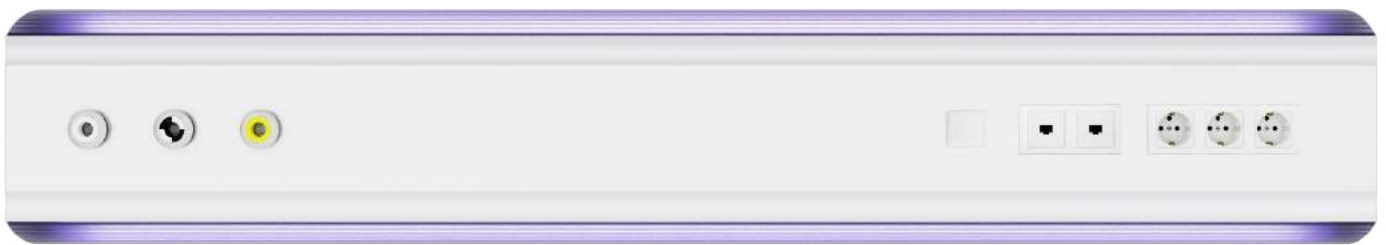




LM MEDICAL  
DIVISION

HEALTHCARE DESIGN TECHNOLOGY







# Why choose OKI PLUS?



## PLUS ES

This is the starting version of the PLUS range. Ideal for all **standard wards**, it offers a simple design featuring a single profile to house both electrical and gas components whilst maintaining segregation between the two. The PLUS range can be offered with or without integral lighting and with additional **DIN rail** for mounting accessories as an option.



## EASY TO INSTALL, EASIER TO MAINTAIN

We create our equipment based on two simple key principles: ease of installation and long-lasting top quality components ensuring minimum maintenance and maximum reliability. **OKI PLUS is delivered fully assembled to reduce costs of installation.**



## GREEN LIGHTING

Decrease your electricity consumption thanks to our innovative **LED** lighting strips which are available for all direct, indirect and even night lighting.

Lower maintenance, greater performance!

**Up to 40% energy saving; 50.000 hours average lifetime.**



## PLUS MD

Suitable for both **standard** and **critical care** this version is designed for intensive care services. Electrical and medical gas components run independently fed to ensure segregation is maintained. It also features integral lighting modules and additional **DIN rails**.



## POWDER COATING, POWERED HYGIENE

**Epoxy powder coating** guarantees a clean smooth hygienic surface for all our units. Our dedicated **antibacterial** paint can be added to the powder coating as an option to ensure 100% shield against bacteria.



## NOT JUST NUMBERS

Behind the solid design we wanted to make sure to offer a tangible added value. All OKI PLUS profiles are extruded from strong performing 6063 aluminium alloy to guarantee the highest standards in mechanical resistance.



s version features two separate profiles housing all  
run in completely separate compartments and are  
ined. Similar to the ES model, it can be fitted with both



## MODULAR VERSATILITY

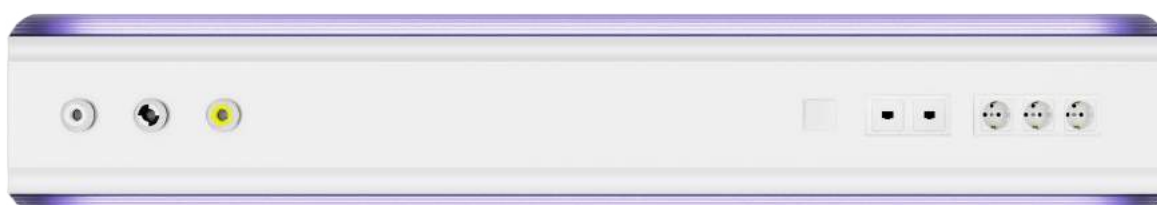
OKI PLUS is arranged to suit perfectly any medical requirement. The modularity of the unit allows any specification to be met with one single product which can be adapted to any level of care needed in the hospital.



## PLUS LG

This is the highest configuration available. Ideal for all **critical areas** this configuration includes three profiles to guarantee that even with a large number of services segregation can always be maintained. Although generally supplied without lights both direct and indirect lighting can be included as an option together with the **DIN rails** if needed.

