



## FUNCTIONALITY

The advantage of the multidisciplinary operating room concept is that it pools most of the human resources in the anesthesia and surgical teams and therefore improves patient rotation and the sequence of programs, while centralizing activities in a single location.

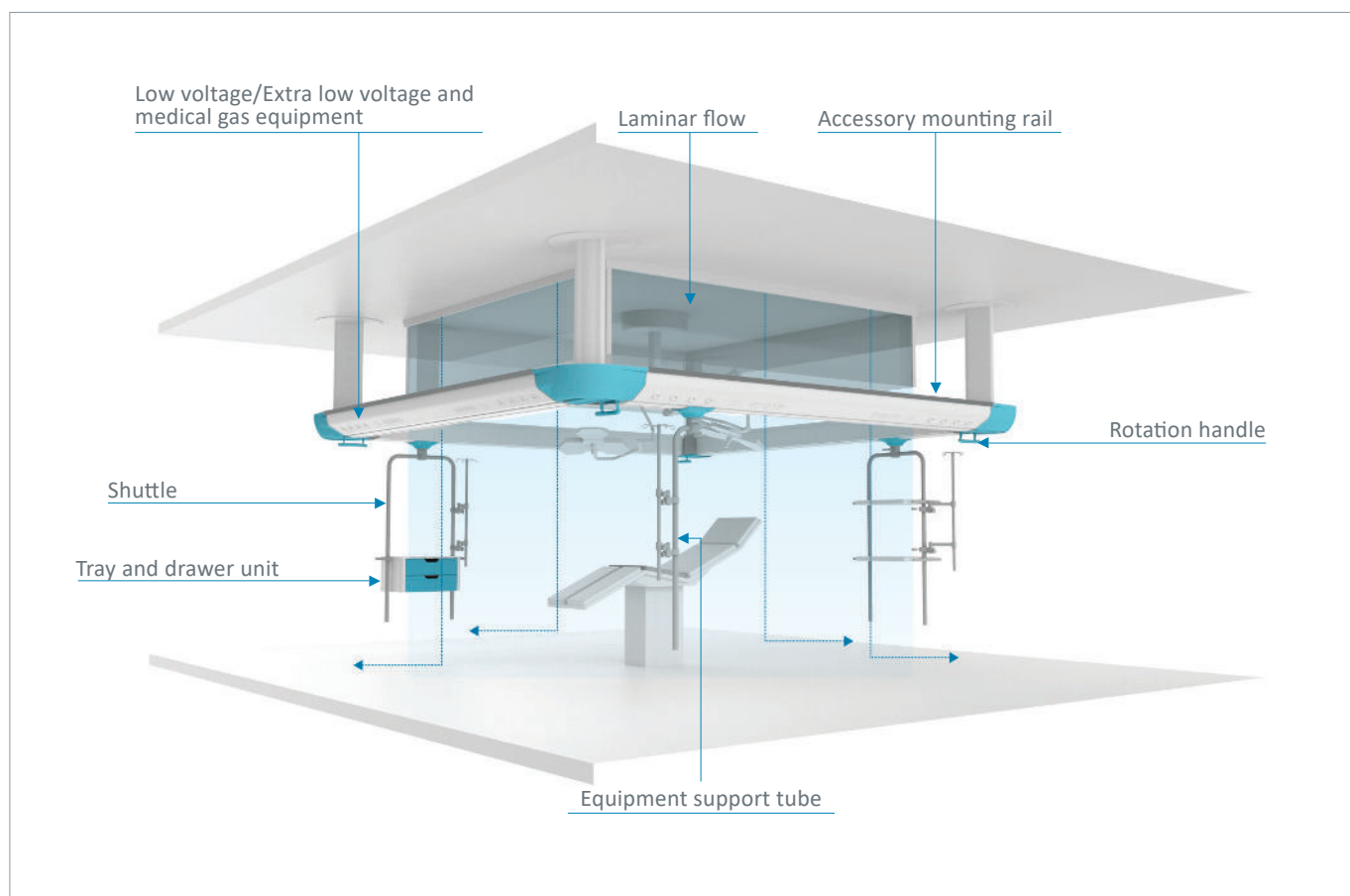
It also has the advantage of allowing shared use of heavy equipment, reducing the need to move it around. It also adapts to most types of table: Fixed, transfer, or mobile, so that their accessories can be shared.

HI-CARE offers significant time savings in terms of OR availability. With its rounded shapes and smooth surfaces and thanks to the flush-mounting of all equipment, it is easy to clean and disinfect after each procedure.

