

# HyPort P30

## Medical Supply Unit



Technical data		
<b>Main</b>		
Arm length		
Suspension tubes	100-1200mm	
Column 1.1.21.	<ul style="list-style-type: none"> <li>Ω Column , 500mm, 800mm, 1000mm 1.1.21.</li> </ul>	
	<ul style="list-style-type: none"> <li>Σ Column , 800mm, 1000mm, 1250mm</li> </ul>	
	<ul style="list-style-type: none"> <li>Head, 780mm, without pole</li> </ul>	
Load capacity	Refer to appendix table A	
Braking 1.1.14.	Pneumatic 1.1.14.	Optional
	Electromagnetic	Fit mechanical arm, heavy
Rotation	340°	
<b>Service components</b>		
Supply gas outlets	Oxygen (O2), Nitrous Oxide (N2O), Carbon dioxide(CO2), Compressed air (Air), Nitrogen gas(N2), Vacuum (Vac), High pressure air, Anaesthetic gas scavenging system (AGSS)	As required
Supply data outlets	HDMI, BNC, VGA, DVI-D, S-VIDEO, RJ11, RJ45	
Max outlets	Ω Column, 500mm——30 units	(Simulate the arrangement of the Socket Legrand)
	Ω Column, 800mm——48 units	
	Ω Column, 1000mm——60 units	
	Σ Column, 800mm——12 units	
	Σ Column, 1000mm——16 units	
	Σ Column, 1250mm——20 units	
	Head, 780mm——28 units	
<b>Others</b>		
Optic design	(Optional) Oxygen Concentration Monitoring	Only Ω Column & Σ Column
	(Optional) Endoscopy Camera Holder	
	(Optional) Leadwire Manager	
	(Optional) Rail-mount Manager Box	
	(Optional) Foot Switch Wire Basket	
	(Optional) Manager Box for Respiratory Hag	Only Ω Column
Green Features	All with ROHS required material Antimicrobial coating	

<b>Standards</b>		
According to Medical Device Directive	Medical devices Regulation, REGULATION (EU) 2017/745 (MDR)	Class II
Medical electrical devices	DIN EN 60601-1	
Medical electrical devices	DIN EN 60601-1-2	
Medical Supply Units	DIN EN ISO 11197	
<b>Environment</b>		
Power Supply	Power : 100-127V/220-240V~, 50/60Hz, 25A Output: 100-127V/220-240V~, 50/60Hz, 16A	
According to the protection against harmful ingress of water or particulate matter	IP20	
<b>Environmental Specifications</b>		
	Operating Environment	Storage and Transportation
Temperature	+ 5 °C up to + 40 °C	- 40 °C up to + 60 °C
Humidity (noncondensing)	15% to 95%, non-condensing	10% to 95%, non-condensing
Atmospheric pressure (kPa)	70-106	50-106

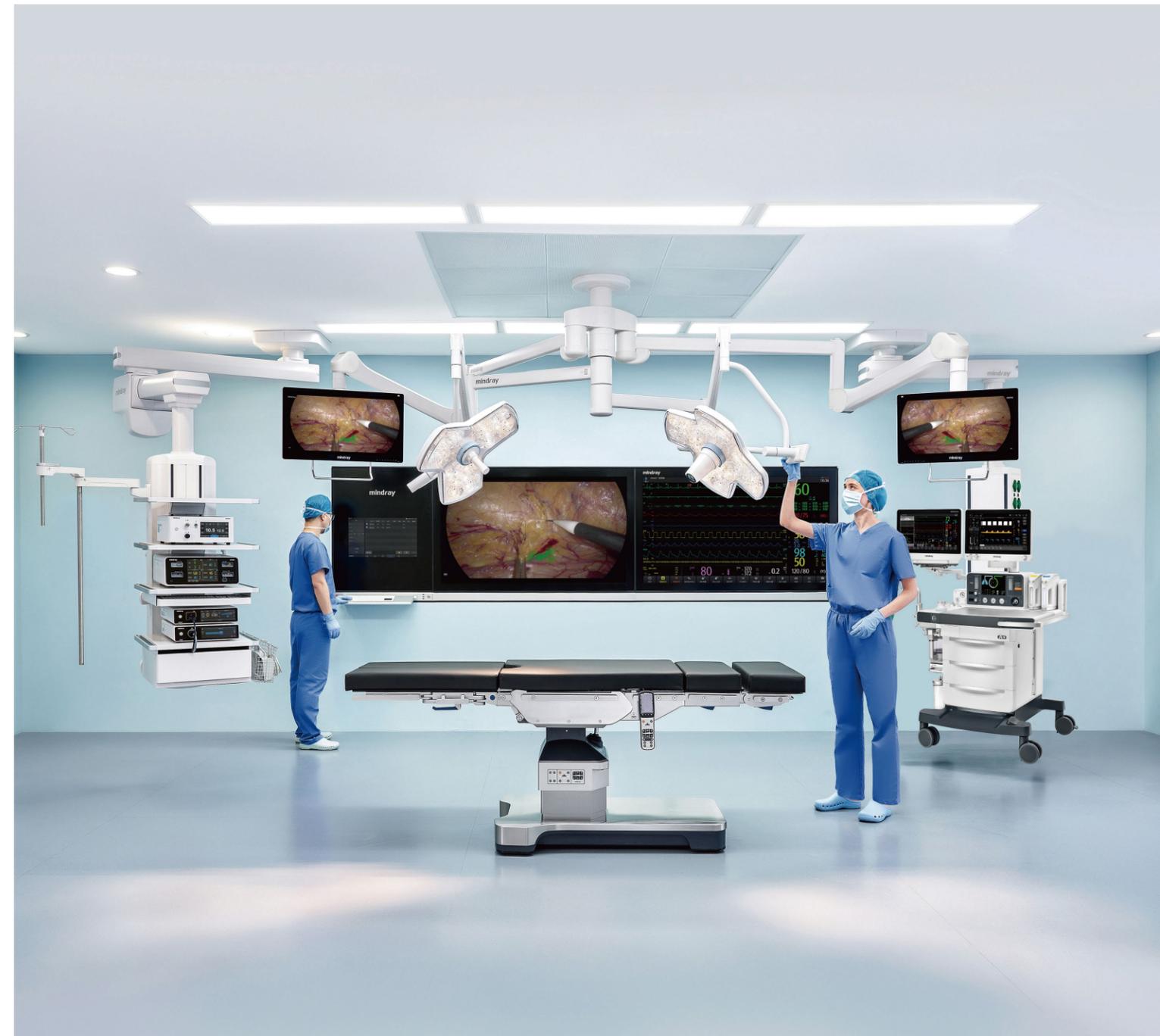
## Appendix table A

Model	Arm length (mm)	Max. load (kg) (under the swivel arm)	
		Arm system-light	Arm system-heavy
HyPort P30	500	350	700
	750	300	580
	1000	240	450
	1250	220	400
	500+500	240	450
	750+500	220	400
	1.1.21. 750+750	1.1.17. 200	360
	1000+750	180	310
	1000+1000	160	270
	1250+750	/	270
	1250+1000	140	240
	1250+1250	120	/

## HyPort Series

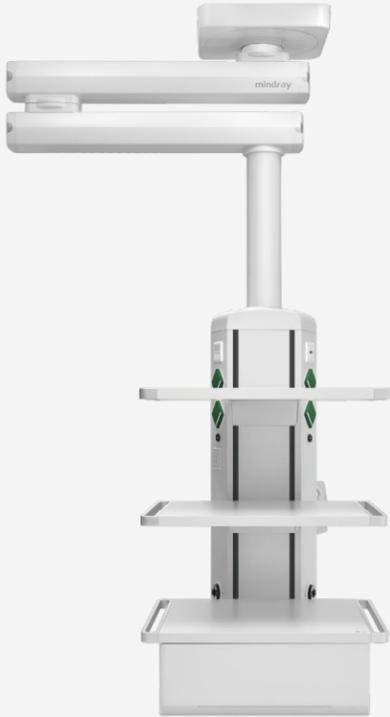
Medical supply unit

Care for health with unrivaled flexibility



# Medical Supply Unit

With the continuous improvement of medical levels, people pay more attention to efficient clinical workflow. Mindray innovation integrates high-end technology with ergonomic design. It develops a new generation of medical supply unit HyPort series, providing an efficient, easy-to-use and safe operating room environment.



**HyPort P30  
Mechanical Pendant**



**HyPort P60  
Motorized Pendant**



**HyPort P90  
Vertically Lifting Pendant**

# Customized Design with Future-proof Flexibility



Comfortable layout



Easy to use



Improve efficiency

- Various supporting solutions towards different medical devices
- Innovative cable management provides a clean and orderly workstation
- Ergonomic functionality with optimized workflow efficiency
- Infection control and safety system secure the surgical progress

# Safety

Safety is the first priority for medical devices, especially pendants that lift and support other heavy machines.

1.1.15.



## Brake system

Besides the standard friction brake, pneumatic or electromagnetic can be an option for additional safety.



## Oxygen concentration monitoring

24-hour continuous monitoring of oxygen concentration with built-in alarm system



## Infection control

- **Screwless design ensures no snags or cuts**
- Antimicrobial powder coating surface treatment

1.1.8.