## PLUS - ES WALL MOUNTED



Version ES

## INTRODUCTION

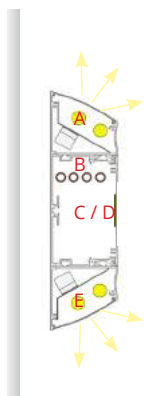
OKI PLUS ES is designed and recommended to offer an easy and price worthy solution for standard inpatient care. The bed head unit could be supplied with various lighting configurations:

- a) either indirect or direct (PLUS ES L),
- b) both (PLUS ES LL).

It can house all medical gas outlets adequately segregated from the electrical components. The highly adaptable profile can be configured for all special hospital wards.



Upon request an integrated aluminium **DIN rail** is also available.



## LIGHT DIFFUSION

- A - Indirect light
- E - Direct light

## COMPONENTS

- B - Gas piping
- C - Gas compartment
- D - Electrical compartment





## PLUS - MD/LG WALL MOUNTED



Version MD



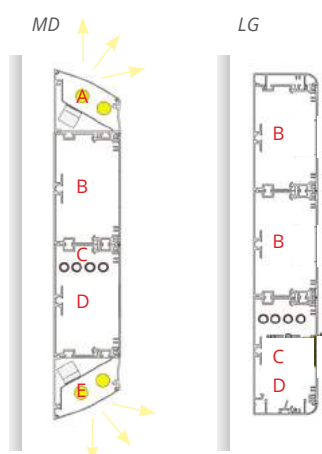
Version LG

## INTRODUCTION

OKI PLUS MD/LG models are particularly designed for all critical areas in a hospital. Gas and electrical components are kept segregated by two or even three different profiles. This models give the opportunity to equip the bed head unit with a large number of services, according to the most detailed specification.



Like PLUS ES also the MD and LG models can be equipped with either direct or indirect lighting (PLUS MD/LG L), or both (PLUS MD/LG LL). Similarly an integrated single or double aluminium **DIN rail** can be supplied upon request.



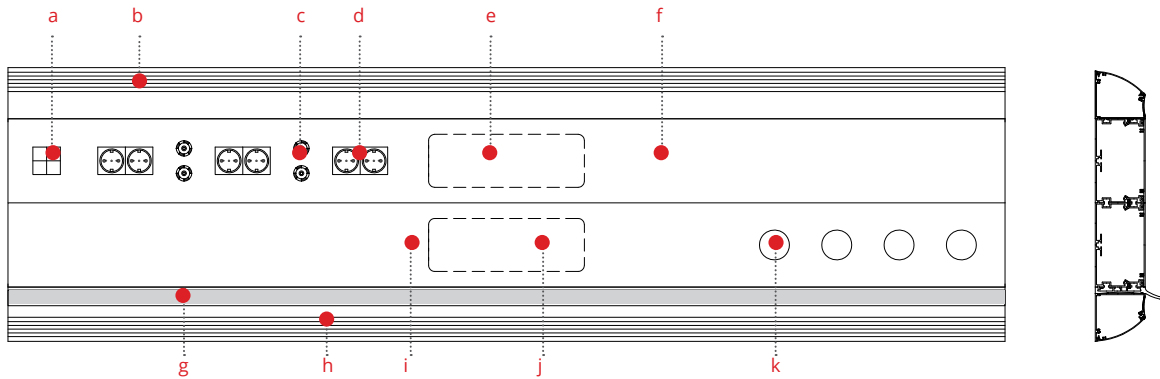
## LIGHT DIFFUSION

- A - Indirect light
- E - Direct light

## COMPONENTS

- B - Electrical compartment
- C - Gas piping
- D - Gas compartment

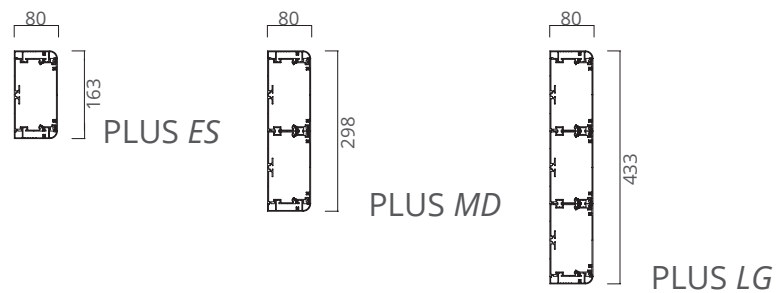
## PROFILE OVERVIEW



This image is for general demonstration only. The number of services varies according to the specifications given by each customer.

