



LM MEDICAL  
DIVISION

HEALT-CARE DESIGN TEC-NOLOGY







# Why choose OKI ISOLA?



## **GUIDING LIGHTS**

All OKI ISOLA's arms are equipped with the newest LED backlighted heads. These will help the medical staff to visualize and co-ordinate intuitively which arm they are operating.



## **TAILOR-MADE CONFIGURATIONS AND SOLUTIONS**

Like the rest of OKI range, ISOLA can be configured in compliance with any tender specification. Not only the customer can select from a range of available standard lengths for the arms and dimensions for the service head but also these components can be made to measure if needed.



## **EASY TO INSTALL, EASIER TO MAINTAIN**

We create equipment based on two simple key principles: ease of installation and long-lasting top quality components ensuring minimum maintenance and maximum reliability.

OKI ISOLA is delivered pre-assembled to reduce costs of installation.

Easy removable system of the cover for installation and maintenance access.







## POWDER COATING, POWERED HYGIENE

Protecting epoxy powder coating guarantees an adequate hygienic surface for all our pendant units. This could be boosted further with our dedicated antibacterial paint to ensure 100% shield against infectious agents.



## SAFE AND FIRM LOCKING

Our enhanced brake system ensures smooth controlled movements and maximum reliability in the course of time. The control keyboard is placed on the main grip of the shelf to drive all movements intuitively.

There are 3 different solutions of brake system:

- Friction brake
- Electropneumatic brake
- Electromagnetic brake
  - operation without compressed air
  - multidisk clutch
  - low voltage supply
  - high durability due to absence of wear out friction material



## SOLID HYGIENE

OKI ISOLA feature our innovative *BIOCLEAN* shelves and drawers to guarantee a completely antimicrobial surface. The composite material is extremely long lasting and guarantee in time the adequate hygiene during all operating procedures.

- offer a microbe shield thanks to the non-porous material, extremely easy to clean;
- are free from added chemicals as it does not contain additives;
- are durable in time due to the extremely solid material that maintain color and gloss over the years.



## FUNCTIONAL DESIGN AND ERGONOMICS

OKI ISOLA is designed to be handled intuitively with maximum ease. Profiles' shapes and the various components' proportions are well-thought-out so as to optimize handling.

## ISOLA



## CONFIGURATION



### OKI ISOLA

**OKI ISOLA** supply system is a suspended unit thought specifically for special intensive care units and operating theaters. It can be configured either for the surgeon or the anesthesiologist and the service head can be equipped with all the needed electrical and medical components in compliance with any specification given. It has been designed to offer the medical staff maximum flexibility and reliability.





## OKI ISOLA VERTICAL MOTORIZED OKI ISOLA HORIZONTAL MOTORIZED

OKI ISOLA is also available with a full motorized mechanism for lifting the service head. This will allow to adjust the height to have all services always in the right place.



OKI ISOLA can be also supplied in the most complete configuration which is highly requested for all ICU areas. Both wet and dry sides are safely guaranteed by this specific system that allows a number of combinations: single or double arms for each column to make it ergonomically adequate for all types of action needed on the patient.



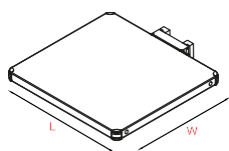
## ACCESSORIES

OKI ISOLA can be fully personalized with a broad range of accessories.

Special rail supports or vertical poles are available for installing the needed complementary equipment to monitor the patients vital signs.

OKI ISOLA allow fast operation by making it easier for the medical staff to

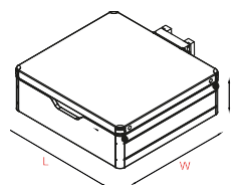
use the equipment, guaranteeing an optimal care to each patient.