# Anesthesia Pendant Solution

Regardless of the adoption of anesthesia solutions, it gives physicians a reliable platform to work with anesthesia machines and creates a comfortable, safe operating room environment.

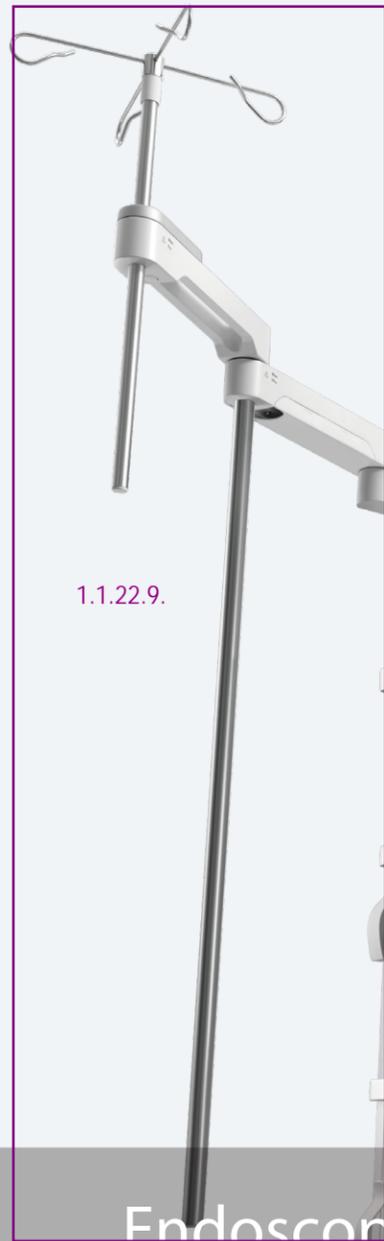


With a motorized arm/lifting system, HyPort P90 can lock your anesthesia workstation or endoscopy cart and lift them off the floor.

The devices can be conveniently moved into the desired area and securely parked, providing a clean and efficient workflow.

Mindray also provides a compact anesthesia pendant design, namely P30/P60 with head distribution only, ensuring a large operating space for the surgical team.





1.1.22.9.



## Endoscope Pendant Solution

Minimally invasive surgery is known as a technique with fewer complications, shorter hospital stays and less pain. Cameras, computers, and instruments are capable of providing very precise movements to endure the procedures. Mindray endoscope pendant with the new  $\Sigma$  distribution is an innovative solution for those numerous devices and cables.

## Endoscope Pendant Solution

### Cable management



Electrical cables hidden inside the column cavity



Built-in cable management with flexible position

### Smart storage



A better basket to hold foot switches with cables



Dedicated holder for laparoscopic camera

### Future-proof flexibility



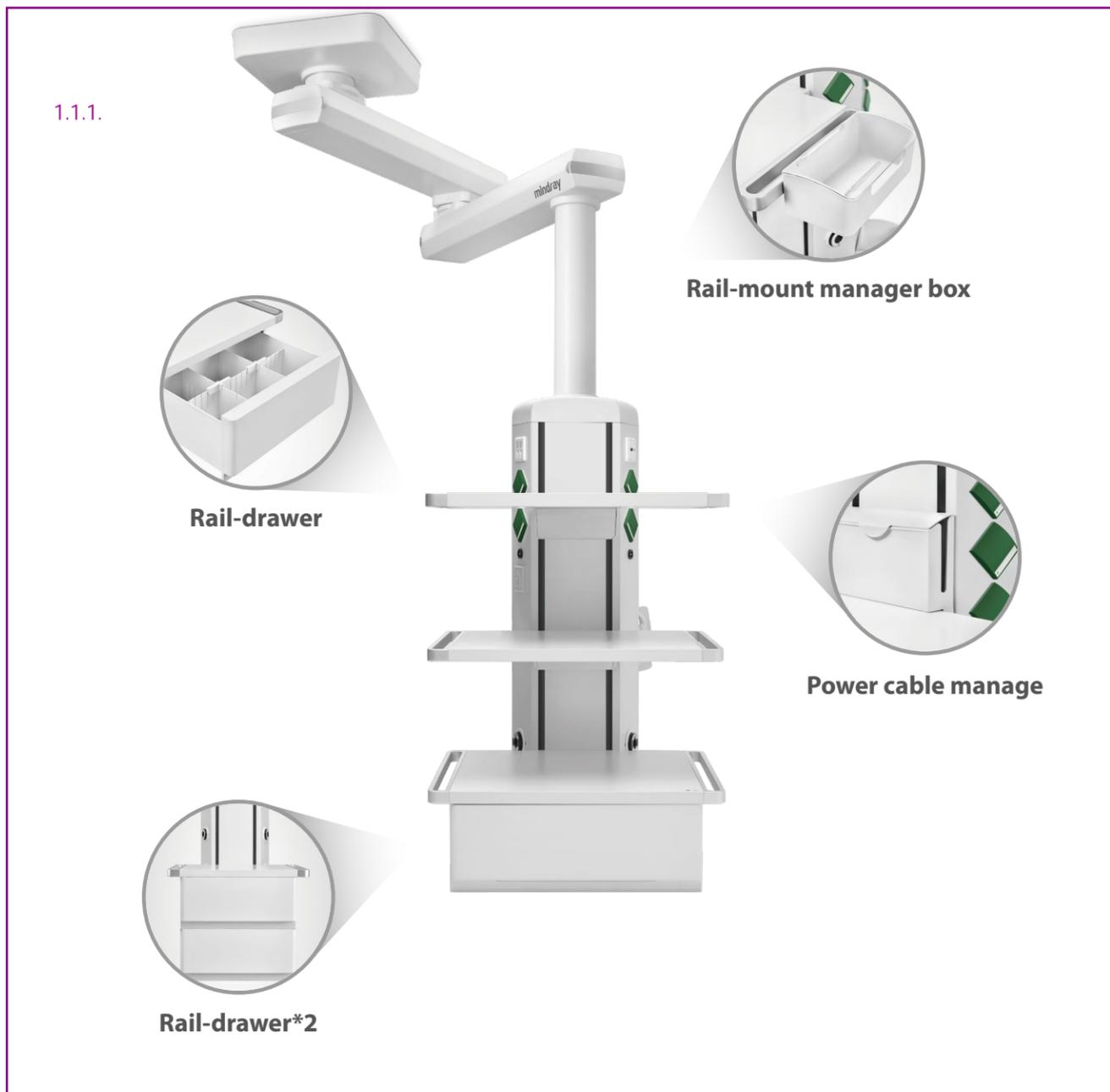
Isolated cavity design for safety concern



Extendable shelf design provides more space for large equipment.

# Surgical Pendant Solution

The design of the column will maximize the configuration requirements towards the quantity of electrical sockets and gas outlets. In addition, the front and rear panels can be expanded as the component panels.



# Imaging Mounting Solution

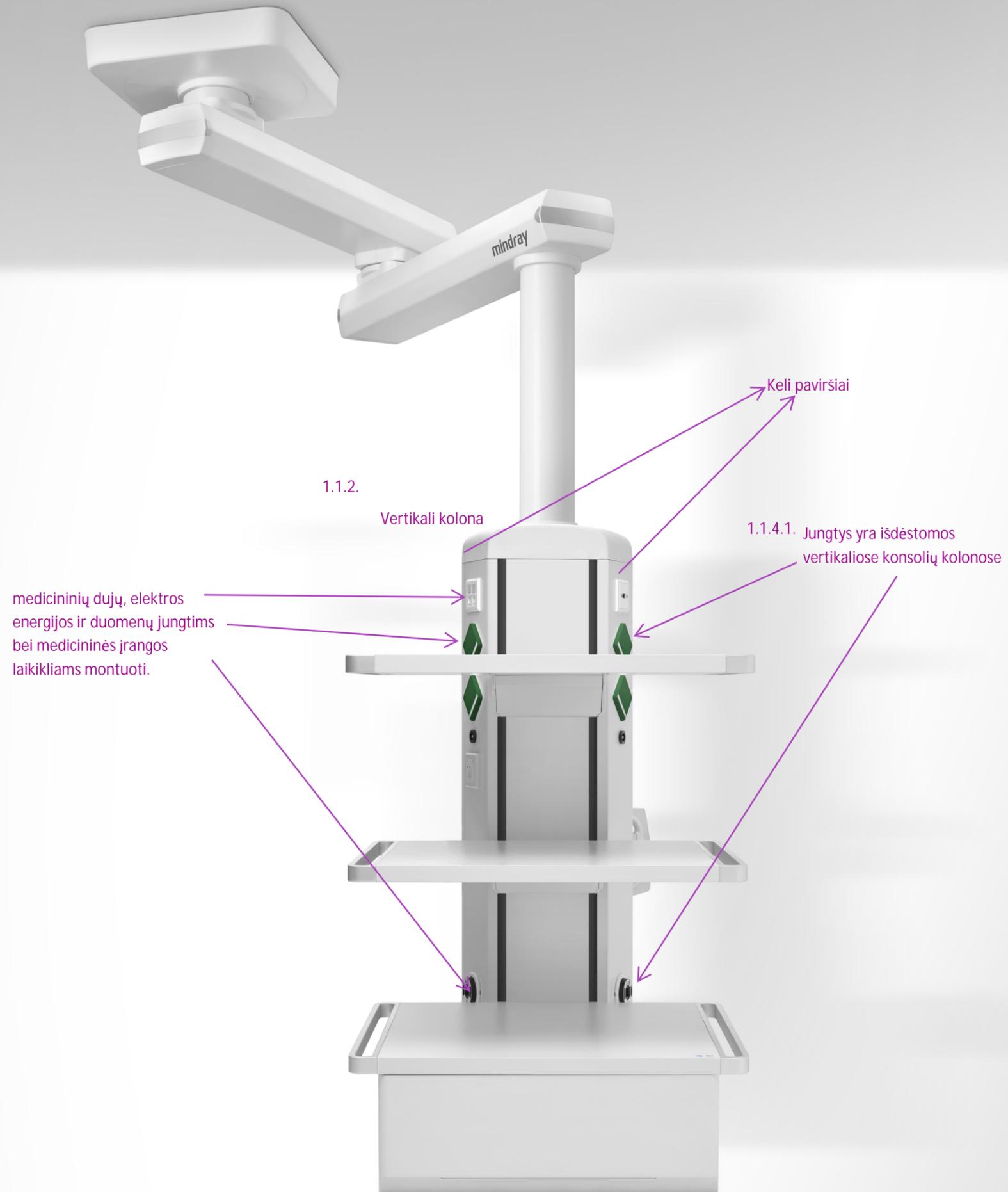
Due to different clinical requirements and various display selections, the manufacturers were required to do lots of time-consuming and expensive customization previously. The Mindray imaging mounting solution provides flexible configurations.