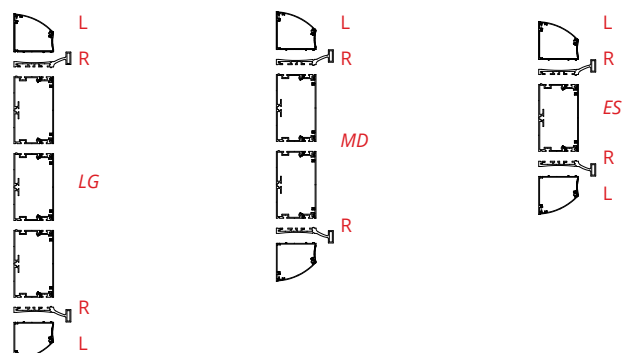
- a - Switches
- b - Indirect light
- c - Equipotential ground socket
- d - Electrical socket
- e - Electrical entry fed
- f - Compartment for electrical components
- g - DIN rail (load 40kg/mt)
- h - Direct light
- i - Compartment for gas components
- j - Gas entry fed
- k - Gas outlet

## STANDARD MODEL DIMENSIONS



These dimensions are also valid for the HTM models.





## SECTIONS CONFIGURATIONS

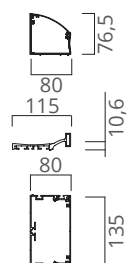
This diagram explains you better the various configurations available for each PLUS wall-mounted model. All PLUS profiles are modular and allow a wide choice of configurations:

- with none, one or both lighting profiles;
- with none, one or both DIN rail profiles.

Lighting and rail profiles can be combined at the same time.

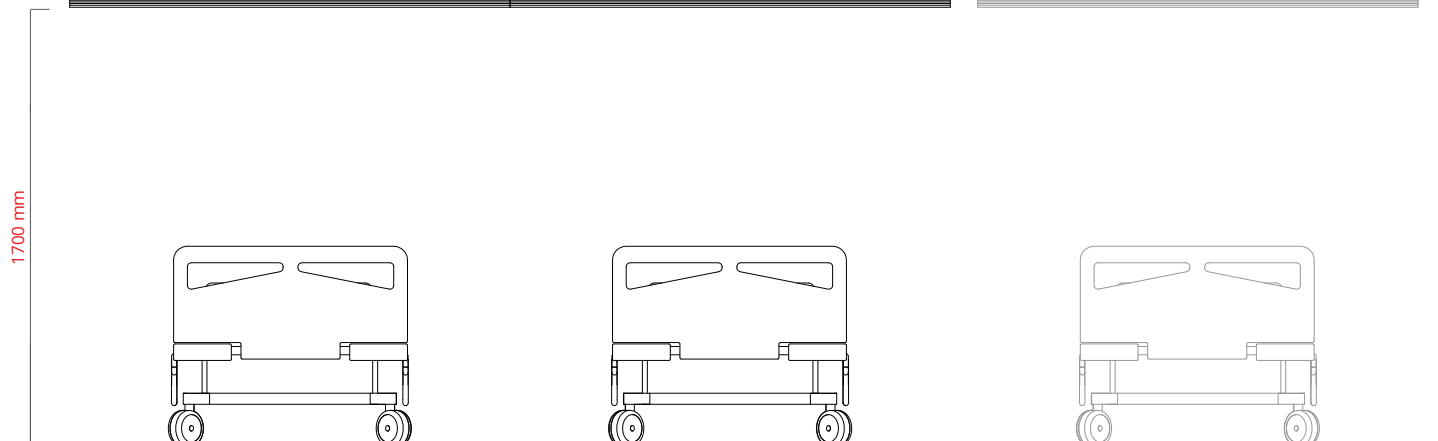
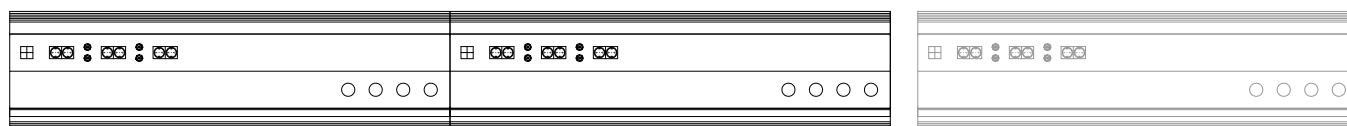
Please do not hesitate to contact our distributor or sales office for further clarifications.