### PAINTED STEEL SHELF

Painted steel structure, aluminum fixings

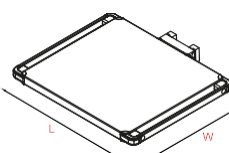
OK-ACPSHRM L 460mm - W 440mm - Load 40Kg - Weight 7Kg  
OK-ACPSHF56M L 460mm - W 440mm - Load 35Kg - Weight 8Kg  
OK-ACPSHF70M L 460mm - W 440mm - Load 30Kg - Weight 9,4Kg



### PAINTED STEEL DRAWER

Painted steel structure, aluminum fixings

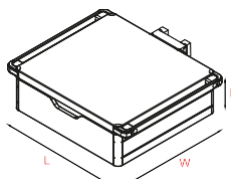
OK-ACPDWRM L 460mm - W 440mm - H 150mm - Load 40Kg - Weight 16Kg



### PAINTED STEEL SHELF

Painted steel structure, aluminum fixings

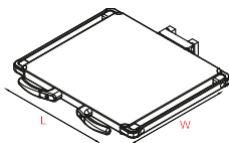
OK-ACPSHRMR L 460mm - W 440mm - Load 40Kg - Weight 7,3Kg  
OK-ACPSHF56MR L 560mm - W 440mm - Load 35Kg - Weight 8,5Kg  
OK-ACPSHF70MR L 700mm - W 440mm - Load 30Kg - Weight 10Kg



### PAINTED STEEL DRAWER

Painted steel structure, aluminum fixings

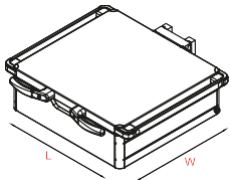
OK-ACPDWRMR L 460mm - W 440mm - H 150mm - Load 40Kg - Weight 17Kg



### PAINTED STEEL SHELF

Painted steel structure, aluminum fixings

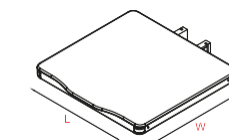
OK-ACPSHRMHR L 460mm - W 440mm - Load 40Kg - Weight 7,5Kg  
OK-ACPSHRMLHR L 460mm - W 440mm - Load 40Kg - Weight 7,5Kg  
OK-ACPSHF56MHR L 560mm - W 440mm - Load 35Kg - Weight 8,6Kg  
OK-ACPSHF70MHR L 700mm - W 440mm - Load 30Kg - Weight 10,2Kg



### PAINTED STEEL DRAWER

Painted steel structure, aluminum fixings

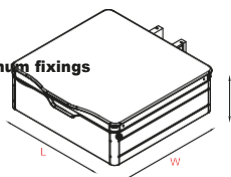
OK-ACPDWRMHR L 460mm - W 440mm - H 150mm - Load 40Kg - Weight 17Kg  
OK-ACPDWRMLHR L 460mm - W 440mm - H 150mm - Load 40Kg - Weight 17Kg



### BIOCLEAN SHELF

Painted steel structure, SOLID MATERIAL top, aluminum fixings

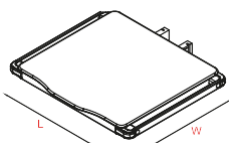
OK-ACPSHFS L 470mm - W 450mm - Load 40Kg - Weight 8,5Kg



### BIOCLEAN DRAWER

Painted steel structure, SOLID MATERIAL top, aluminum fixings

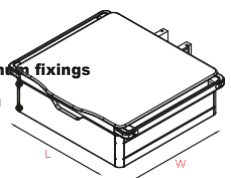
OK-ACPDWFS L 470mm - W 450mm - H 150mm - Load 40Kg - Weight 18Kg



### BIOCLEAN SHELF

Painted steel structure, SOLID MATERIAL top, aluminum fixings

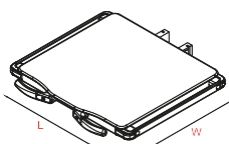
OK-ACPSHFSR L 470mm - W 450mm - Load 40Kg - Weight 9,2Kg



### BIOCLEAN DRAWER

Painted steel structure, SOLID MATERIAL top, aluminum fixings

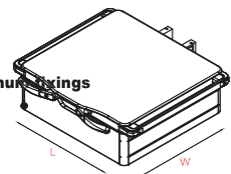
OK-ACPDWFSR L 470mm - W 450mm - H 150mm - Load 40Kg - Weight 18,7Kg



### BIOCLEAN SHELF

Painted steel structure, SOLID MATERIAL top, aluminum fixings

OK-ACPSHFSHR L 470mm - W 450mm - Load 40Kg - Weight 9,2Kg  
OK-ACPSHFSLHR L 470mm - W 450mm - Load 40Kg - Weight 9,2Kg