### Air flow

HI-CARE is carefully designed to be compatible with all (laminar flow) air filtration ceiling-mounted systems. It contributes to reduce the risk of infection and airborne contamination thanks to the centralisation of equipment in a single unit with a small space requirement.

It also offers the opportunity to protect the air flow in the surgical area from peripheral turbulence by equipping it with additional glass shielding made by the external suppliers of your choice (air processing specialists).



## EQUIPMENT

The HI-CARE peripheral suspended beam optimizes the quality of surgical procedures by giving surgeons, anesthesiologists, and OR teams easy access to electrical power supplies and medical gases, which can easily be positioned within arm's reach. Patient access, working conditions, and cleanliness of treatment areas are therefore optimized.

### Integration of electrical equipment

Waterjet cutting gives HI-CARE's cover a precise, custom finish. This allows the possibility of integrating sockets and outlets of all different shapes. Electrical devices are flush-mounted, for easy cleaning and disinfection of the product.



### Integration of gases

Every type of gas outlet standard (DIN, BS, AFNOR) can be integrated into the beam.



Thanks to these various configurations, the HI-CARE beam provides a modular concept to suit most situations and fulfil the needs of surgical teams.

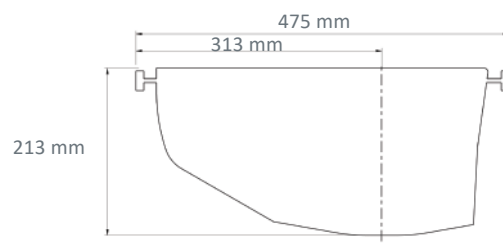
### Rails

The HI-CARE beam incorporates a 25 x 10 mm accessory mounting rail on its inner and outer faces all along its periphery.

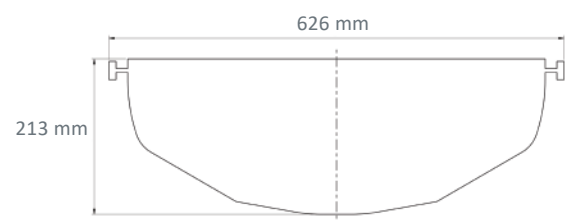


### Beam characteristics

Outer face equipped with power sockets and medical gas outlets. Outer and inner rails.

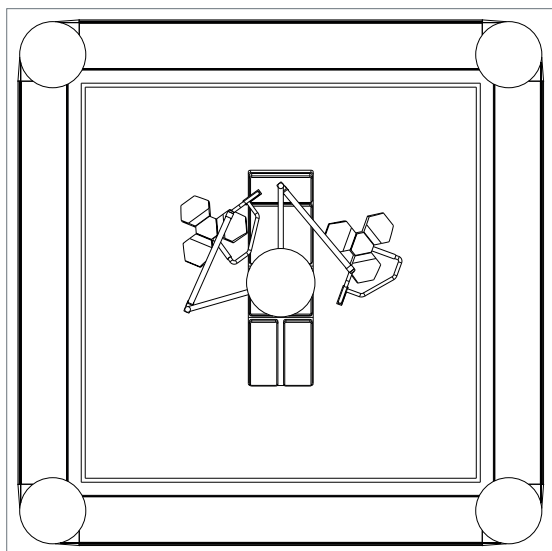


Outer and inner faces equipped with power sockets and medical gas outlets, and outer and inner rails.