## PROFILES' DIMENSIONS



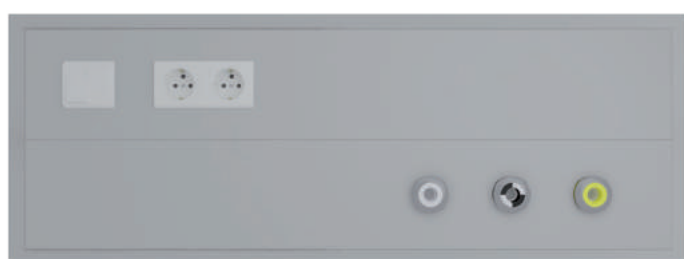
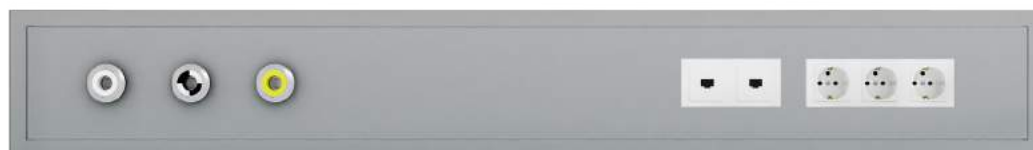
## CONFIGURATIONS

MULTIPLE



Dimensions in this prospect are just standard recommended ones. Each customer can then choose a different length according to the project specifications.

## PLUS - RECESSED

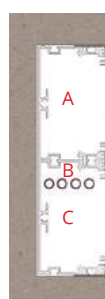


## INTRODUCTION

All OKI PLUS can be also recessed either in a concrete wall or any plasterboard. In addition to this, it can be completely integrated to existing HPL paneling. It is especially suitable where sleek but simple design needs to meet all medical requirements for standard specialty wards. The configuration can be either horizontal or vertical and the unit itself can provide **single, double or multiple profile**.



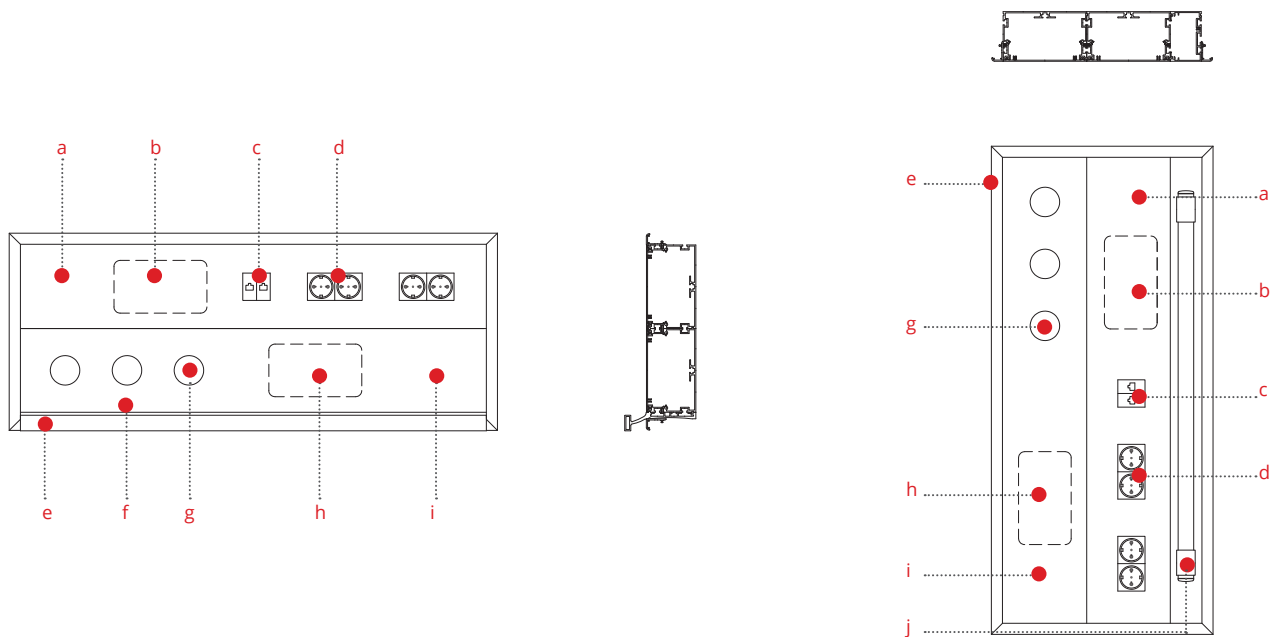
All configurations can be supplied with additional integrated **DIN rail** (horizontal mounting) or **vertical pole** (vertical mounting) for which a dedicated list of accessories is available which you can find in the dedicated accessories catalogue.