### BIOCLEAN DRAWER

Painted steel structure, SOLID MATERIAL top, aluminum fixings

OK-ACPDWFSHR L 470mm - W 450mm - H 150mm - Load 40Kg - Weight 18,8Kg  
OK-ACPDWFSLHR L 470mm - W 450mm - H 150mm - Load 40Kg - Weight 18,8Kg

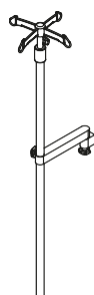




#### ORIENTABLE VERTICAL POLE

Vertical pole made of stainless steel, support made of aluminium

OK-ACOPID2508 H 800mm - W 200mm - Ø25mm - Load 15Kg - Weight 1,4Kg  
OK-ACOPID2510 H 1000mm - W 200mm - Ø25mm - Load 15Kg - Weight 1,6Kg  
OK-ACOPID2512 H 1200mm - W 200mm - Ø25mm - Load 15Kg - Weight 1,7Kg



#### ORIENTABLE VERTICAL POLE WITH IV STAND 4 HOOKS

Vertical pole made of stainless steel, support made of aluminium, plastic hooks

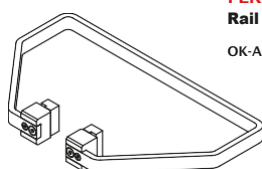
OK-ACOPID2508IV H 800mm - W 200mm - Ø25mm - Load 15Kg - Weight 2,2Kg  
OK-ACOPID2510IV H 1000mm - W 200mm - Ø25mm - Load 15Kg - Weight 2,3Kg  
OK-ACOPID2512IV H 1200mm - W 200mm - Ø25mm - Load 15Kg - Weight 2,6Kg



#### ORIENTABLE VERTICAL POLE WITH IV STAND 4 HOOKS

Vertical pole made of stainless steel, support made of aluminium, stainless steel hooks

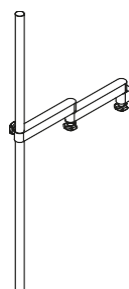
OK-ACOPID2508IVX H 800mm - W 200mm - Ø25mm - Load 15Kg - Weight 2,3Kg  
OK-ACOPID2510IVX H 1000mm - W 200mm - Ø25mm - Load 15Kg - Weight 2,6Kg  
OK-ACOPID2512IVX H 1200mm - W 200mm - Ø25mm - Load 15Kg - Weight 2,9Kg



#### PERIMETRAL DIN RAIL 25X10MM MADE IN STAINLESS STEEL

Rail made of stainless steel, support made of aluminium

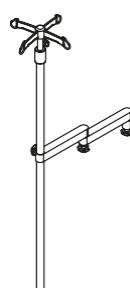
OK-ACPRAILO L 450mm - W 270mm - Load 10Kg - Weight 2,8Kg



#### ORIENTABLE VERTICAL POLE

Vertical pole made of stainless steel, support made of aluminium

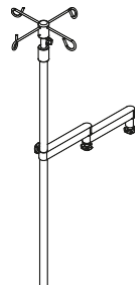
OK-ACOPID2508 H 800mm - W 400mm - Ø25mm - Load 10Kg - Weight 1,9Kg  
OK-ACOPID2510 H 1000mm - W 400mm - Ø25mm - Load 10Kg - Weight 2K  
OK-ACOPID2512 H 1200mm - W 400mm - Ø25mm - Load 10Kg - Weight 2,2Kg



#### ORIENTABLE VERTICAL POLE WITH IV STAND 4 HOOKS

Vertical pole made of stainless steel, support made of aluminium, stainless steel hooks

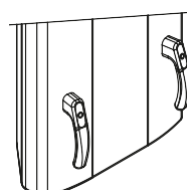
OK-ACOPID2508IV H 800mm - W 400mm - Ø25mm - Load 10Kg - Weight 2,9Kg  
OK-ACOPID2510IV H 1000mm - W 400mm - Ø25mm - Load 10Kg - Weight 3,1Kg  
OK-ACOPID2512IV H 1200mm - W 400mm - Ø25mm - Load 10Kg - Weight 3,4Kg



#### ORIENTABLE VERTICAL POLE WITH IV STAND 4 HOOKS

Vertical pole made of stainless steel, support made of aluminium, stainless steel hooks