The monitor hanger can be adjusted according to the size of the monitor to meet different viewing needs, compatible with large format screens up to 65".



Integrated information solution for Hybrid OR, Catheterization Lab, MIS OR, four screens up to 32", six screens up to 27".



**HyPort P30**  
**HyPort P60**  
**HyPort P90 Series**

**Medical Supply Unit**

**Operator's Manual**

# 2 Equipment Introduction

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## 2.1 Intended Use

### 2.1.1 Intended Purpose

1.1.2. The device is designed as a permanently mounted unit, which provides location for equipment used in diagnostics, therapy and surgery, access to such media as electricity, medical gases, vacuum, data and communications.

### 2.1.2 Intended Users

The unit is operated by trained doctors, nurses, care workers and authorized personnel of device service and maintenance.

### 2.1.3 Intended Patient Population

The unit is applicable for adults, children and newborns.

### 2.1.4 Intended Medical Conditions

It is used in intensive care unit, anaesthesia room, operating room, recovery and emergency rooms.

### 2.1.5 Contra-indications

None.

### 2.1.6 Side-effects

According to the conclusion of clinical evaluation and residual risk evaluation, for the intended patients, there are no known side effects that can occur during or after the use of the medical device. And there is no need for the operator to make extra preparations. Thus, no residual risk associated with using the medical device should be disclosed.

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## WARNING

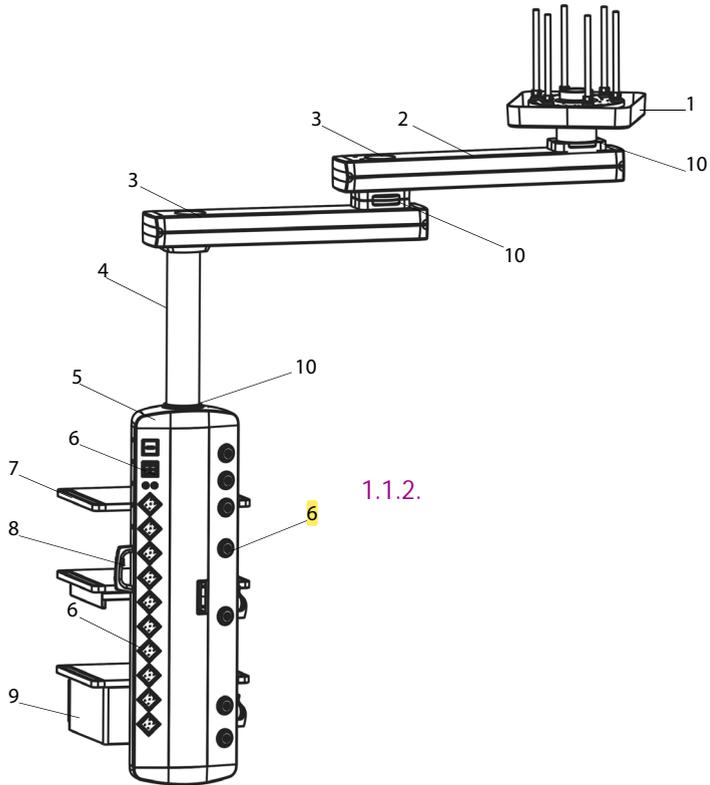
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- **Contents of this manual are based on the full configuration of the medical supply unit. Some of them may not apply to your unit. Use your medical supply unit according to the actual configuration. If you have any questions, contact the customer service department authorized by Mindray or your local distributor.**
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## 2.2 Main Components

The main components of the HyPort medical supply unit are shown in the figures below.

- HyPort P30 mechanical ceiling supply pendant



1. Ceiling cover
2. Swivel arm
3. Indirect navigation light (optional)
4. Suspension tube
5. Distribution module
6. Service components (electrics and gases)
7. Shelf
8. Control handle (optional)
9. Drawer
10. Articulations

1.1.2.

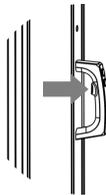
### 3.5 Using the Pneumatic/Electromagnetic Brake (optional)

The swivel arm or distribution module can be equipped with a pneumatic braking system that operates on compressed air and an electromagnetic braking system that operates on solenoid.

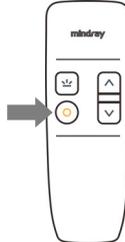
#### 3.5.1 Using the Release-all Control Button

The release-all control button can unlock all articulations at one time.

- Release-all control button on the control handle



- Release-all control button on the corded hand control



You can:

1. Press and hold the release-all control button.
2. Rotate and extend the unit to the desired position.
3. Release the button.

### 3.6 Using Service Components

1.1.2.

The service components include medical gases, vacuum, electricity, and communications (telephone, nurse call, and network).

### 3.6.1 Using Gas Outlets

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#### WARNING

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- **The leaked oxygen burns easily. When using oxygen or nitrous oxide outlets, be sure to avoid fire and do not smoke.**
  - **Keep grease and flammable liquid away from the oxygen and nitrous oxide outlets.**
  - **Before the initial operation, make sure the gas hoses are correctly connected, gas flows are normal and no leakages are present.**
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#### CAUTION

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- **Do not plug a gas probe into an outlet of a different standard.**
  - **When disconnecting a gas probe, be sure to hold it to avoid unexpected ejection.**
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#### NOTE

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- **Installation of flow meters and/or pressure gauges in compliance with your local requirements is recommended.**
  - **For the detail of the gas outlets, please refer to specific manufacturer's instructions.**
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The following gas and vacuum are available for the medical supply units.

- Oxygen (O<sub>2</sub>)
- Nitrous Oxide (N<sub>2</sub>O)
- Carbon Dioxide (CO<sub>2</sub>)
- Compressed air (Air)
- Vacuum
- Anesthesia gas scavenging system (AGSS)

Connect the medical gas lines as instructed below.

1. Identify the appropriate gas outlets which are clearly labeled with the gas type. Ensure that the probe matches the gas type.
2. Screw or plug the appropriate fitting to the gas outlet.

## 3.6.2 Using Electrical Outlets

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### WARNING

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- The purpose of the equipotential pin is to eliminate the potential difference between electrical devices. Make sure it is connected to an equipotential point within the operating room, ICU or laboratory before using the medical supply unit.
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### CAUTION

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- Do not overload any electrical outlet.
  - The maximum current of the unit is 16A. Do not overload it.
  - Do not plug an electrical connector into an outlet of a different standard.
  - Be sure to know the electrical demands of the devices you intend to connect to the outlets, and do not exceed the circuit rating.
  - Do not connect any multiple portable socket-outlet or power extension cord to the unit.
  - Do not connect more devices than the circuit can supply in amperage. Overloading an electrical circuit can lead to overheating and fire. It can also result in a circuit failure and a loss of power to the devices it supplies.
  - An electrical surgical unit (ESU) may create noise on the power lines. This noise may interfere with other devices on the same line. To minimize the potential for interference, ensure that each ESU unit is connected to a different circuit.
  - If such communication outlets as the network outlet, the telephone outlet and the like are used, make sure screened IT cable in compliance with the requirements of EN 50288 are used, and the overall wiring are in compliance with the requirements of EN 50174-2.
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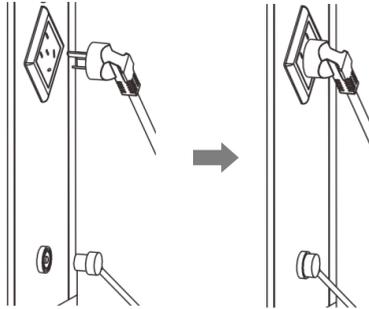
### NOTE

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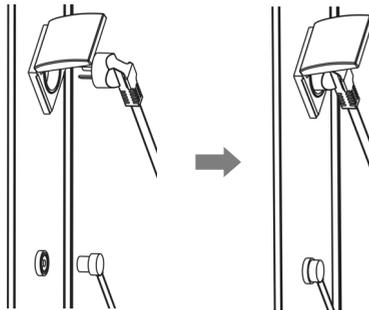
- Plug an electrical connector fully into the electrical socket to make sure the medical device is normally powered.
  - Plug an electrical connector into another effective electrical socket if circuit malfunction occurs.
  - When pulling an electrical connector out of the electrical socket, be sure to hold the outlet to avoid unexpected damage.
  - For the detail of the electrical outlets, please refer to specific manufacturer's instructions.
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## 1.1.2.