## COMPONENTS

- A** - Electrical compartment
- B** - Gas piping
- C** - Gas compartment

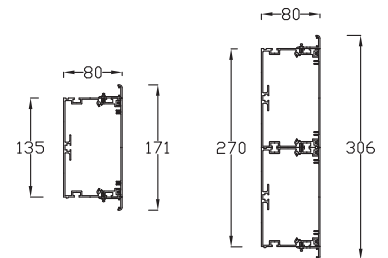
## PROFILE OVERVIEW



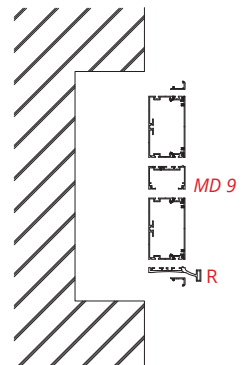
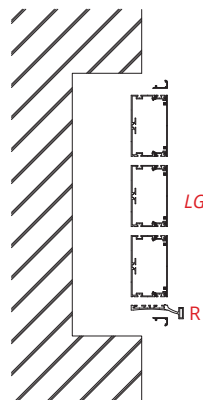
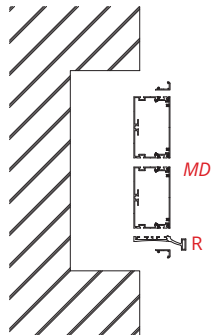
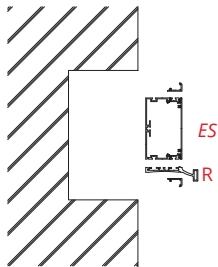
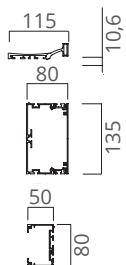
This image is for general demonstration only. The number of services varies according to the specifications given by each customer.

- a - Compartment for electrical components
- b - Electrical entry fed
- c - Data socket
- d - Electrical socket
- e - Frame
- f - DIN rail (load 40kg/mt)
- g - Gas outlet
- h - Gas entry fed
- i - Compartment for gas components
- j - Vertical pole for accessories

