



Health Technology with a Human Touch



Intensive care

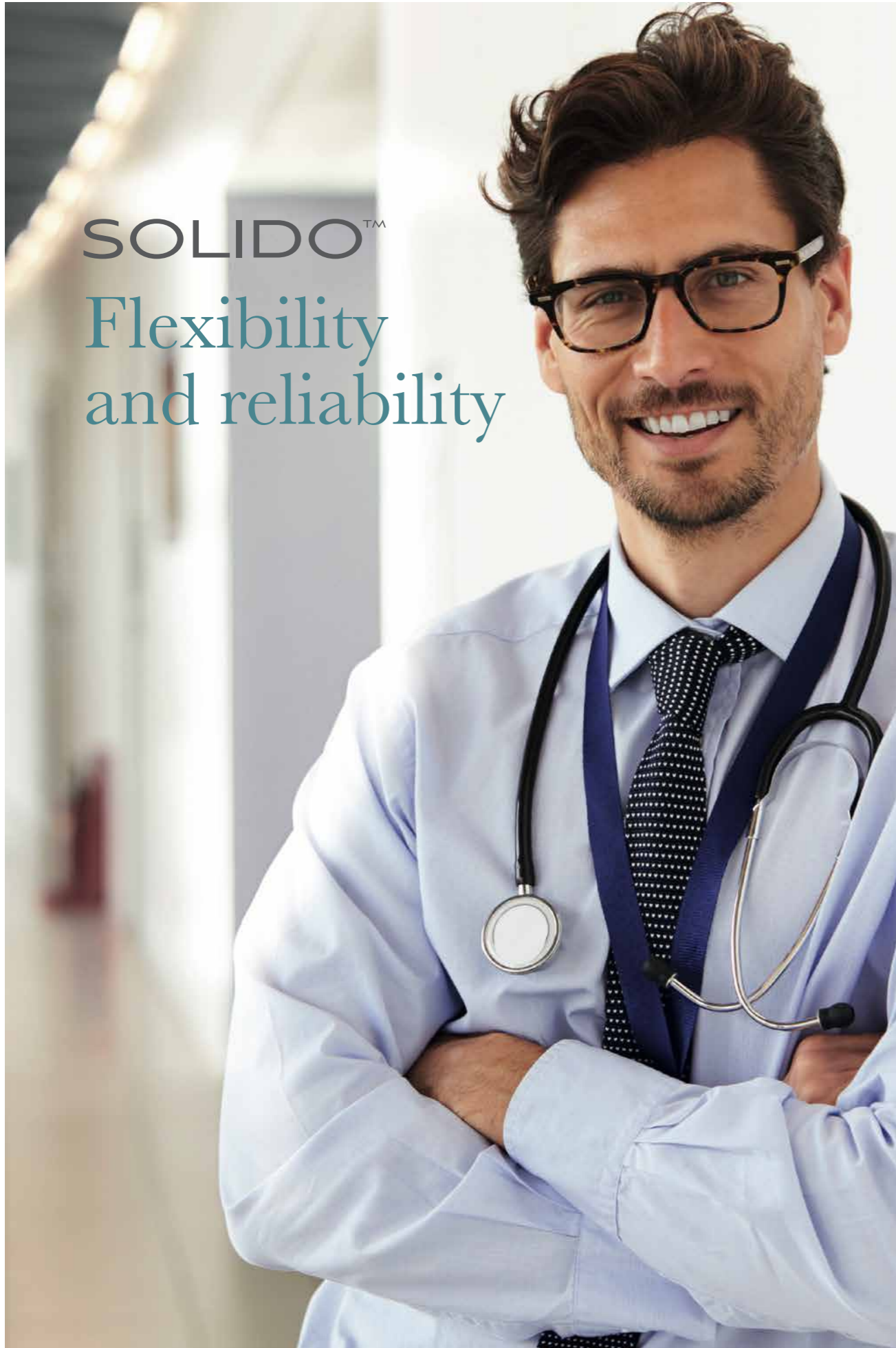


Operating room



Pendants

SOLIDO™



SOLIDO™ Flexibility and reliability

Why choose _____ SOLIDO™

SOLIDO?