### ■ Electrical outlet (common)



### ■ Electrical outlet with waterproof cover

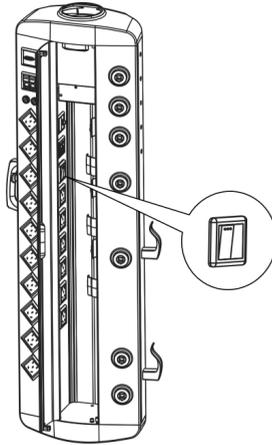


Each electrical outlet has a maximum capacity, which varies from 10Amps to 20 Amps, depending on the outlet you have chosen. Follow these best practice guidelines for connecting electrical devices to electrical outlets.

1. If power cords are detached from the devices, ensure that you are connecting the correct cord with the proper wire gauge.
2. Attach separate power cords to the devices first, and then plug the power cords into the electrical outlets.
3. Always plug the power cord into the nearest electrical outlet with adequate circuit capacity.
4. Do not allow the excess power cord to dangle. Coil the excess cord and secure it with wire ties or tape.
5. Connect the equipotential cable to the equipotential pin on the unit and then connect the other end of the cable to the operating room's equipotential pin.
6. If your device has an equipotential pin, be sure to connect it to the equipotential pin on the unit.

### 3.7 Power Switch

Use the power switch to control the connection and disconnection of the internal electrical socket so that you do not need to plug or unplug the power plug frequently.



#### NOTE

- The label “ | ” on the power switch indicates the unit is power on and label “ ○ ” indicates the unit is power off.

### 3.8 Turning On/Off the Indirect Navigation Light

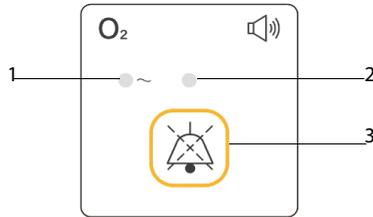
The light switch of the indirect navigation light is on the control handle and the corded hand control.

Press  to turn on/off the indirect navigation light.

### 3.9 Using Data Outlets 1.1.2.

The following data outlets are available: RJ11/RJ45 (with/without shield), BNC, HDMI, VGA, S-VIDEO, DVI-D.

### 3.10 Oxygen Concentration Monitoring



1. AC indicator
2. Indicator of high oxygen concentration
3. Mute key of oxygen concentration monitoring

■ State definitions of oxygen concentration monitoring

State	Definition
AC indicator is green.	The oxygen concentration monitoring is AC powered.
Indicator of high oxygen concentration is red and flashing.	The oxygen concentration value is not within a normal range.
Sound is heard.	The oxygen concentration value is not within a normal range.

#### CAUTION

- **The function is only for monitoring the oxygen concentration inside the distribution module.**
- **When the oxygen concentration value is not within a normal range, contact the customer service department authorized by Nanjing Mindray.**
- **The sound can be silenced by the mute key, but the indicator of high oxygen concentration is still red and flashing.**

- 1.1.2. Dujų, elektros ir kitos jungtys išdėstytos prasilenkiančiai taip, kad deguonies srauto matuokliai ir medicininio siurbimo (atsiurbimo) įranga ergonomiškai pozicionuojama ir netrugdytų prieigai prie jungčių.



**HyPort P30**  
**HyPort P60**  
**HyPort P90 Series**

**Medical Supply Unit**

**Operator's Manual**

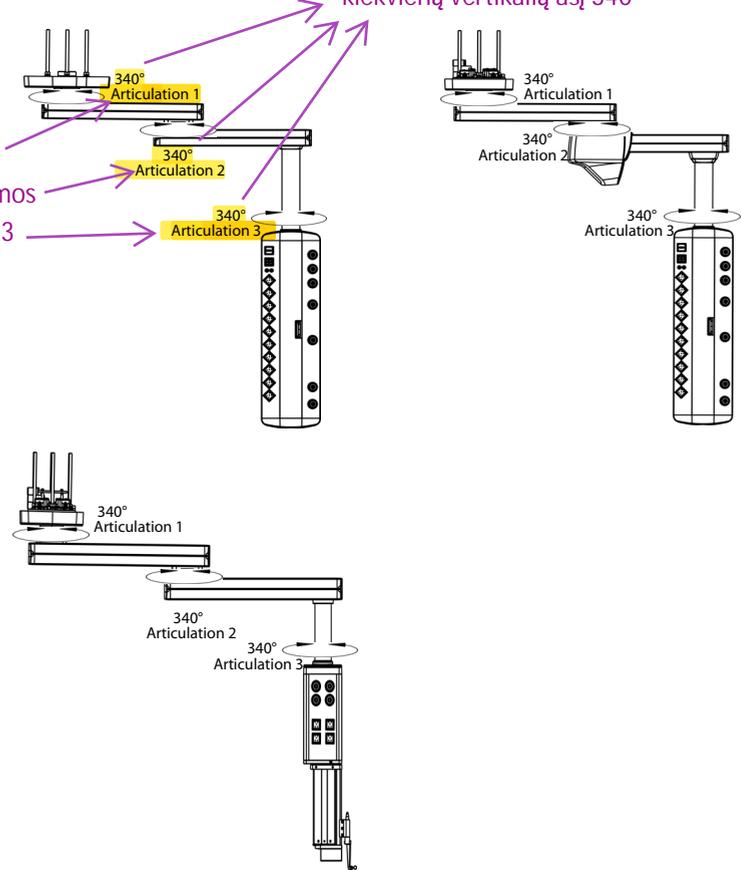
### 3.3 Rotation Range

The articulation rotation range is 340°.

1.1.6.

Alkūnių judesio eiga aplink kiekvieną vertikalią ašį 340°

1.1.5.  
Vienos konsolės sistemos sukimosi ašių skaičius 3



#### NOTE

- The arm and distribution can rotate a maximum of 340°. Actual movement will be adjusted during installation to limit the unit as necessary to prevent collisions with walls or other structural elements.

# 5 Cleaning and Disinfection 1.1.9.

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## 5.1 Safety Information

The product must be cleaned and disinfected after every use.

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### WARNING

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- Use only Mindray approved cleaners and disinfectants and methods listed in this chapter to clean or disinfect your equipment. Warranty does not cover damage caused by unapproved substances or methods.
  - Do not mix disinfecting solutions as hazardous gases may result.
  - We make no claims regarding the efficacy of the listed chemicals or methods as a means for controlling infection. For the method to control infection, consult your hospital's infection control officer or epidemiologist.
  - Agents containing alcohol can form explosive vapor mixtures and ignite where high-frequency equipment is being used. Do not use the cleaners or disinfectants containing alcohol where high-frequency surgical equipment may be used.
  - Always wear gloves for cleaning and disinfection. Neglect of this may cause infection.
  - Be sure to disconnect the power supply before cleaning and disinfection.
  - The responsible hospital or institution shall carry out all cleaning and disinfection procedures specified in this chapter.
  - Never grease gas connectors. Explosion hazard may be present. Keep grease and lubricant away from the oxygen and other gas outlets.
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### CAUTION

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- Do not clean/disinfect the medical supply unit mechanically.
  - Never immerse any part of the equipment or accessories in liquids.
  - Particles of grime may become encapsulated and lead to the product not reaching the desired germ-reduction after disinfection. Before disinfection, the product must be cleaned thoroughly of contamination and encapsulated particles of grime and then be dried.
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### 1.1.9.