## STANDARD MODEL DIMENSIONS



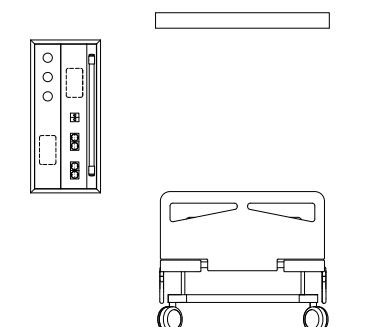
## PROFILES' DIMENSIONS



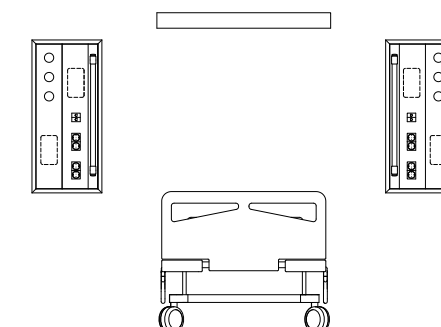
## SECTIONS CONFIGURATIONS

## CONFIGURATIONS

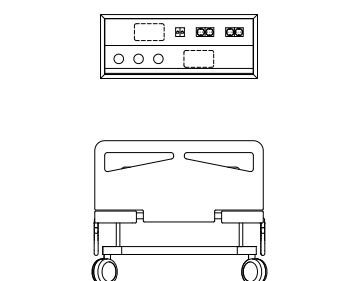
### ONE SIDED VERTICAL SOLUTIONS



### DOUBLE SIDED VERTICAL SOLUTIONS

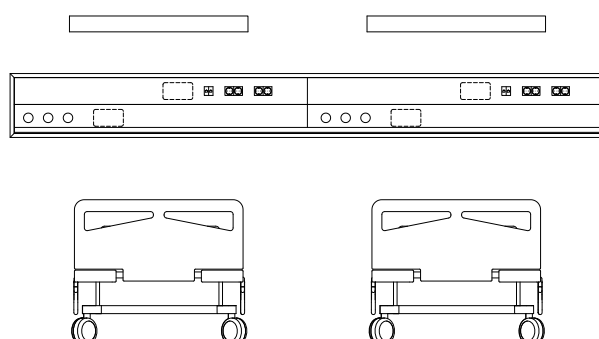


### HORIZONTAL SOLUTION



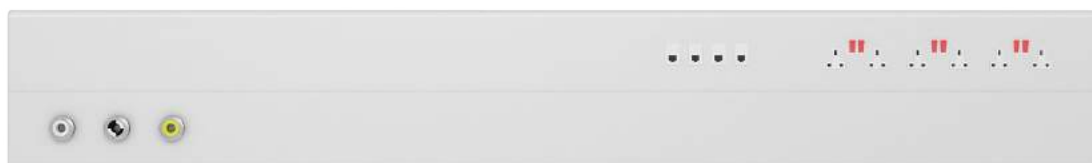
The recessed PLUS range gives a number of solutions that can fulfil any architectural and technical requirement. From single to two/multiple beds these units can be configured vertically or horizontally with one, two and even more profiles. Continuous twin solution is also available to serve two beds with one only solution.

### HORIZONTAL TWIN SOLUTION





## PLUS - HTM WALL MOUNTED

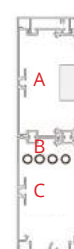


## INTRODUCTION

LM MEDICAL DIVISION has developed a number of specific versions which can fully comply with the strictest HTM and BS regulations. Based on our PLUS MD and LG we have designed dedicated units featuring specific details that can fully satisfy the British technical memorandum:

- Panel mounted sockets with no visible screws
- Dedicated metal segregation boxes for each position of the following:
  - o Voice/Data or IM&T services;
  - o Nurse call module;
  - o Mains, ELV and SELV electrical services;
  - o Medical gas terminal units;
  - o Surface mounted examination light;
- Electrical wiring according to BS 7671;
- Pre-gassing according to HTM02-01.

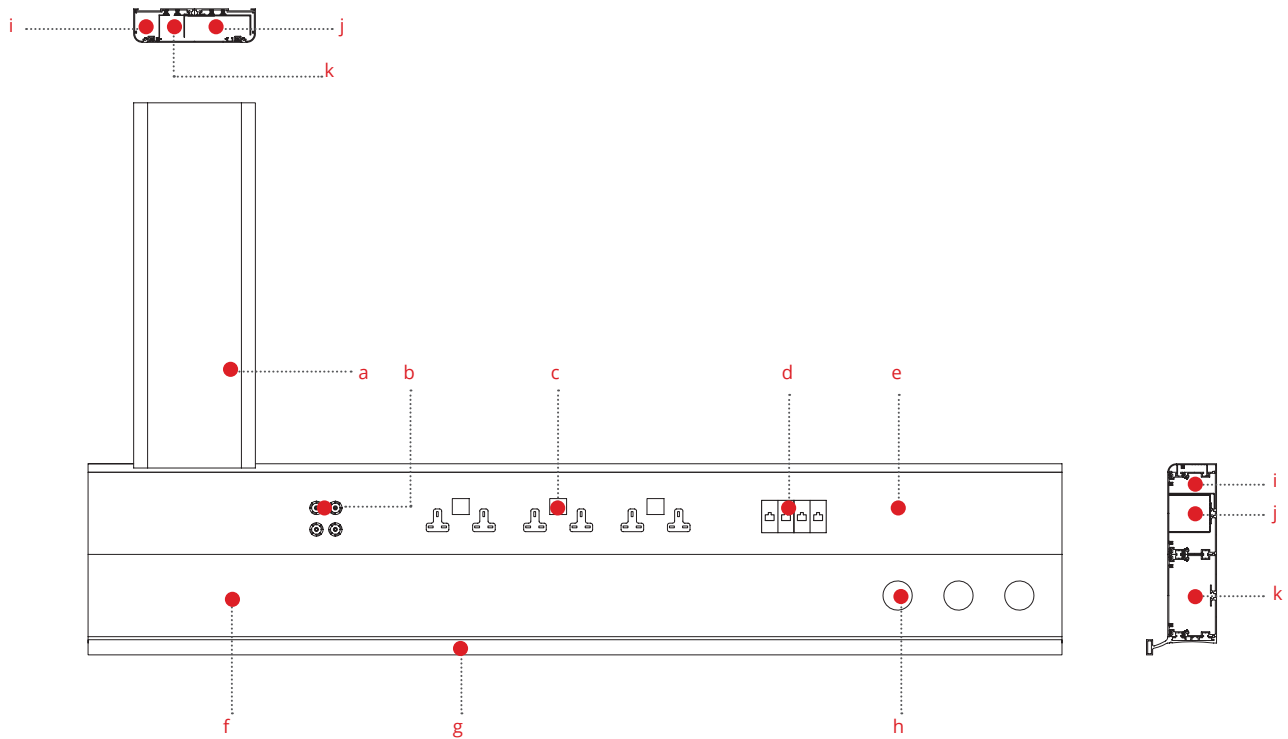
Upon request a dedicated **riser** can be supplied. Like the unit, the riser will guarantee the possibility to segregate gases, low and high voltage.