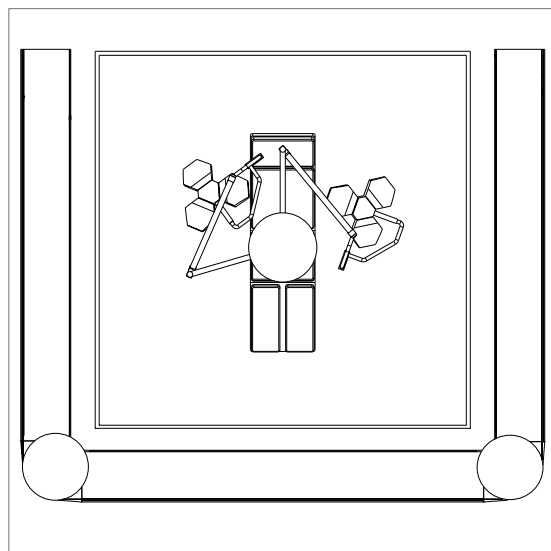


## CONFIGURATIONS

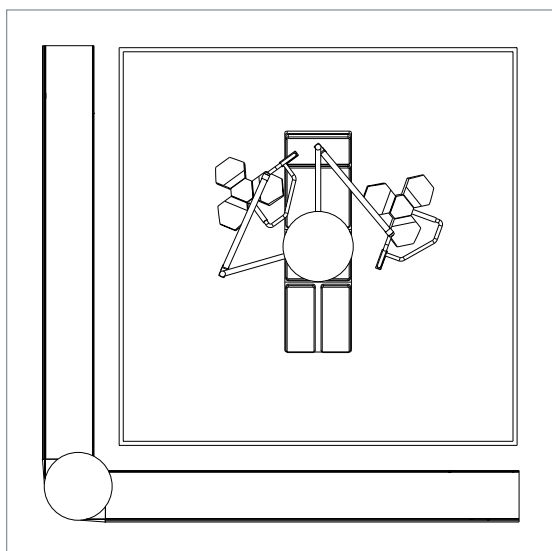
□ Configuration



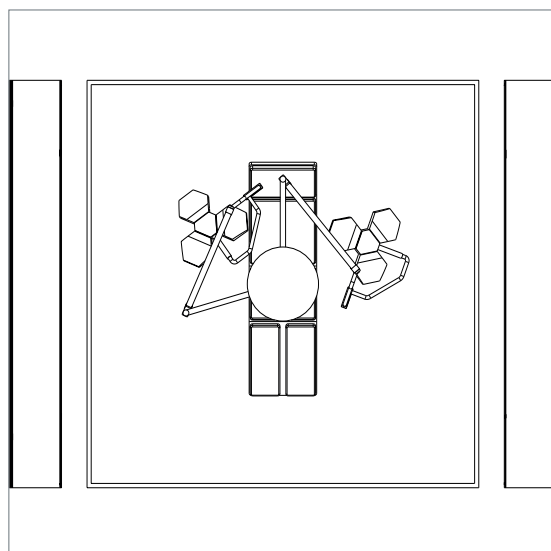
U Configuration



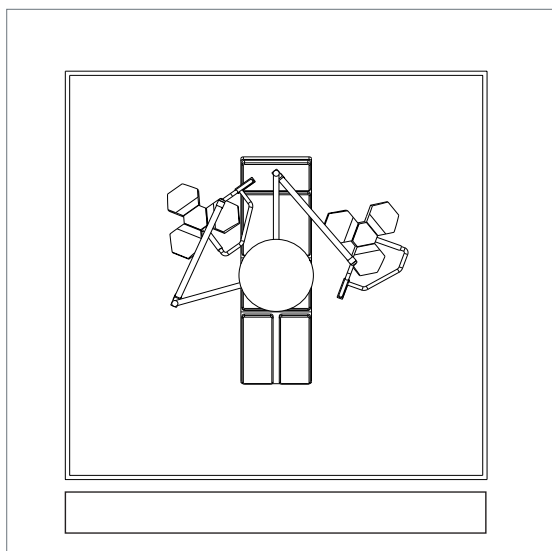
L Configuration



Parallel configuration



Beam configuration



## SHUTTLES CONFIGURATION

Shuttles are equipped with a sliding trolley mounted on ball bearings.

With the indexed rotation angles, the position of therapeutic equipment and accessories can be adjusted between procedures, quickly and along the whole periphery of the beam. This provides an optimized work area for anesthesiologists, surgeons, and their teams.

The shuttle translation and rotation locking system, using a joystick, makes it easy and safe to handle the trolleys and the biomedical equipment.

### Easy positioning of shuttles



Shuttles are equipped with  $\varnothing$  38 mm stainless steel tubes. They come in a choice of 800 mm or 1500 mm in height, and their payload is 150 kg.



Vertical equipment support tube

## DISTRIBUTION BOX CONFIGURATION

To optimize the work area, this can be equipped with a distribution box mounted on a trolley or arm, according to your requirements.

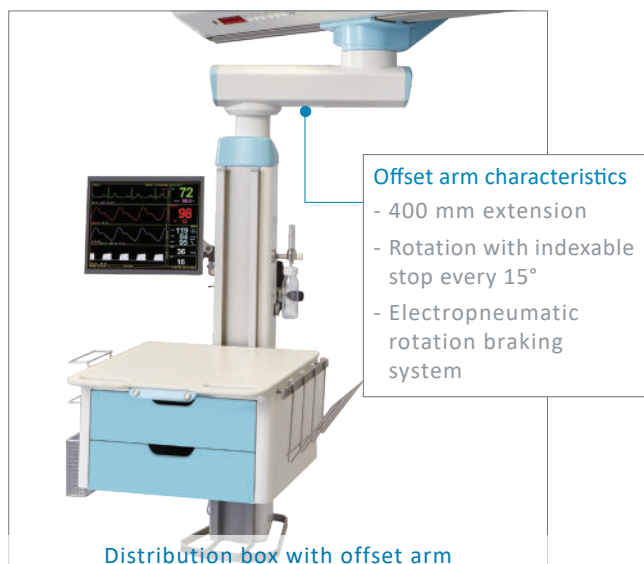
Its sliding trolley mounted on ball bearings is equipped with a cable and hose control system allowing sliding of 1200 mm and electropneumatic braking of the translation movement.