- **Any contact of cleaners or disinfectants with connectors may cause corrosion.**
  - **Do not pour or spray any liquid directly on the equipment or accessories or permit fluid to seep into live parts inside the equipment.**
  - **If you spill liquid on the equipment or accessories, disconnect the power supply, dry the equipment and contact your service personnel.**
  - **Improper cleaning/disinfection can damage the medical supply unit. Do not spray the cleaning agent/disinfectant directly into the joints or gaps. Do not use high pressure to clean/disinfect components.**
  - **Never use abrasive materials (such as steel wool or silver polish), or strong solvent (such as acetone or acetone-based cleaners) for cleaning.**
  - **Do not use polish or steel cleaner to clean or disinfect stainless steel surfaces.**
  - **Dilute and use the cleaners or disinfectants according to the manufacturer's instructions.**
  - **The inside cleaning of the medical supply unit is to be maintained and/or serviced by personnel authorized by Nanjing Mindray only.**
  - **Do not allow water to infiltrate the service components inside the unit.**
  - **Do not use disinfectants containing alcohol to clean the plastic components.**
  - **Do not use scouring agents.**
  - **Do not use water containing metal particles, any metal tools (such as wire brushes or steel wool), or products containing hydrochloric acid to clean the unit.**
  - **Do not use the disinfectants containing chlorine or compounds which can release chlorine to disinfect the metal parts. Long-term use of these disinfectants may corrode the metal parts, hence compromising safety and effectiveness of the device. It is recommended that metal parts be disinfected by 2% alkaline glutaraldehyde or 0.5% peroxyacetic acid.**
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### **NOTE**

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- **Be sure to follow the related national hygiene and disinfection regulations to carry out cleaning and disinfection procedures.**
  - **Check the equipment or accessories after cleaning and disinfecting. Stop use if there is any sign of wear or damage.**
  - **Clean or disinfect the equipment surface at room temperature. Be sure to follow the disinfectants' instruction if the disinfectants have special temperature requirements for disinfection.**
-

## 5.2 Cleaning

The surface of the unit should be cleaned and disinfected regularly and at least once a week is recommended.

### 5.2.1 Preparation before Cleaning

1. Cut off the electrical power supply and gas supply to the unit before cleaning and disinfecting.
2. Disconnect all the gas probes and electrical connectors from your unit.

### 5.2.2 Cleaning Procedure

1. Use a piece of lint-free clean cloth to wipe off the dust gently and thoroughly.
2. Use a piece of lint-free cloth moistened with cleaner (clean water or soap solution) to wipe the surface.
3. Use a piece of disposable lint-free cloth moistened with water to clean the surface.
4. Use a piece of dry lint-free cloth to wipe the surface dry.

#### NOTE

- Use proper amount of the cleaning agent to clean the medical supply unit, and remove any excessive agent by the dry cloth.
- Be sure to disinfect the equipment after cleaning.

## 1.1.9. 5.3 Disinfection

### 5.3.1 Recommended Disinfectants

Disinfect the equipment as required in your hospital's servicing schedule. Cleaning the equipment before disinfection is recommended. Always dilute and use disinfectants according to the manufacturer's instructions. The following table lists approved disinfectants:

Product name	Product type	Manufacturer
Alpet® D2 Surface Sanitizing Wipes	Wipes	BEST SANITIZERS INC™.
CIDEX® OPA	Liquid	Gilag GmbH International Advanced Sterilization products
Clorox Dispatch® Hospital Cleaner Disinfectant Towels with Bleach	Wipes	Clorox professional products company

## 1.1.9.

Product name	Product type	Manufacturer
Clorox Healthcare® Bleach Germicidal Wipes	Wipes	Clorox professional products company
Clorox Healthcare® Hydrogen Peroxide Cleaner Disinfectant Wipes	Wipes	Clorox professional products company
Metrex CaviCide1™	Liquid, spray	METERX® RESEARCH
Metrex CaviWipes™	Wipes	METERX® RESEARCH
PDI Sani-Cloth® AF3 Germicidal Disposable Wipe	Wipes	PDI Inc.
PDI Sani-Cloth® Bleach Germicidal Disposable Wipe	Wipes	PDI Inc.
PDI Sani-Cloth® HB Germicidal Disposable Wipe	Wipes	PDI Inc.
PDI Sani-Cloth® Plus Germicidal Disposable Wipe	Wipes	PDI Inc.
PDI Super Sani-Cloth® Germicidal Disposable Wipe	Wipes	PDI Inc.
Virex® II 256 (1:256)	Liquid	Diversey Inc
JIAN ZHI SU Disinfectant Tablets	Tablet	Beijing ChangJiangMai Medical Science Technology Co. Ltd
JIAN ZHI SU Surface Disinfectant Spray	Liquid, spray	Beijing ChangJiangMai Medical Science Technology Co. Ltd
JIAN ZHI SU Disinfectant, Double-chain Quaternary Ammonium	Liquid	Beijing ChangJiangMai Medical Science Technology Co. Ltd
DIAN'ERKANG Surface Wipes	Wipes	Shanghai Likang Disinfectant Hi-Tech Co., Ltd
DIAN'ERKANG Surface Disinfectant	Liquid	Shanghai Likang Disinfectant Hi-Tech Co., Ltd
DIAN'ERKANG Disinfectant Spray	Liquid, spray	Shanghai Likang Disinfectant Hi-Tech Co., Ltd
Clinell® Universal Wipes	Wipes	GAMA Healthcare Ltd
Clinell® Sporocidal Wipes	Wipes	GAMA Healthcare Ltd
Tristel Duo™	Liquid, foam	Tristel solutions Limited

1.1.9.

Product name	Product type	Manufacturer
Tristel Jet	Liquid, spray	Tristel solutions Limited
Surfa 'safe	Liquid, spray	ANIOS LABORATORIES
Aniosurf ND premium, 0.25%	Liquid	ANIOS LABORATORIES
Glutaraldehyde, 2%	Liquid	/
Ethanol, 70%	Liquid	/
Isopropanol, 70%	Liquid	/
Hydrogen peroxide, 3%	Liquid	/
Rely+On™ Virkon® High Level surface Disinfectant	Powder	Antec International Ltd
1-Propanol, 50%	Liquid	/
84 disinfectant (2000mg/L available chlorine)	Liquid	/
Trichloroisocyanuric acid (2000mg/L available chlorine)	Liquid	/
Peroxyacetic acid, 1%	Liquid	/
Domiphen, 2000mg/L	Liquid	/

**5.3.2 Disinfection**

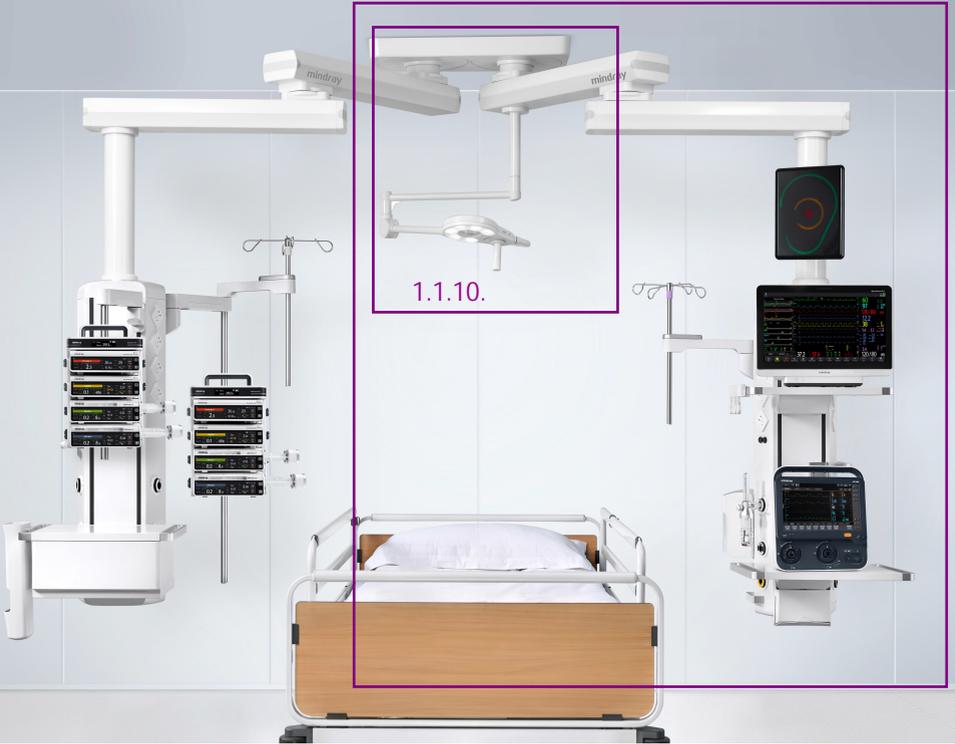
1. Use a piece of lint-free cloth moistened with disinfectant to wipe the surface.
2. Use a piece of disposable lint-free cloth moistened with water to clean the surface.
3. Use a piece of dry lint-free cloth to wipe the surface dry.

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**CAUTION**

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- **Do not disinfect the equipment by fumigation methods. Otherwise, the equipment may be damaged.**
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1.1.10.

## HyPort Components & Accessories



HyPort Series  
Power outlet



**Standard: British**

PN: DJ15-1026-008  
**DESCRIPTION:** Electrical socket, British, 13A, three contacts, Legrand.



PN: DJ15-1026-054  
**DESCRIPTION:** Electrical socket, British, orange, 13A/250V, Ip44, Berker.



PN: DJ15-1026-026  
**DESCRIPTION:** Electrical socket, US, orange, double version.



PN: DJ15-1026-036  
**DESCRIPTION:** Electrical socket, with light, Schuko, green, 16A/250V, Ip44, Berker.



PN: DJ15-1026-051  
**DESCRIPTION:** Electrical socket, British, white, 13A/250V, Ip44, Berker.



**Standard: America**  
PN: DJ15-1026-009  
**DESCRIPTION:** Electrical socket, US, 15A, three contacts, Legrand.



PN: DJ15-1026-065  
**DESCRIPTION:** Electrical, socket, US, red, double version.



PN: DJ15-1026-037  
**DESCRIPTION:** Electrical socket, with light, Schuko, orange, 16A/250V, Ip44, Berker.