OK-ACOPID2508IVX H 800mm - W 400mm - Ø25mm - Load 10Kg - Weight 2,9Kg  
OK-ACOPID2510IVX H 1000mm - W 400mm - Ø25mm - Load 10Kg - Weight 3,1Kg  
OK-ACOPID2512IVX H 1200mm - W 400mm - Ø25mm - Load 10Kg - Weight 3,4Kg



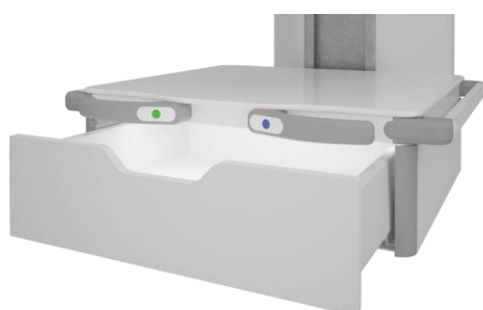
#### TWIN HANDLE FOR PENDANT CONTROL

Plastic material, for control movement

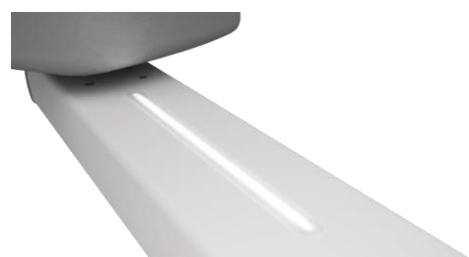
OK-ACPHB - Weight 0,5Kg

## LED LIGHTING FEATURES

On demand, the drawer can also offer a LED lighting placed underneath the control pads to illuminate the drawer when opened.



Integrated LED stripes for ambient lighting are also available upon request. In this way the environment will adequately be illuminated through the swiveling arms. This is an optimal solution to integrate necessary ambient lighting especially for the endoscopic operations.



## VERTICAL ENDOSCOPIC COLUMN



The configuration shown is just for illustrative purpose.

## ANESTHESIA DOCKING SYSTEM



All OKI ISOLA pendants can be equipped with the specific endoscopic configuration which can be arranged:

- on a vertical column;
- on a horizontal column.

Both configurations can accommodate a different number of shelves and drawers. According to the number of shelves/drawers required the dimensions of the system will vary.

## HORIZONTAL ENDOSCOPIC COLUMN



The configuration shown is just for illustrative purpose.