Design and hygiene

The innovative accessory mounting design provides nearly unlimited flexibility in placing medical equipment precisely where it is needed, while also allowing you to change configurations on the spot when clinical application or rooms needs change. Solido is designed to be easy to clean and is compatible with a large range of cleaning products.

Efficient and advanced ergonomics

An ergonomic and well-designed workstation is the key to an efficient workspace, which can help to reduce errors, improve clinical outcomes, and increase staff effectiveness. Solido provides the ability to mount equipment in any position on the column, aligning the workstation with the needs of clinical staff.

Patient-friendly environment

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

Solido

Solido 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.



Introduction

Solido arms can be also supplied in the most complete configuration which is highly requested for all ICU areas. This specific system allows several combinations: single or double arms for each column to make it ergonomically adequate for all types of action needed on the patient.

Optional features



GAS outlets



Night lighting



Antibacterial paint treatment



Data communication



Direct lighting



Special images and patterns available



Available accessories



Indirect lighting

Details

Solido is available in a variety of RAL colors, wood finishes and special patterns and image to complement virtually any product detail.

Solido can be also supplied in the most complete configuration which is highly requested for all ICU areas. The column is customizable with

- Shelves and storage
- Cable management system
- Mounting system
- Single workstation components

Models

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

- on a vertical column
- on a horizontal head

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.

The service head of Solido can be:

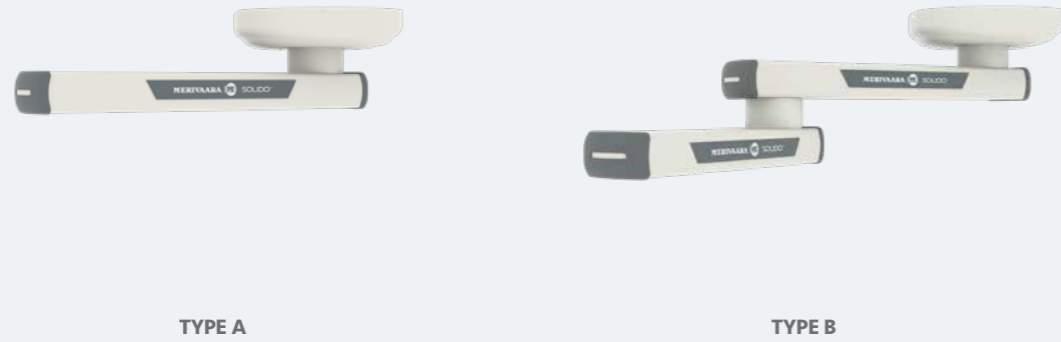
- Ultra (Vertical or Horizontal)
- Pro (Vertical or Horizontal)

Accessories

Solido 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. Product Solido allow fast operation by making it easier for the medical staff to use the equipment, guaranteeing an optimal care to each patient.



Single/Double arms



Single/Double motorized/manual (spring) arms



Single/Double motorized/manual (spring) arms

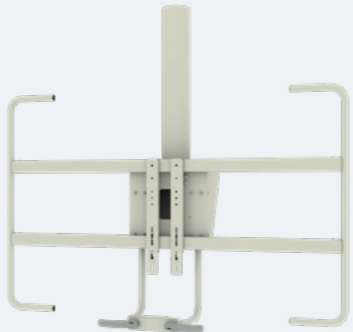


Column Slim - Type 1



TECHNICAL DATA	
Height (mm)	Dimensions (HxWxD)
400	400x160x163 mm - 6,3x6,4 inch
600	600x160x163 mm - 6,3x6,4 inch
800	800x60x163 mm - 6,3x6,4 inch
1000	1000x160x163 mm - 6,3x6,4 inch