### Technical characteristics of boxes

The distribution box of HI-CARE suspended beam is available with or without offset arm.



Distribution box without offset arm



#### Offset arm characteristics

- 400 mm extension
- Rotation with indexable stop every 15°
- Electropneumatic rotation braking system

Distribution box with offset arm

### Vertical

- Aluminum profile
- Equipped with three accessory mounting rails, 25 x 10 mm (two on the front panel and one on the back)
- Adjustable friction braking of rotation
- Optional LED position lighting located at the bottom
- Loading capacity : 150 kg without offset arm and 120 kg with offset arm
- Three heights for vertical box : 600 mm, 1200 mm or 1500 mm



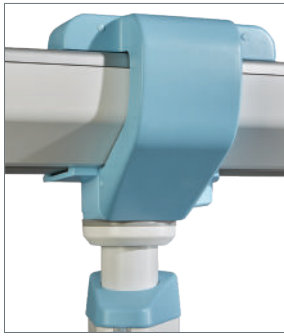
### Horizontal

- RAL 9016 with lacquered steel body
- Equipped with two vertical Ø 38 mm accessory support tubes 800 or 1500 mm long
- Adjustable friction braking of rotation
- Optional : bottom accessory mounting rail
- Loading capacity : 150 kg
- Dimension of the box (L x W x D) : 760 x 324 x 267 mm



## DISTRIBUTION BOX CONFIGURATION

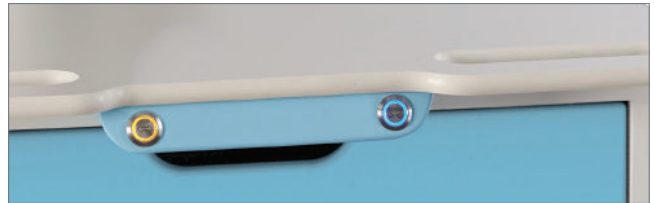
### Translation system



The distribution box is fed by the suspended beam.

### Braking control

Located on the shelf, controls with illuminated button allow easy and ergonomic use of the arm rotation and translation system. They are engraved to allow intuitive operation of the box.



### Extra tube system to hold accessories page 283

This device clamps onto the vertical service head (1200 and 1500 mm) and makes it possible to hang main biomedical accessories.





## LIGHTING

The HI-CARE offers the following types of lighting:

- 100% LED general lighting
- Indirect with RGB LED modules
- Night light, located at the top



### Lighting power

Lighting	Power	Types of sources	Color temperature	Luminous Flux <sup>(1)</sup>	Consumption	System Efficiency	Driver(s)
General lighting	68 W (2 x 4 Ft)	LED	3000 K 4000 K	10 325 lm	69,5 W	148,6 lm/W	Fixed / DALI
Reading lighting	9,8 W (2 Ft)	LED	3000 K 4000 K	1756 lm	11,8 W	149,2 lm/W	Fixed / DALI
Night light	3,1 W	LED	-	292 lm	3,3 W	89,8 lm/W	Fixed

### Lighting study

Operating room configuration (□)	<b>General lighting</b>	
	2 x 4 Ft module	
Consumption	78,8 W	
Average lighting	1394 lx	

- Luminous flux maintenance factor : L80B10 to 60 000 hours
- MacAdam Ellipse: 3 SDCM
- LED sources photobiological risk : GP1

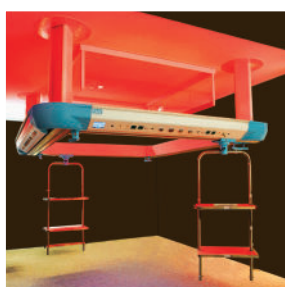
<sup>(1)</sup> All the luminous flux indicated in the brochure are based on the flux of the LED modules also known as system flux.

Luminaire output flux = (Module flux) x (optical efficiency), the optical efficiency of the luminaire is indicated in the Eulumdat file (LDT line 23) available for download on our website or on request.