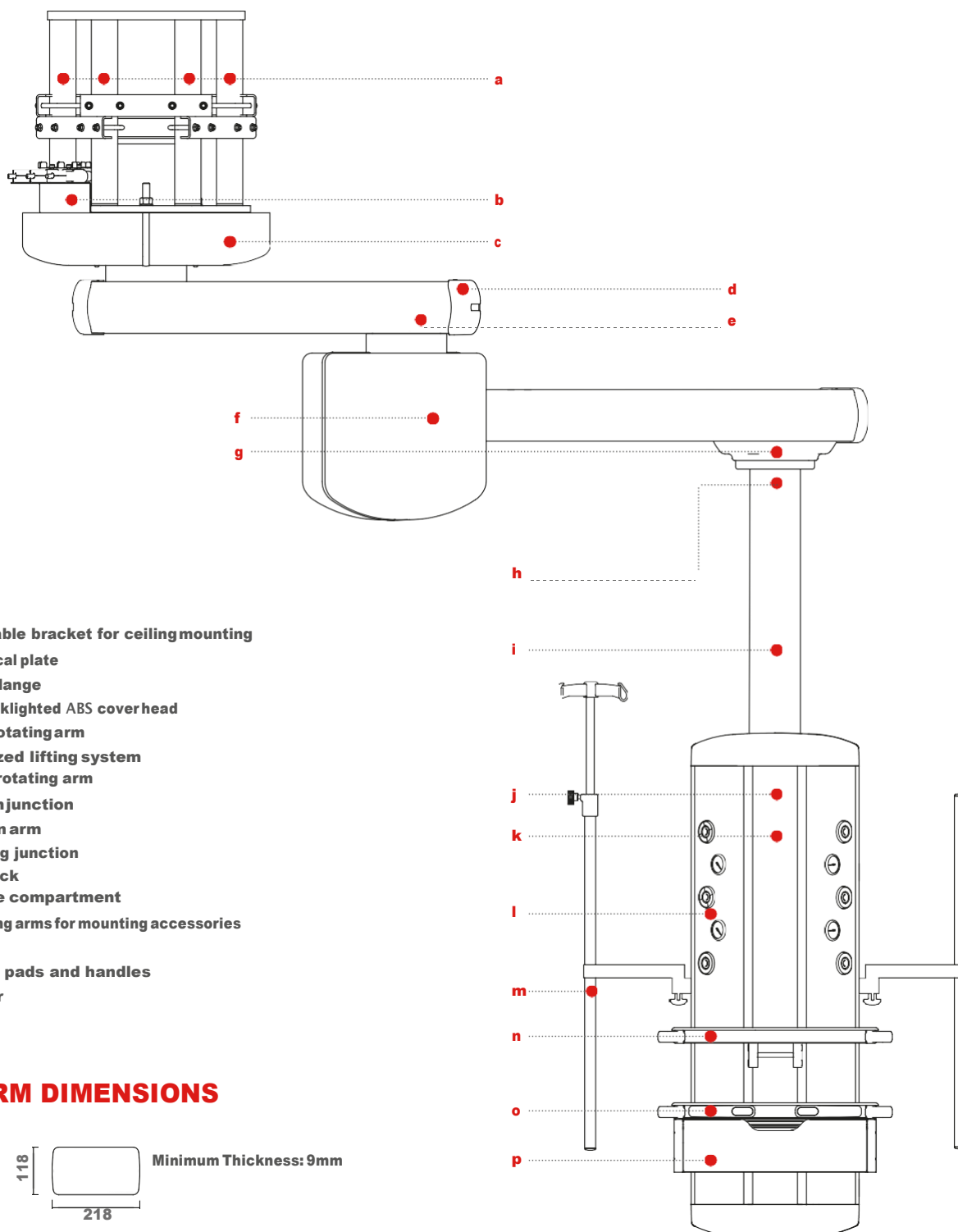
Upon request the column can be equipped with the docking system for the anesthesia machine.

This system is fully tested and in compliance with all standards available for anesthesia machines.

According to the brand and model we can adapt our system to hook perfectly the related chosen equipment.

The mounting system can be height adjusted and the tolerance is  $\pm 200$  mm.

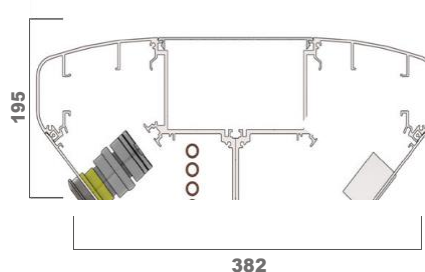
## PROFILE OVERVIEW



## ARM DIMENSIONS



## COLUMN DIMENSION



Minimum Thickness  
of structure: 3,5mm

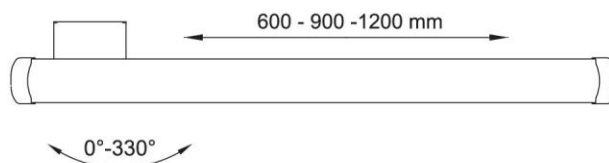
This image is for general demonstration only.

The number of services varies according to the specifications given by each customer.

## LOADING CAPACITIES

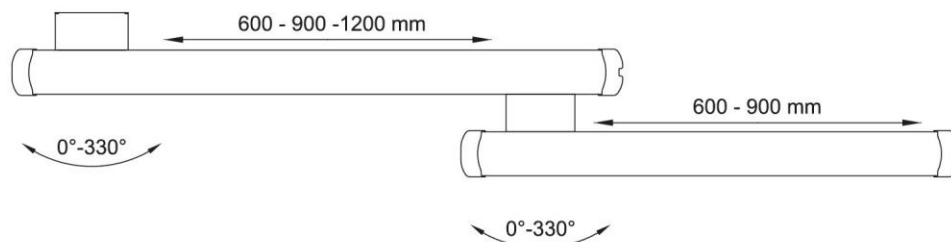
### SINGLE ARM

Lenght	Load capacity
600 mm	<b>400 kg</b>
900 mm	<b>270 kg</b>
1200 mm	<b>200 kg</b>