PN: DJ15-1026-052  
**DESCRIPTION:** Electrical socket, British, red, 13A/250V, Ip44, Berker.



PN: DJ15-1026-010  
**DESCRIPTION:** Electrical socket, US, universal, Legrand.



**Standard: DIN**  
PN: DJ15-1026-011  
**DESCRIPTION:** Electrical socket, Schuko, 16A, three contacts, Legrand.



PN: DJ15-1026-038  
**DESCRIPTION:** Electrical socket, with light, Schuko, white, 16A/250V, Ip44, Berker.

1.1.22.1.



PN: DJ15-1026-053  
**DESCRIPTION:** Electrical socket, British, green, 13A/250V, Ip44, Berker.



PN: DJ15-1026-027  
**DESCRIPTION:** Electrical socket, US, white, double version.



PN: DJ15-1026-035  
**DESCRIPTION:** Electrical socket, with light, Schuko, red, 16A/250V, Ip44, Berker.



PN: DJ15-1026-012  
**DESCRIPTION:** Electrical socket, French, 16A, three contacts, Legrand.

HyPort Series  
Power outlet

HyPort Series  
Power outlet



**Standard: India**

**PN:** DJ15-1026-013  
**DESCRIPTION:** Electrical socket, India, three contacts, Legrand.



**Standard: Vimar**

**PN:** DJ15-1045-008  
**DESCRIPTION:** Electrical, socket, Italian, Vimar, cassette.



**PN:** DJ15-1045-007  
**DESCRIPTION:** Electrical, socket, Italian, Vimar.



**Low voltage outlet**

**PN:** DJ15-1028-002  
**DESCRIPTION:** RJ45 outlet, CAT 5, with cable, Winpro.



**PN:** DJ15-1028-003  
**DESCRIPTION:** RJ11 outlet, with cable, Winpro.



**PN:** DJ15-1028-004  
**DESCRIPTION:** RJ45 outlet, CAT 6, with cable, Legrand.



**PN:** DJ15-1028-005  
**DESCRIPTION:** RJ11 outlet, with cable, Legrand.



**Video cable**

**PN:** DJ15-1028-012  
**DESCRIPTION:** Video outlet, VGA, with cable, Length of cable is 5 meters, supporting FHD signal transmission.



**PN:** DJ15-1028-014  
**DESCRIPTION:** Video outlet, DVI-D, female, with cable, Length of cable is 5 meters, supporting FHD signal transmission.



**PN:** DJ15-1028-015  
**DESCRIPTION:** Video outlet, S-Video, with cable, Length of cable is 5 meters, supporting FHD signal transmission.



**PN:** DJ15-1028-016  
**DESCRIPTION:** BNC outlet, 1 piece, with cable, Length of cable is 5 meters, supporting FHD signal transmission.



**PN:** DJ15-1028-013  
**DESCRIPTION:** Video outlet, HDMI, with cable, Length of cable is 5 meters, supporting FHD signal transmission.



**PN:** DJ15-1028-020  
**DESCRIPTION:** Video outlet, DVI-D, w/ cable, FDDI. Length of cable is 5 meters, supporting FHD signal transmission.



**PN:** DJ15-1028-018  
**DESCRIPTION:** Video outlet, HDMI, w/ cable, 4K. Length of cable is 5 meters, supporting 4K signal transmission.



**PN:** DJ15-1028-019  
**DESCRIPTION:** BNC outlet, 1 piece, w/ cable, 4K. Length of cable is 5 meters, supporting 4K signal transmission.

1.1.22.2.



**PN:** DJ15-1028-001  
**DESCRIPTION:** Equipotential pin, green and yellow.

HyPort Series  
Power outlet

## HyPort Series Gas Outlets

Gas terminal units provide the connection of medical equipment to the gas supply system. Our gas terminal units enable flexible installation in all conceivable distribution. Simple handling guarantees smooth operation in everyday hospital life.

We can supply gas outlets that comply with various regional standards to cater to the requirements of frontline customers

All types of gas terminals and related components are equipped with internal and external anti-misinsertion design as well as gas type identification to ensure ventilation safety



Press probe into the terminal unit,

## HyPort Series Gas Outlets

1.1.22.5.



**Standard:** DIN

1.1.23.

**PN:** DJ15-1030-009

**DESCRIPTION:** Gas outlet, DIN Standard, Pahasco, O<sub>2</sub>.



**PN:** DJ15-1030-013

**DESCRIPTION:** Gas outlet, DIN Standard, Pahasco, N<sub>2</sub>O.

1.1.22.4.



**PN:** DJ15-1030-010

1.1.23.

**DESCRIPTION:** Gas outlet, DIN Standard, Pahasco, Air, 4Bar.



**PN:** DJ15-1030-014

**DESCRIPTION:** Gas outlet, DIN Standard, Pahasco, N<sub>2</sub>.

1.1.22.3.



**PN:** DJ15-1030-011

1.1.23.

**DESCRIPTION:** Gas outlet, DIN Standard, Pahasco, Vac.



**PN:** DJ15-1030-015

**DESCRIPTION:** Gas outlet, DIN Standard, Pahasco, Air-800, 8Bar.



**PN:** DJ15-1030-012

**DESCRIPTION:** Gas outlet, DIN Standard, Pahasco, Co<sub>2</sub>.



**PN:** DJ15-1030-016

**DESCRIPTION:** Gas outlet, DIN Standard, Gentec, AGSS.

HyPort Series  
Power outlet



**Standard: India**

**PN:** DJ15-1026-013  
**DESCRIPTION:** Electrical socket, India, three contacts, Legrand.



**Standard: Vimar**

**PN:** DJ15-1045-008  
**DESCRIPTION:** Electrical, socket, Italian, Vimar, cassette.



**PN:** DJ15-1045-007  
**DESCRIPTION:** Electrical, socket, Italian, Vimar.

1.1.22.6.



**Low voltage outlet**

**PN:** DJ15-1028-002  
**DESCRIPTION:** RJ45 outlet, CAT 5, with cable, Winpro.



**PN:** DJ15-1028-003  
**DESCRIPTION:** RJ11 outlet, with cable, Winpro.



**PN:** DJ15-1028-004  
**DESCRIPTION:** RJ45 outlet, CAT 6, with cable, Legrand.



**PN:** DJ15-1028-005  
**DESCRIPTION:** RJ11 outlet, with cable, Legrand.



**Video cable**

**PN:** DJ15-1028-012  
**DESCRIPTION:** Video outlet, VGA, with cable, Length of cable is 5 meters, supporting FHD signal transmission.



**PN:** DJ15-1028-014  
**DESCRIPTION:** Video outlet, DVI-D, female, with cable, Length of cable is 5 meters, supporting FHD signal transmission.



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**PN:** DJ15-1028-018  
**DESCRIPTION:** Video outlet, HDMI, w/ cable, 4K. Length of cable is 5 meters, supporting 4K signal transmission.

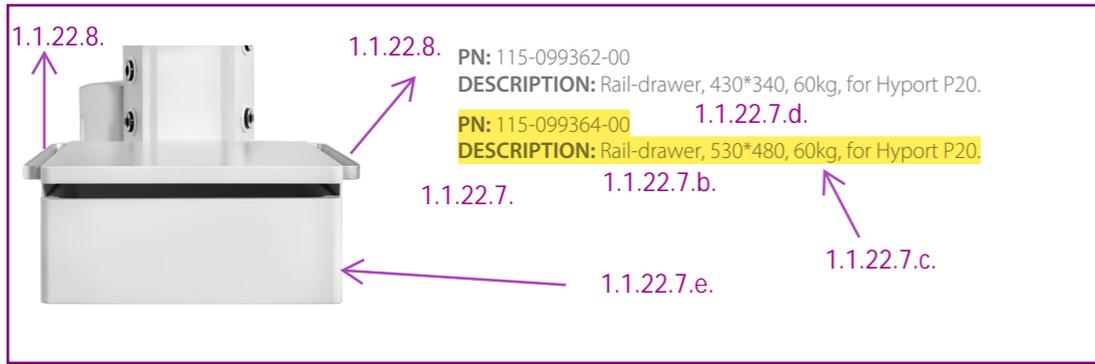


**PN:** DJ15-1028-019  
**DESCRIPTION:** BNC outlet, 1 piece, w/ cable, 4K. Length of cable is 5 meters, supporting 4K signal transmission.



**PN:** DJ15-1028-001  
**DESCRIPTION:** Equipotential pin, green and yellow.

HyPort Series  
Power outlet



**PN:** 115-099362-00  
**DESCRIPTION:** Rail-drawer, 430\*340, 60kg, for Hyport P20.

**PN:** 115-099364-00 **1.1.22.7.d.**  
**DESCRIPTION:** Rail-drawer, 530\*480, 60kg, for Hyport P20.

**1.1.22.7.** **1.1.22.7.b.** **1.1.22.7.c.**  
**1.1.22.7.e.**



**PN:** 115-099366-00  
**DESCRIPTION:** Pole drawer, 530\*340, 60kg, for Hyport P20.

**PN:** 115-099368-00  
**DESCRIPTION:** Pole drawer, 630\*340, 60kg, for Hyport P20.



PN	SAP description	Applicable models
115-073620-00	Rail-drawer*2, 430*340	HyPort P30、HyPort P60
115-073625-00	Rail-drawer*2, 530*480	HyPort P30、HyPort P60
115-111343-00	Drawer*2, w/handle, Brake&Light	HyPort P30
115-111709-00	Drawer*2, w/handle, M-function	HyPort P60



**PN:** 115-029337-00  
**SAP DESCRIPTION:** Swivel drawer, w/ 1 drawer.

**PN:** 115-029335-00  
**SAP DESCRIPTION:** Swivel drawer, w/ 2 drawers.

Note: It can be mounted on shuttle with pole and head with pole.