Intensive care room configuration	<b>General lighting</b>	<b>Reading lighting</b>	<b>Caring lighting</b>
	Module 2 x 4 ft	2 ft module	General and reading lighting combined
Consumption	77,6 W	11,8 W	89,4 W
Average lighting	163 lx	617 lx	426 lx

### Lighting to suit every context

□ configurations examples

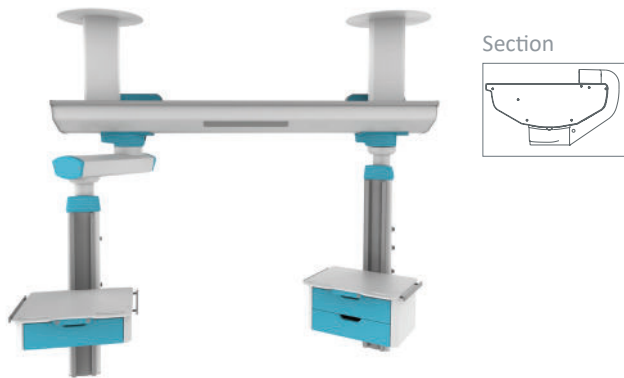


Equipped with LED RGB lighting, dimmable, HI-CARE makes possible to change or configure your working environment. I.E, green color is recommended for endoscopy, red color can be used for cardiac surgery and blue color can be helpful for concentrating.

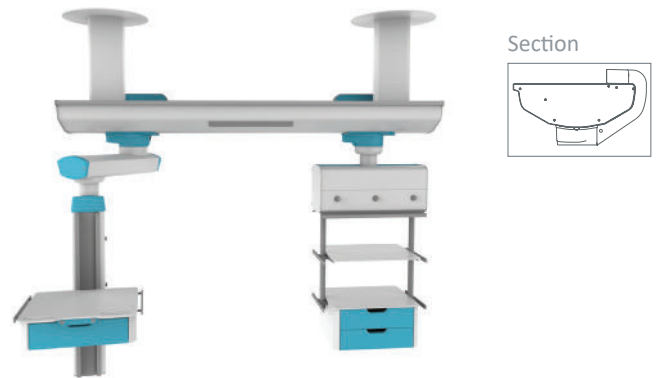


## CONFIGURATIONS

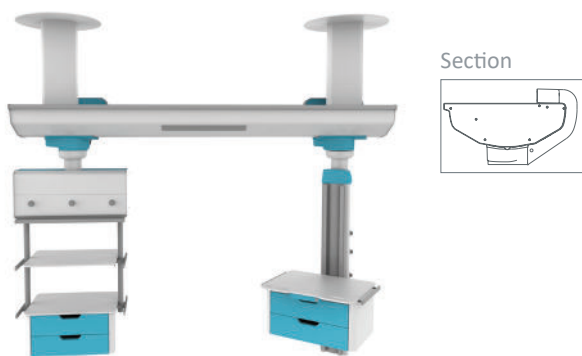
HI-CARE suspended beam configuration with vertical box with and without offset arm



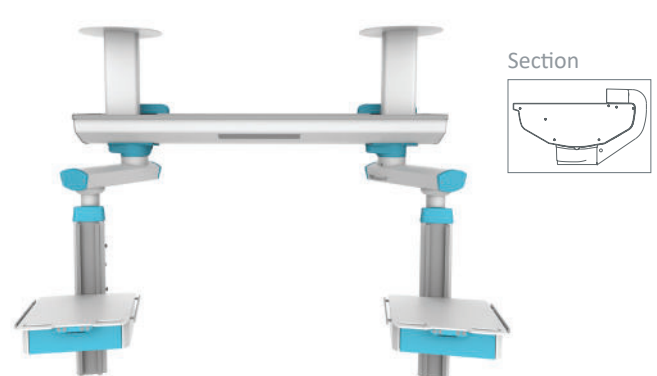
HI-CARE suspended beam configuration with vertical box with offset arm and horizontal box



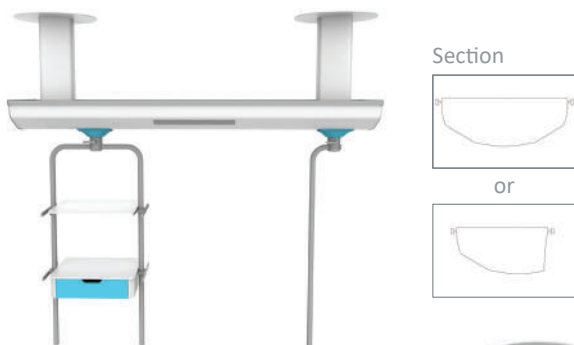
HI-CARE suspended beam configuration with horizontal and vertical box