### DOUBLE ARM

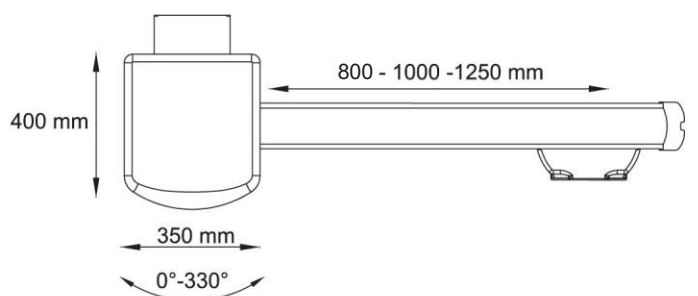
Lenght	Load capacity
(600+600) 1200 mm	<b>220 kg</b>
(900+600) 1500 mm	<b>200 kg</b>
(900+900) 1800 mm	<b>180 kg</b>
(1200+900) 2100 mm	<b>150 kg</b>



### SINGLE MOTORIZED ARM

Lenght	Load capacity	Travel
800 mm	<b>260 kg</b>	<b>420 mm</b>
1000 mm	<b>180 kg</b>	<b>600 mm</b>
1250 mm	<b>145 kg</b>	<b>750 mm</b>

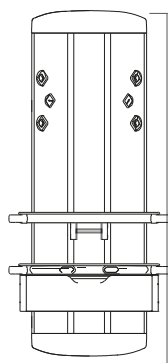
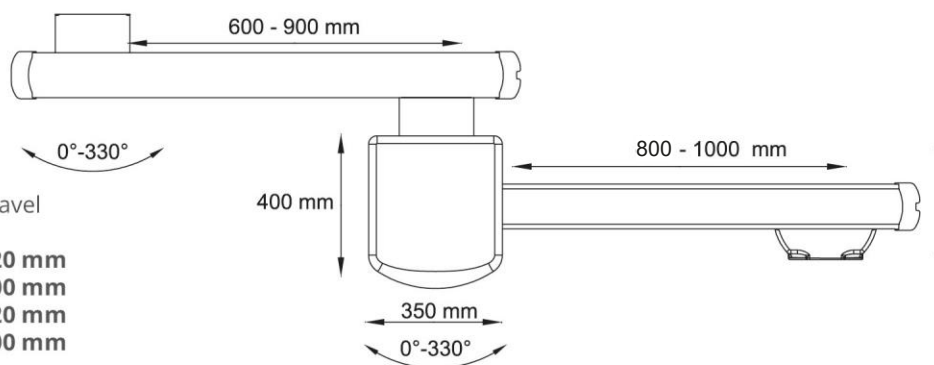
travel time: 27 seconds



### DOUBLE MOTORIZED ARM

Lenght	Load capacity	Travel
(600+800) 1400 mm	<b>260 kg</b>	<b>420 mm</b>
(600+1000) 1600 mm	<b>180 kg</b>	<b>600 mm</b>
(900+800) 1700 mm	<b>260 kg</b>	<b>420 mm</b>
(900+1000) 1900 mm	<b>180 kg</b>	<b>600 mm</b>