**PN:** 115-095069-00  
**SAP DESCRIPTION:** Rail-shelf, keyboard, 630\*480.

**PN:** 115-095068-00  
**SAP DESCRIPTION:** Rail-shelf, keyboard, 530\*480.



**PN:** 049-000811-00  
**SAP DESCRIPTION:** 430\*340 Anti-slide mats.



**Shelf extension:** Provides more space on the shelf to accommodate larger or additional equipment.



**PN:** 115-095067-00  
**SAP DESCRIPTION:** Shelf extension, w/handle, 530\*100mm.

**PN:** 115-095067-00  
**SAP DESCRIPTION:** Shelf extension, w/handle, 530\*100mm.

**HyPort P30**  
**HyPort P60**  
**HyPort P90 Series**

**Medical Supply Unit**

**Operator's Manual**

# 4 Accessories

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## WARNING

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- Be sure to only use accessories made by Nanjing Mindray on the medical supply unit. Accessories produced by other manufacturers must not be used for they may cause personal injury. If accessories of other manufacturers must be used unless their use is expressly permitted by Nanjing Mindray.
  - Do not overload any weight-bearing part of the unit.
- 
- 

## NOTE

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- If you want to know more details of the accessories, contact the customer service department authorized by Nanjing Mindray or your local distributor.
- 

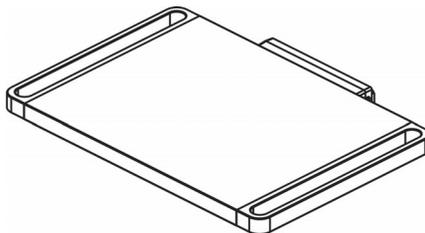
### 4.1 Shelf

The shelf provides location for medical devices.

- Side rails of the shelf can be used to mount the wire basket and the cable manager.
- The shelf can be equipped with the drawer, the extension plate and the keyboard tray.
- 1.1.22.7.a. ■ The height of the shelf can be adjusted as required.

#### 4.1.1 Rail-mount Shelf

- Rail-mount shelf





Collect and manage the cables of infusion pumps and syringe pumps, you can:

1. Open the front extension arm cable manager.
2. Arrange the cables and wind them around the cable manager; make sure the reserved length of the cables is sufficient to plug the electrical connector into the electrical socket on the distribution module.

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## WARNING

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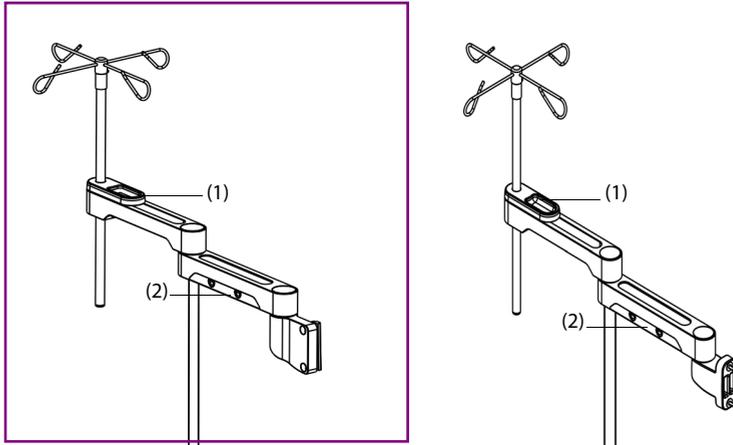
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- **The front extension arm can bear a maximum of 15kg load. Do not overload it.**
- 
- 

### 4.5.2 Double Extension Arms [1.1.22.9.](#)

The double extension arms are for supporting infusion pumps and syringe pumps. The articulations of double extension arms are rotatable.

### 1.1.22.9.



Adjust the height of the infusion pole, you can:

1. Hold the infusion pole and unscrew the handle locker (1) clockwise or counterclockwise.
2. Adjust the infusion pole to a proper height.
3. Screw the handle locker (1) to lock the infusion pole.

Collect and manage the cables of infusion pumps and syringe pumps, you can:

1. Open the double extension arms cable manager (2).
2. Arrange the cables and wind them around the cable manager; make sure the reserved length of the cables is sufficient to plug the electrical connector into the electrical socket on the distribution module.

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## WARNING

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- **The double extension arms can bear a maximum of 40kg load. Do not overload it.**
  - **The arm 1 of double extension arms can bear a maximum of 40kg load. Do not overload it.**
  - **The arm 2 of double extension arms can bear a maximum of 5kg load. Do not overload it.**
- 
-

Warszawa, dn. 15.12.2025 r.

To Whom It May Concern,

## CONFIRMATION LETTER

We, Mindray Medical Poland Sp. z o.o., with the address at ul. Cybernetyki 9, 02-677 Warsaw, Poland, subsidiary of Nanjing Mindray Bio-Medical Electronics Co., Ltd., ("Mindray") the manufacturer of Medical Supply unit Mindray HyPort P30 hereby confirm the following:

1.1.1.

- The console will be mounted on the ceiling slab, considering the height of the suspended ceiling. Without through-hole mounting;
- Pendant is supplied with all elements required for its ceiling mounting;
- The dimensions of the console system can be adjusted according to the room height and may be provided at the time of order;
- The maximum allowable load for a single vertical column with arm system is more than 120 kg;
- Movement locking of the consoles: pneumatic brakes on the elbows of both consoles;
- The specific connector place is freely selectable. The exact locations may be provided at the time of order; 1.1.4.2.

- Inside the console columns, separate channels provided for: electrical inlets; gas inlets; 1.1.7.

- 1.1.16 ● A single separate button is installed, which controls all elbow brakes of one console (one brake for the left side with its elbows and another for the right side with its elbows);

- 1.1.22.1. ● Single-phase electrical sockets with grounding (220 V, 50 Hz, 16 A), voltage indicator,

1.1.22.1.

and protective covers, with color-coded sockets. Two types of sockets are installed: powered from the main supply only; powered from both the main supply and the backup power source;

1.1.22.7.b

- Standard medical rails for equipment mounting are provided on the sides of the shelf;
- An elbow with a stand for mounting infusion pumps (1065 mm length) and a stand with hooks for hanging infusion solutions (535 mm length);
- Viewed from the front, the console has a “wet/left side” and a “dry/right side”;
- All pneumatic connections installed in the console column comply with mechanical coding according to EN and DIN-CE standards, as well as color coding according to ISO standards;

1.1.23.

- The console system is adapted to the height of the room in which it will be installed. Exact dimensions will be provided at the time of ordering;
- The supplier has the possibility to install the call system module (button): the location for the button can be prepared on-site, only in those consoles where call system modules (buttons) are being installed at that time. The provided module (button) can be connected and inserted into the console.

This confirmation letter is (integral) part of Medical Supply Units Mindray HyPort P30 datasheet. If there are parameters with different values in the datasheet and confirmation letter, the information in the confirmation letter should be used.

Zhenlei Gao - General Manager

  
Członek Zarządu/Member of the Board

Signature/stamp

Mindray Medical Poland Sp. z o.o.  
ul. Cybernetyki 9, 02-677 Warszawa  
tel. +48 22 463 80 80  
NIP 1080017640, REGON 147173040

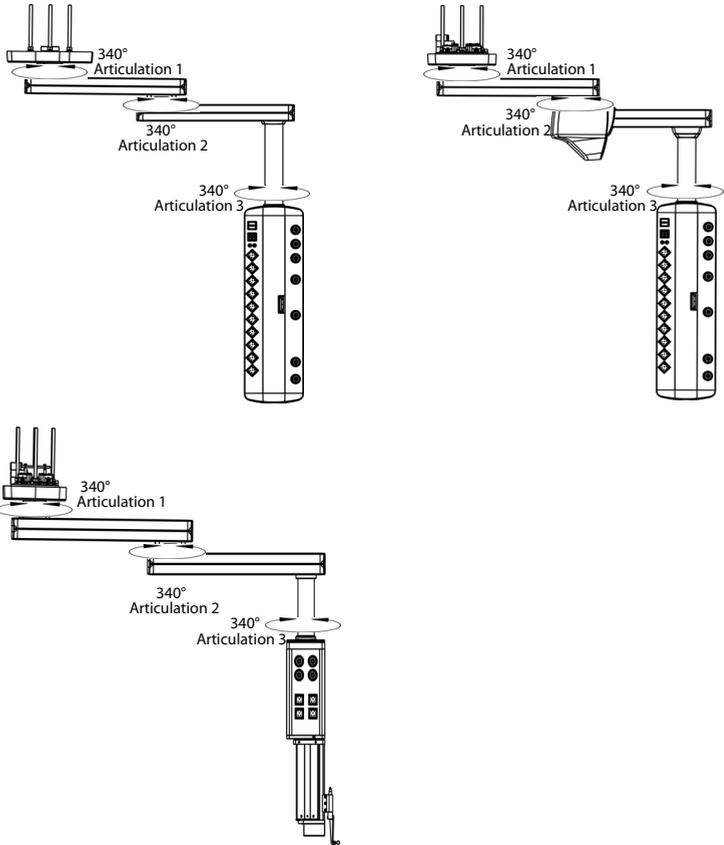
**HyPort P30**  
**HyPort P60**  
**HyPort P90 Series**

**Medical Supply Unit**

**Operator's Manual**

### 3.3 Rotation Range

The articulation rotation range is 340°.