HI-CARE suspended beam configuration with vertical box with offset arm



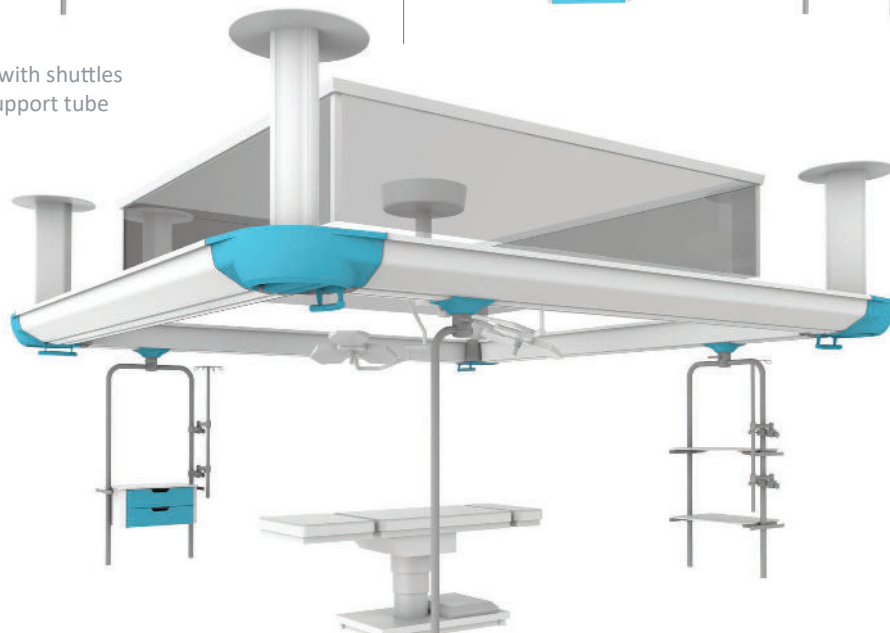
HI-CARE suspended beam configuration with shuttle and vertical equipment support tube



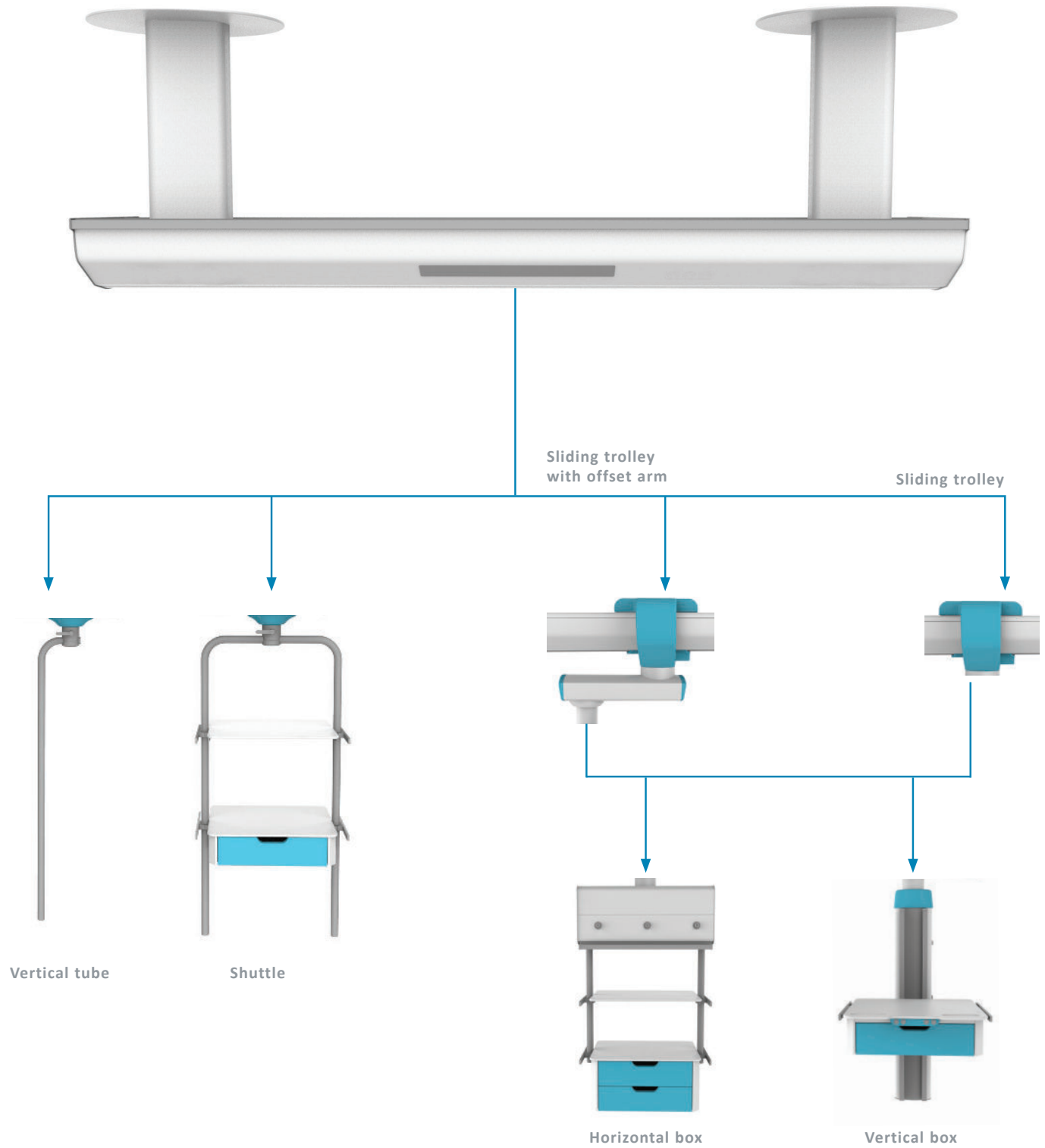
HI-CARE suspended beam configuration with horizontal box and shuttle