travel time: 27 seconds

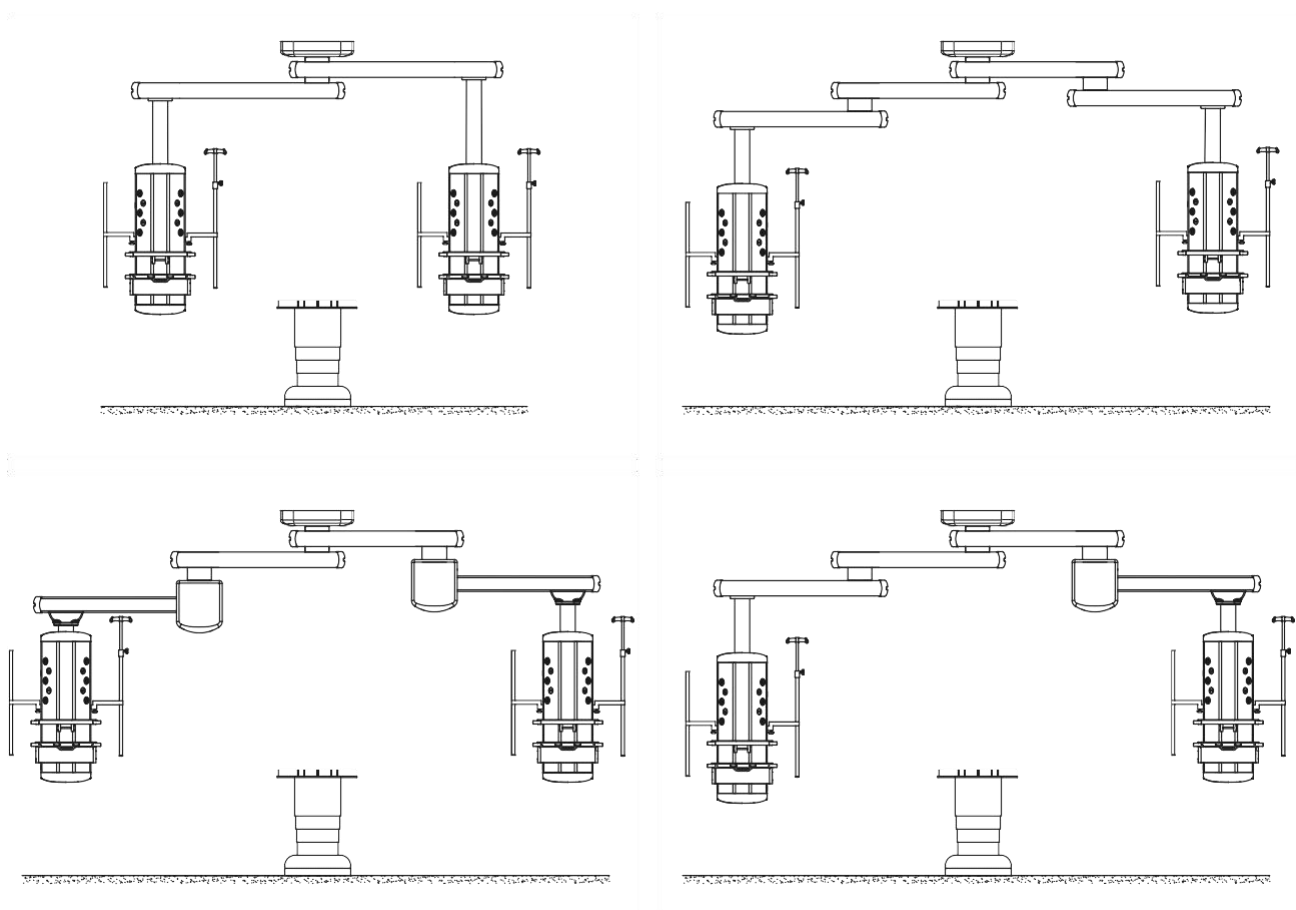


### CE STANDARDS

Head column height	Maximum number of electrical devices	Maximum number of gas outlet	Total Maximum number of devices
<b>600 mm</b>	12 pcs	8 pcs	29 pcs
<b>1000 mm</b>	22 pcs	14 pcs	32 pcs
<b>1200 mm</b>	28 pcs	16 pcs	35 pcs
<b>1500 mm</b>	36 pcs	20 pcs	43 pcs
<b>1700 mm</b>	40 pcs	22 pcs	46 pcs

In reference to the standard HTM 02-1 reduce the maximum number of 30%

## ARM CONFIGURATION OF ISOLA



## CONTROLL PAD SCHEMES



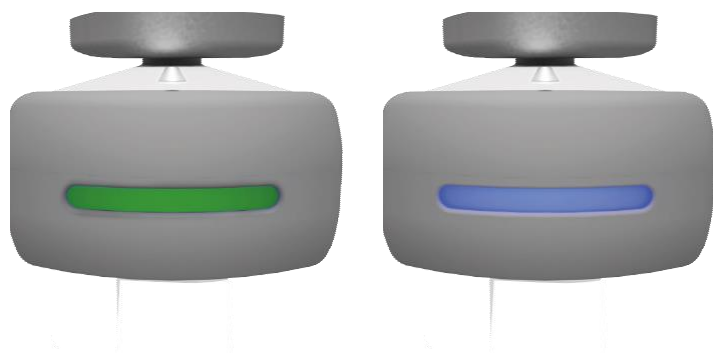
SINGLE ARM



DOUBLE ARM



SINGLE AND DOUBLE ARM MOTORIZED



The above schemes show how the arms are controlled via the handle pads. The buttons are colour coded so that once pressing the LED frontal signaling light of the correspondent arm switches on. In this way the operator is always aware of which arm is being moved.