Screen Ultra - Type 6



TECHNICAL DATA	
Dimensions (HxWxD)	
918x1401x461 mm - 31,1x55,2x18,2 inch	

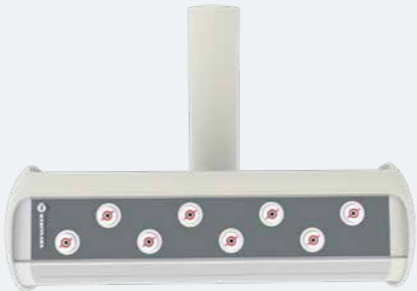
Column Pro



TECHNICAL DATA	
Height (mm)	Dimensions (HxWxD)
600	744x307x307 mm - 29,7x12,1x12,1 inch
800	944x307x307 mm - 37,2x12,1x12,1 inch
1000	1144x307x307 mm - 45x12,1x12,1 inch
1200	1344x307x307 mm - 52,9x12,1x12,1 inch
1500	1644x307x307 mm - 64,7x12,1x12,1 inch

The image is not finalised. Layout may change without prior notice.

Head Pro



TECHNICAL DATA	
Lenght (mm)	Dimensions (HxWxD)
400	544X307x307 mm - 21,4X12,1x12,1 inch
600	744X307x307 mm - 29,7X12,1x12,1 inch
800	944X307x307 mm - 37,2X12,1x12,1 inch
1000	1144X307x307 mm - 52,9X12,1x12,1 inch

The image is not finalised. Layout may change without prior notice.

Column Ultra



TECHNICAL DATA	
Height (mm)	Dimensions (HxWxD)
600	744x378x378 mm - 29,7x14,9x14,9 inch
800	944x378x378 mm - 37,2x14,9x14,9 inch
1000	1144x378x378 mm - 45x14,9x14,9 inch
1200	1344x378x378 mm - 52,9x14,9x14,9 inch
1500	1644x378x378 mm - 64,7x14,9x14,9 inch

Head Ultra

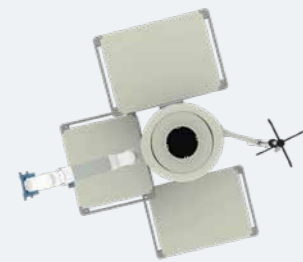


TECHNICAL DATA	
Lenght (mm)	Dimensions (HxWxD)
400	544X378X378 mm - 21,4x14,9x14,9 inch
600	744X378X378 mm - 29,7x14,9x14,9 inch
800	944X378X378 mm - 37,2x14,9x14,9 inch
1000	1144X378X378 mm - 52,9x14,9x14,9 inch



Detail 2 colors LED for brakes

The above schemes show how the arms are controlled via the control panel. 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 control panel 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.



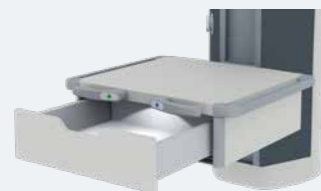
4 sides for accessories

The column is designed for mounting accessories (shelves, IV holders, drawers ...) on 4 sides. Accessories can be put on the pendant from 1 to 4 sides.



Light on the arm

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



Lights in the drawer

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



Control panel

Control panel allows you to lock and unlock the arm brakes. Select the blue circle to move the arm with blue light. Select the green circle to move the arm with green light or select the blue/green circle to move both arms. The gray arrows are used to direct the arms.



Workstation LED light

On demand, the column can also offer a LED lighting placed on top of the product, to illuminate the functionalities and devices present, to facilitate the operations of clinical staff and to illuminate the ambient when it is switched on. The LED lighting can be placed on the top of the column on 4 sides.



Position LED light

On demand, the column can also offer a LED lighting placed below of product, to illuminate the ambient when it is switched on.



4 sides cable management

Solido provides the ability to mount equipment in any position on the column, aligning the workstation with the needs of clinical staff. Cable management can help to reduce errors, improve clinical outcomes and increase staff effectiveness thanks to its system, which encloses and holds the cables, it makes the medical environment safer and more practical not only for the clinical staff but also for the patient. Cable management can be put on the pendant from 1 to 4 sides.