HI-CARE □ configuration with shuttles and vertical equipment support tube



## CONFIGURATIONS



## TRAYS AND DRAWERS EQUIPMENTS

The trays are designed to comply with the strictest standards concerning hygiene and durability. Their surface is made of compact material with white core (HPL).

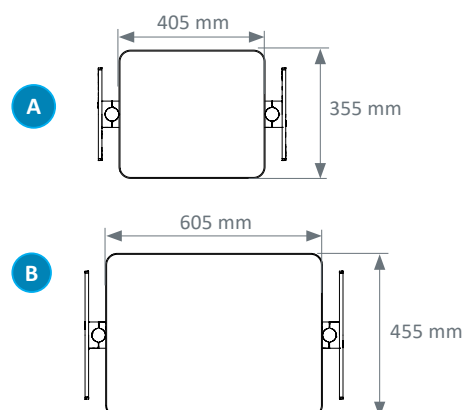
The tray units can accommodate one or two drawers made of antibacterial Kydex. The drawers are removable for easy cleaning.

### Load table

	TRAY DIMENSION	LOAD MAX
<b>A</b>	405 x 355 mm	40 kg
<b>B</b>	605 x 455 mm	60 kg

### Shuttles

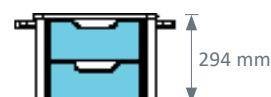
#### Trays



#### One drawer

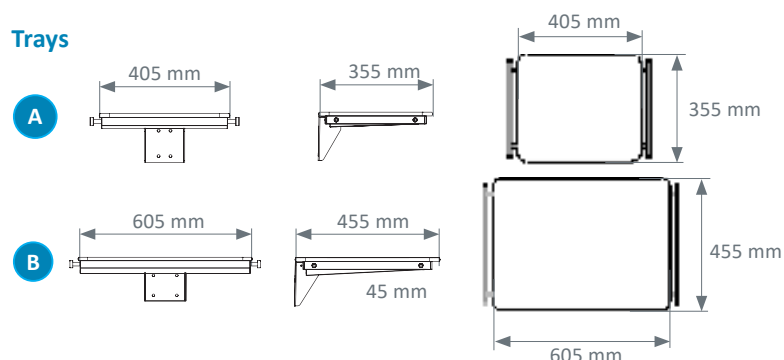


#### Two drawers

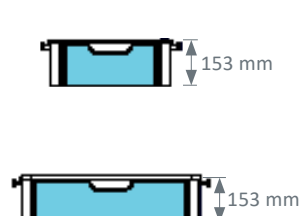


### Vertical box

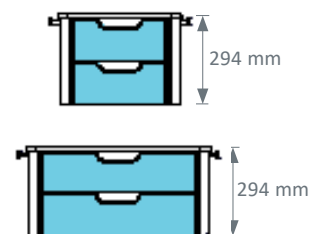
#### Trays



#### One drawer

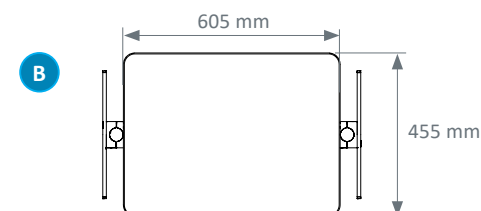


#### Two drawers



### Horizontal box

#### Trays



#### One drawer

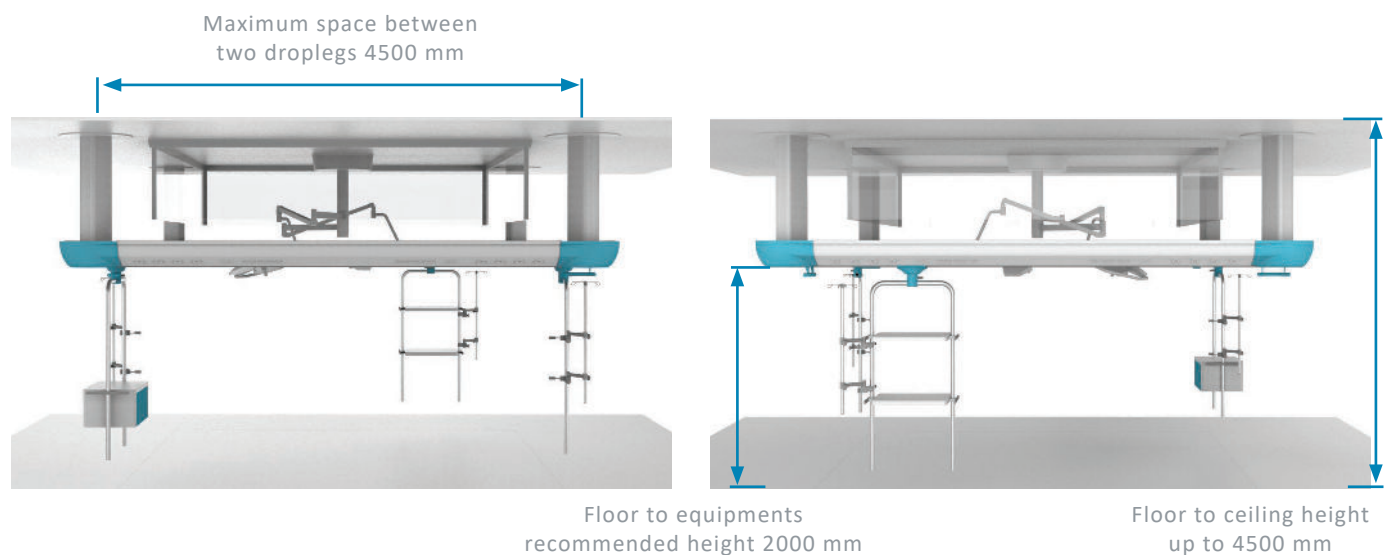


#### Two drawers



Horizontal box

## TECHNICAL CHARACTERISTICS



<b>Ceiling mounting</b>	<p>Special design for each building</p> <p>Suspension up to 1500 mm plenum height</p> <p>Beam length up to 4500 mm without additional suspension</p>
<b>Suspended beam</b>	<p>Custom length (up to 5000 mm in single profile)</p> <p>Loading capacity 450 kg per segment</p> <p>Recommended distance for accessories 2000 mm</p>