The handle pads can be placed on the shelves, on the drawers or even on the column itself.

This is though something which is studied specifically on the project so please verify with our sales team the various possibilities available.



## PAINTINGS



### STANDARD RECOMMENDED COLOUR



OKI ISOLA is painted with thermoset epoxy-polyester paint. Each single profile can be painted separately according to the customer's specific colour-matching.

The colour shown is for guidance only, please refer to the standard RAL colour chart. The choice of any colour not commonly used might require longer delivery time. Customers are highly recommended to consult our sales office for detailed advice.

### ABS COMPONENTS



All our new OKI ISOLA feature a number of ABS plastic covering components that improve the overall appearance. These are all offered in graphite colour only.

## TECHNICAL DATA SHEET

Testing in production for each single unit	For each unit the following tests are performed: -grounding impedance protection in accordance with 18f) of standard 60601-1 - standard measurement of leakage current in accordance with 19.3 and 19.4 of EN 60601-1-measurement of dielectric strength, in accordance with 20.3 and 20.4 of standard EN 60601-1 – requirements as in 59.101.1, 59.102.1 and 59.103.1; 59.101.2); 59.102.2 b), 59.103.2); 59.101.2 BC), 59.102.2 (c)) and 59.103.2. b) – pressure tests in accordance with 59.101.2. d) and 59.102.2. d)
EC CERTIFICATE	The device are made in compliance with MDR 2017/745 UE Regulation. It is a class IIb DM according to classification rule:  9 and 12 of Annex VIII - MDR 2017/745UE Regulation. Certified CE 0051.
Regulation	The equipment should be considered class IIb.
Classification according to the type of protection against electrical hazards	Class I device. The protection against electric shock is guaranteed by the metal parts of the ground protection.
Classification according to the degree of protection against penetration of liquids and external agents	Against penetration of liquids and external agents IP20.
Classification according to the use and conditions	Device for continuous operation.
Electromagnetic interference	The operation of other devices placed near the medical device (as portable equipment or furniture) can cause electromagnetic interference or other interference, always check with qualified personnel.
Protection provided on external power circuit	Provides adequate protection with circuit breakers or fuses dimensioned according to the power indicated on the label.
Supply voltage	110-230 VAC 50/60 Hz
Low voltage	12-24 V-AC/DC
Wire minimum section	Lights 1.5 sq.mm. Electrical sockets 2.5/4 sq.mm. Ground 2.5/6 sq.mm.
Conditions for Storage	Temperature: between -10°C and +40°C. Relative humidity: between 30% and 75%.
Conditions for Usage	Temperature: between +5°C and 35°C. Relative humidity: between 30% and 75%.
Maintenance	The pendant does not require routine standard maintenance but only long term one. Medical gases and electrical components are kept separated : for this reason no special caution during maintenance service is needed.
Cleaning	The epoxy-polyester paint or the anodic oxidation guarantee the durability of all external surfaces. Cleaning is recommended with soft cloth soaked with non-alcoholic and gentle detergents and disinfectants.
Testing	The products are fully tested and ready for immediate installing.
Ceiling fixing	Clamped onto the ceiling with an adjustable support.
Aluminium	Structural profile not less than 3.5mm/cover profile not less than 1.8mm Alloy 6063 T6.
Electropneumatic Brakes	24 Vcc - 4 Bar min - 6 Bar max
Electromagnetic Brakes	24 Vcc
Gas connection	Through DIRECT connection, VALVE or NIST valve, with antistatic hoses positioned on the technical plate.
Quality management systems	EN ISO 13485:2016

LM MEDICAL DIVISION S.r.l.  
Via Brigade Alpine, 9 - 25036 Palazzolo sull'Oglio - Brescia - Italy  
Tel. +39 030 7453357 - Fax +39 030 7453105 - [info@lmmedicaldivision.com](mailto:info@lmmedicaldivision.com)



MADE IN ITALY