## COMPONENTS

- A - Electrical compartment
- B - Gas piping
- C - Gas compartment

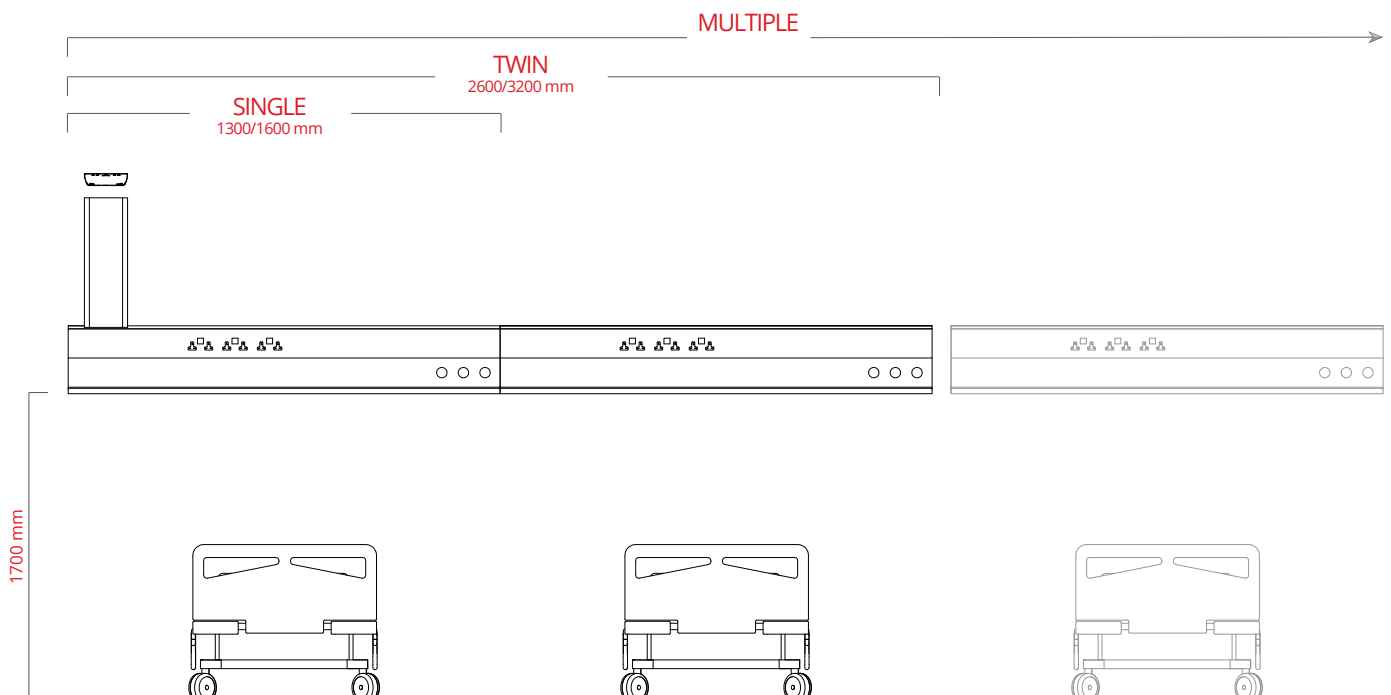
## PROFILE OVERVIEW



This image is for general demonstration only. The number of services varies according to the specifications given by each customer.

- |  |                              |
|--|------------------------------|
| a - Riser for electrtrica/gas/data passage | g - DIN rail (Load 40 Kg/mt) |
| b - Equipotential ground socket            | h - Gas outlet               |
| c - Electrical socket                      | i - Data segregation         |
| d - Data socket                            | j - Electrical segregation   |
| e - Compartment for electrical components  | k - Gas segregation          |
| f - Compartment for gas components         |                              |

## CONFIGURATIONS



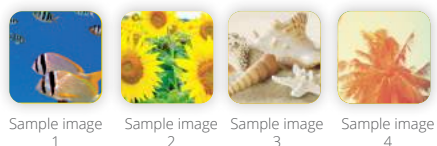
This image is for general demonstration only. The number of services varies according to the specifications given by each customer.