<b>Equipment &amp; accessory mounting</b>	<p>Outer and inner rail(s), 25 x 10 mm</p> <p>Loading capacity on rail 20 kg/linear meter</p>
<b>Equipment &amp; accessory holder shuttle</b>	<p>Translation and positioning all along the length of the beam</p> <p>Mounted on silent ball bearings, mechanical lock for stability</p> <p>Dimensions: width 450 mm or 650 mm, height 800 or 1500 mm</p> <p>Loading capacity: 150 kg</p>
<b>Vertical distribution box</b>	<p>Translation and positioning over 1200 mm</p> <p>Loading capacity without offset arm: 150 kg</p> <p>Loading capacity with offset arm: 120 kg</p>
<b>Horizontal distribution box</b>	<p>Loading capacity: 150 kg</p>
<b>Indirect lighting</b>	<p>LED (2 x 4 Ft, 11 107 lm)</p>
<b>Direct lighting</b>	<p>LED (2 Ft, 1811 lm)</p>
<b>Night light</b>	<p>LED (355 lm)</p>
<b>Colors</b>	<p>White RAL 9016</p>

\* 3000 K or 4000 K



## Norms & certifications

- EN ISO 13485 : Quality management systems
- CE Medical Devices Marking according to the (EU) Rules 2017/745
- EN ISO 11197: Medical supply units
- EN ISO 7396-1: Medical gas pipeline systems - Part 1
- EN 60601-1: Medical electrical equipment - Part 1

Bed head units, Wall lighting units, Ceiling pendants, Suspended Beams & Columns,  
Special care bed head units, Sealed lightings, Medical gas monitoring & Biomedical Accessories

