catalog: Specifications and appearance may be subject to change without prior notice for improvement purposes. Due to printing, the color of the actual product may slightly differ from what is shown in the catalog. ● Trademarks: SkyJet is a trademark of SkyJet Medical Co.,Ltd. The names of other companies, product names, and system names mentioned are generally trademarks or registered trademarks of their respective companies or organizations. In this text, TM and * marks are not explicitly mentioned. ● Images are composite images for illustrative purposes. ● The items featured are not medical devices.

SkyJet Medical

About Us

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Business Description | We specialize in the development and sales of medical imaging systems.

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Product Offerings

- 3D Monitoring and Recording System for Surgical Robots
- Apollo21 Remote Support Solution
- Comprehensive Imaging Solution for Surgical Operating Room
- Imaging Solution for Angiography Room
- Various Panoramic Camera
- Audio Solution for Medical Facilities
- Various Monitors
- Design, Development, Planning and Prototype Production of New Products and Services