Control touch

Achmi is a capacitive touch, which offers the following functions:

- Brake lock/unlock control;
- It is possible to view the Service and User Manual directly on the screen;
- Maintenance alerts for the wall unit via an alarm;
- Security, thanks to password credentials.

Touch dimensions: 7 inch.



Adjustable vertical pole
Vertical pole made of stainless steel, support made of aluminium.



Adjustable vertical pole
Vertical pole made of stainless steel, support made of aluminium.



Adjustable vertical pole with IV stand 4 hooks
Vertical pole made of stainless steel, support made of aluminium hooks.



Adjustable vertical pole with IV stand 4 hooks
Vertical pole made of stainless steel, support made of aluminium hooks.



Adjustable vertical pole with IV stand 4 hooks
Vertical pole made of stainless steel, support made of aluminium hooks.



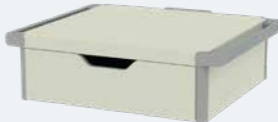
Adjustable vertical pole with IV stand 4 hooks
Vertical pole made of stainless steel, support made of aluminium hooks.



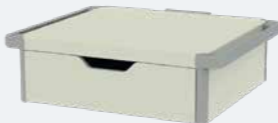
Painted steel shelf with rail
Painted steel structure, aluminium fixings.



Bioclean shelf with rail
Painted steel structure, aluminium fixings.



Painted steel drawer with rail
Painted steel structure, aluminium fixings.



Bioclean drawer with rail
Painted steel structure, aluminium fixings.



Double arm monitor holder with orientable VESA bracket



Handle
On demand, it is possible to put the handle on the pendant. It can facilitate the movement of the column in the room.

*For all accessories consult the specific catalogue.

Single arm (Type A)



TECHNICAL DATA	
Lenght arm (mm)	Load capacity (Kg)
600	400
800	320
900	300
1000	300
1200	280

Double motorized arm (Type DM/DS)



TECHNICAL DATA		
Lenght arm (mm)	Load capacity (Kg)	Travel* (mm)
(600+800) 1400	260	430
(600+1000) 1600	220	550
(900+800) 1800	260	430
(900+1000) 1900	220	550
(1000+800) 1800	220	430
(1000+1000) 2000	180	550
(800+800) 1600	260	430
(800+1000) 1800	220	550

*Datas referring only to Type DM

Double arm (Type B)



TECHNICAL DATA	
Lenght arm (mm)	Load capacity (Kg)
(600+600) 1200	280
(900+600) 1500	260
(900+900) 1800	240
(800+800) 1600	260
(1000+800) 1800	240
(800+1000) 1800	220
(1000+1000) 2000	180
(1200+900) 2100	160

Single motorized/spring pendant (Type FM/FS)



TECHNICAL DATA	
Lenght column (mm)	Travel* (mm)
300	375
600	530
800	630
1000	735
1200	910

*Datas referring only to Type FS

Single motorized arm (Type CM/CS)



TECHNICAL DATA		
Lenght arm (mm)	Load capacity (Kg)	Travel* (mm)
800	300	430
1000	250	550
1250	145	750

*Datas referring only to Type CM

Double motorized/spring pendant (Type GM/GS)

TECHNICAL DATA	
Lenght column (mm)	Travel* (mm)
300	375
600	530
800	630
1000	735
1200	910