#### NOTE

1.1.13.

- The arm and distribution can rotate a maximum of 340°. Actual movement will be adjusted during installation to limit the unit as necessary to prevent collisions with walls or other structural elements.

DoC-MDR-2023-005(V2.0)

**Declaration of Conformity**

<b>Manufacturer:</b>	Nanjing Mindray Bio-Medical Electronics Co., Ltd. 666# Middle Zhengfang Road, Jiangning, 211111 Nanjing, Jiangsu, P.R.China
<b>Manufacturer SRN:</b>	CN-MF-000019806
<b>EC-Representative:</b>	Shanghai International Holding Corp. GmbH (Europe) Eiffestraße 80, 20537 Hamburg, GERMANY
<b>Product Name:</b>	Medical Supply Units
<b>Model:</b>	HyPort 3000, HyPort 3500, HyPort P30, HyPort P30S, HyPort P30T, HyPort 6000, HyPort 6500, HyPort P60, HyPort P60S, HyPort P60T, HyPort 9000, HyPort P90, HyPort B20, HyPort B30, HyPort B60 (HyPort B60-I, HyPort B60-II), HyPort B80 (HyPort B80-I, HyPort B80-II), HyPort R80 (HyPort R80-I, HyPort R80-II), HyPort R80T (HyPort R80T-I, HyPort R80T-II), HyPort R80S (HyPort R80S-I, HyPort R80S-II), HyPort 8000, HyPort R50 (HyPort R50-I, HyPort R50-II), HyPort R20 (HyPort R20-I, HyPort R20-II)
<b>Basic UDI-DI:</b>	69483505HyPortB30*****W6
<b>CND code:</b>	Z120309
<b>Classification:</b>	IIa (According to Rule 12 of MDR Annex VIII) 1.1.19.
<b>Conformity Assessment Route:</b>	Annex IX excluding CHAPTER II

**We declare that the above mentioned products meet the provisions of the REGULATION (EU) 2017/745 OF THE EUROPEAN PARLIAMENT. All supporting documentations are retained under the premises of the manufacturer. This declaration of conformity is issued under the sole responsibility of the manufacturer.**

1.1.19.

<b>References to CS:</b>	/
<b>Notified Body:</b>	TÜV SÜD Product Service GmbH Ridlerstraße 65, 80339 Munich, Germany
<b>Notified Body No. :</b>	0123
<b>Identification of the Certificate:</b>	G10 070744 0019
<b>Start of CE-Marking:</b>	2015-01-27

**I hereby am appointed as the authorized person to deal with all the registration and quality management affairs in my capacity as Manager of Technical Regulation Department of Nanjing Mindray Bio-Medical Electronics Co., Ltd, Effective immediately.**

DoC-MDR-2023-005(V2.0)

Place, Date of Issue:

Nanjing, 2023.6.26

Signature:

Zhai Pei

Name of Authorized Signatory:

Mr. Zhai Pei

Position Held in Company:

Manager, Technical Regulation

DoC-MDR-2023-005(V2.0)

Attachment of Declaration of Conformity: Applied Standards List-V1.0

## Applied Standards List

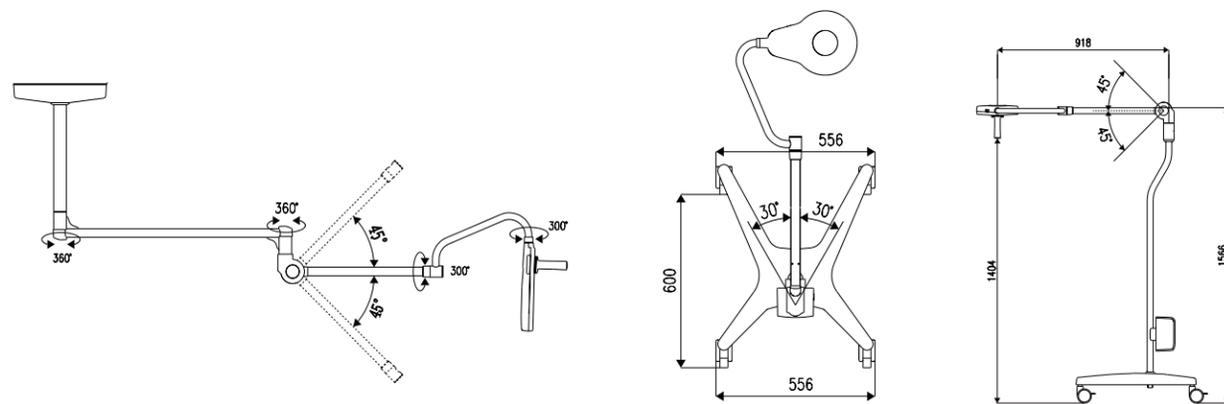
**Product:** Medical Supply Units  
**Model:** HyPort 3000, HyPort 3500, HyPort P30, HyPort P30S, HyPort P30T, HyPort 6000, HyPort 6500, HyPort P60, HyPort P60S, HyPort P60T, HyPort 9000, HyPort P90, HyPort B20, HyPort B30, HyPort B60 (HyPort B60- I , HyPort B60- II ), HyPort B80 (HyPort B80- I , HyPort B80- II ), HyPort R80 (HyPort R80- I , HyPort R80- II ), HyPort R80T (HyPort R80T- I , HyPort R80T- II ) , HyPort R80S (HyPort R80S- I , HyPort R80S- II ), HyPort 8000, HyPort R50 (HyPort R50- I , HyPort R50- II ), HyPort R20 (HyPort R20- I , HyPort R20- II )

### Standards Applied:

EN ISO 14971:2019/A11:2021	Medical devices – Application of risk management to medical devices
EN ISO 20417: 2021	Medical devices - Information to be supplied by the manufacturer
EN ISO 15223-1:2021	Medical devices - Symbols to be used with information to be supplied by the manufacturer - Part 1: General requirements
EN 60601-1:2006/ A1:2013 1.1.20.	Medical electrical equipment -- Part 1: General requirements for basic safety and essential performance
EN 60601-1-2:2015	Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests
EN 60601-1-6: 2010/A1:2015	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability
EN 62366- 1:2015/A1:2020	Medical devices -- Application of usability engineering to medical devices
EN ISO 11197:2019 1.1.20.	Medical supply units

## Technical Specifications

		HyLED 200/200M
Central illuminance (at 1m distance)	1.1.11.	70,000lux
Light field diameter(at 1m distance)	1.1.12.	170mm
Depth of illumination (20%)		1,500mm
Depth of illumination (60%)		700mm
Color temperature		4,350K
Color rendering index (Ra)		96
Color rendering index (R9 )		96
Service life of bulb		≥60,000h
Optional battery supply duration		10 hours
Dimming range		10-100%
Number of LED bulbs		6
Max. power consumption of all light sources		28w
Light head dimension		230*330mm



1.1.10.

**HyLED 200 Series** NEW  
LED Examination & Treatment Light



Mindray Building, Keji 12th Road South,  
High-tech Industrial Park, Nanshan, Shenzhen 518057, P.R. China  
Tel: +86 755 8188 8998 Fax: +86 755 26582680  
E-mail: int-market@mindray.com www.mindray.com

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P/N:ENG-HyLED200 -210285x4P-20180813

**mindray**

**mindray**  
healthcare within reach

# HyLED 200 Series

## LED Examination & Treatment Light

Mindray HyLED 200 inherits the advanced technology from LED surgical light and shows excellent light performance: better light intensity, longer service life and lower power consumption. It is ideal for patient examination, ICU, outpatient, as well as OR-induction, treatment room and recovery areas.

- 70,000 lux illuminance with 1,500mm depth for the best possible visualization
- Better tissue differentiation with color rendering index(Ra & R9)at 96
- LED life of up to 60,000 hours and lower power consumption
- Up to 10 hours battery(optional) duration at maximum intensity
- Five-year warranty for LED bulb

## Flexible and simple handling

The following features can be operated electronically using the control panel in the light head:

- On/off switching
- 5-step brightness control



## Various options for different clinical application

### Small clinics, ER and examination room

- Recommend with mobile light
- 4 universal 75mm casters, with foot brake

### ICU

- Recommend with pendant mounted light
- Rotation radius of up to 1.5m with maximum flexibility

### OR-induction, treatment room and recovery areas

- Recommend with ceiling or wall mounted light
- No need for reposition when establishing vein channel
- Optional with sterilizable handle