*Datas referring only to Type GS



Finishing & colours

Color illustration for aluminum profiles

RAL

9010	5012	3020	1034
5018	3015	1016	9006

Special models and images

IMAGES

SAMPLE IMAGE 1	SAMPLE IMAGE 2	SAMPLE IMAGE 3	SAMPLE IMAGE 4

Special paediatric models and images

IMAGES

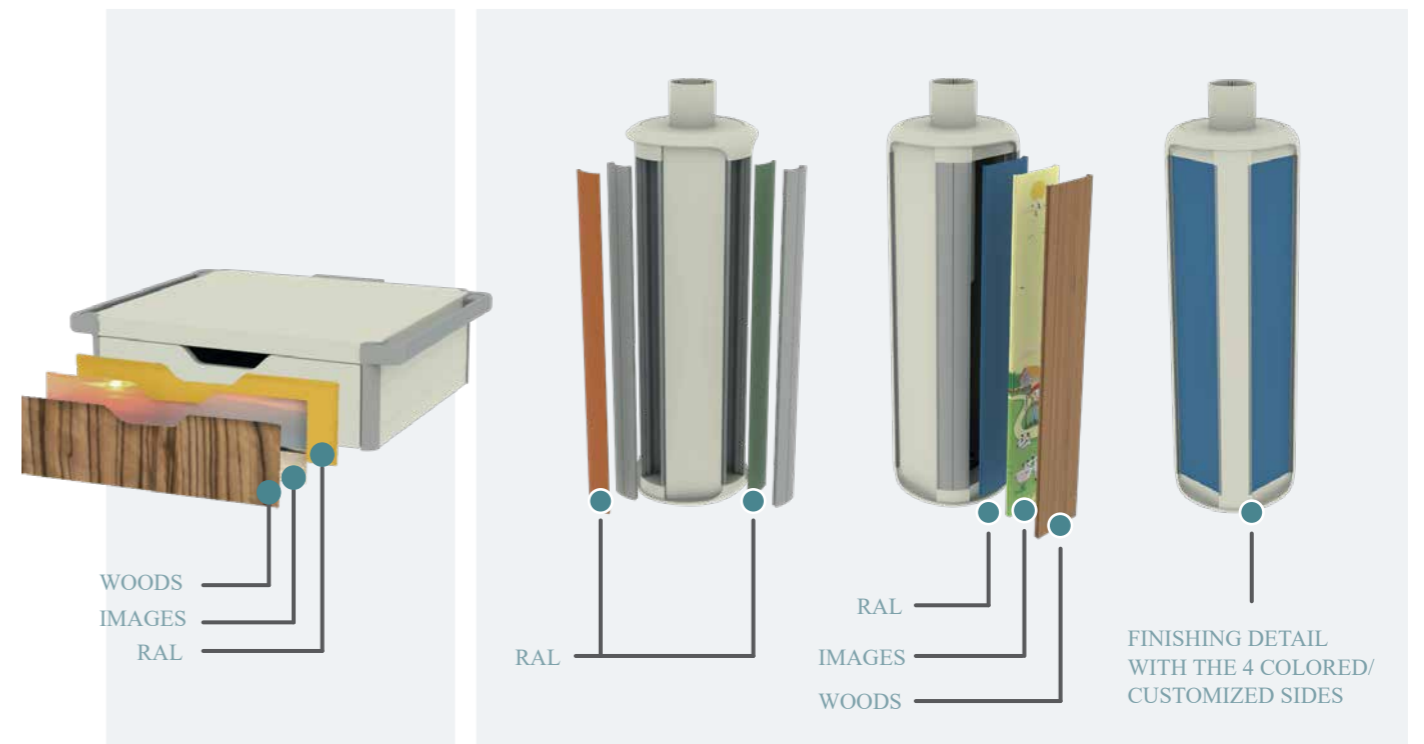
SAMPLE IMAGE 1	SAMPLE IMAGE 2	SAMPLE IMAGE 3	SAMPLE IMAGE 4

Special finishes

WOOD EFFECT

4247_R	4177_R	4479_LU	4123_R

For all finishes consult the specific catalogue.



The colours shown are 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. Special anti-bacterial paint is also available upon request, suggested for intensive care units. Please contact us to receive the full range of available finishes.

Technical data sheet

Features	Specifications
DM Classification	The power unit is an active medical device. It is a class IIb DM according to classification rule 2, 9 and 12 of MDR 2017/745UE Regulation.
Classification according to type of protection against electrical hazards	Class I electrical shock protection device Protection is provided by earthed metal parts.
Classification by type of safety against direct and indirect contact	The device without accessories has parts that do not fall under the definition of APPLIED PARTS, but are considered Type B applied parts. The device supplied with light control and nurse call buttons has applied parts classified as type B.
Classification according to degree of protection against the penetration of liquids and external agents	Against penetration of liquids and external agents IPX0.
Classification according to duration of use	Long-term operation device
Target Populations and Patients	No age, gender or ethnicity restrictions.
User characteristics	Qualified healthcare worker and/or lay personnel only for lighting system control and nurse call functions.
Noise level	Less than 35 dB.
Cleaning	The surface treatment of the Power Unit and its accessories guarantees the durability of the external surfaces. Cleaning should be carried out using a soft cloth slightly moistened with non-alcoholic disinfectants or max. 70% alcohol or non-abrasive detergents. Do not use active solvents to clean plastic parts.
Production testing for each power unit	The following tests are performed for each unit: <ul style="list-style-type: none"> Electrical: <ul style="list-style-type: none"> protective conductor continuity test insulation resistance test earth leakage current test Medical gas system: <ul style="list-style-type: none"> tightness and integrity test of medical gas and vacuum system leak test and integrity of anaesthetic gas evacuation system End-of-line product tests are available on request.
Electromagnetic interference	Operation of other devices placed close to the medical device (such as portable or mobile devices) may cause electromagnetic or other interference, always check with qualified personnel the tables at the end of this manual.
Supply voltage	100÷120 V 50/60Hz or 220÷240 V 50/60Hz.
Auxiliary voltage	24Vdc 24Vac.
Power supply absorption	Lighting system Max 150W. Max 2000W distribution system for each electrical outlet.
Components only replaceable by qualified technical support personnel	All electrical components in the 'Spare Parts List' (list provided by the manufacturer on request).
Protection provided on the external power supply circuit	Provide adequate protection with circuit breakers or fuses sized according to the power rating indicated on the label on the DM.
Reference Standard	ISO 11197:2019; IEC 60601-1:2005+AMD1:2012+AMD2:2020; IEC 60601-1-2:2014 +AMD1:2020; IEC 60601-1-6:2010+AMD1:2013+AMD2:2020 CSV; IEC 62366-1:2015+A1:2020; ISO/DIS 14971:2018; UNI CEI EN ISO 14971:2020; UNI CEI EN ISO 15223-1:2021; UNI CEI EN ISO 20417:2021; EN 1041:2008 + A1:2013; UNI EN ISO 7396-1:2019; EN ISO 7396-2:2007; ISO 5359:2018; ISO 9170-1:2008; ISO 9170-2:2008; ISO 10993-1:2021; EN 62471:2008.
Documentation available on request from the user	The manufacturer can provide if requested, circuit diagrams, spare parts list, maintenance instructions or other information that the service technician needs to maintain the DM or replace faulty and/or worn parts.
Manufacturer's registered office and production site	The registered office and production site of the manufacturer are in Via Brigate Alpine n° 9 San Pancrazio - 25036 Palazzolo Sull'Oglio (BS) - Italy. The storage and production site is in via F.lli Calvi, snc - 25036 Palazzolo sull'Oglio (BS) - Italy.
Regulatory Implementation Provision	In accordance with the provisions of Legislative Decree 151/2005 of 25.7.2005.
Units of Measurement	[mm].
Useful Life	10 years from the production date on the label.
Ceiling fixing	Clamped into the ceiling with an adjustable support.

Features	Specifications
Aluminium	Structural profile not less than 3.5mm/cover profile not less than 2mm 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.
Manufacturer	LM MEDICAL DIVISION S.r.l. Via Brigate Alpine, 9 - 25036 Palazzolo sull'Oglio - Brescia - Italy Tel. +39 030 7453357 - Fax +39 030 7453105 - info@lmmedicaldivision.com
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