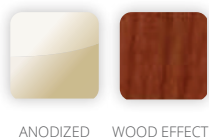
## ILLUSTRATIVE COLOUR CHART FOR ALUMINIUM PROFILES



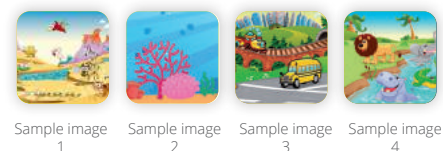
## SPECIAL PATTERNS AND IMAGES



## SPECIAL FINISHINGS



## SPECIAL PEDIATRIC PATTERNS AND IMAGES



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.

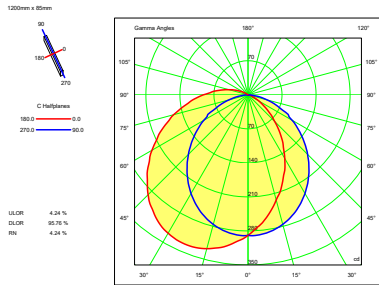
**Please contact us to receive the full range of available finishes.**



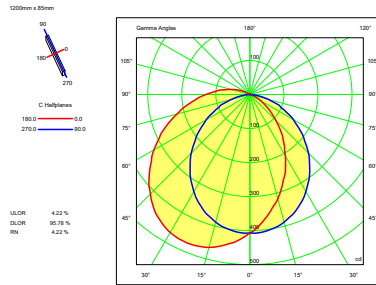
## LIGHTING PLOTS

### LED lighting

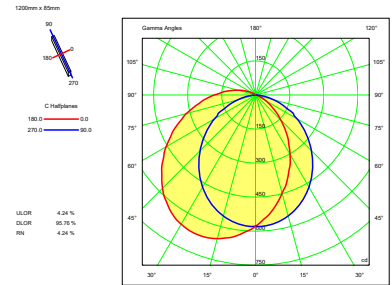
1x8W LED



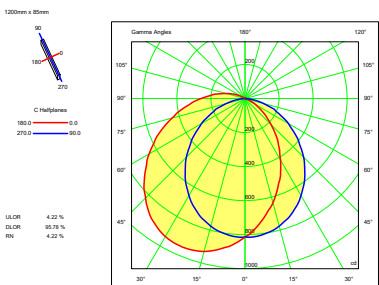
1x12W LED



2x8W LED

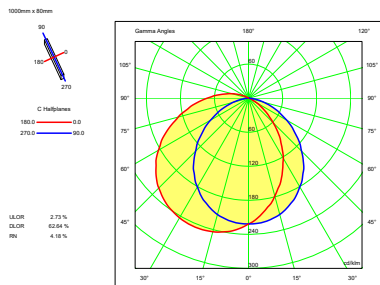


2x12W LED

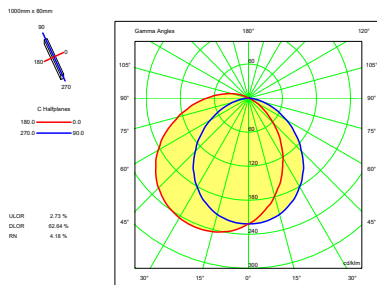


### Fluorescent lighting

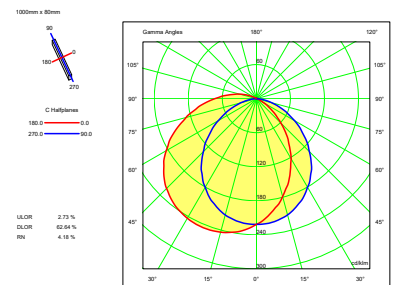
1x24W T5



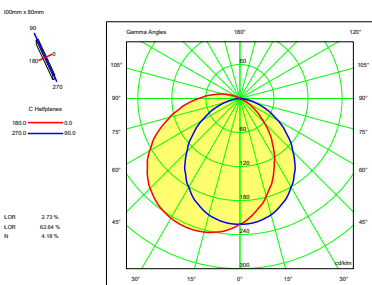
1x39W T5



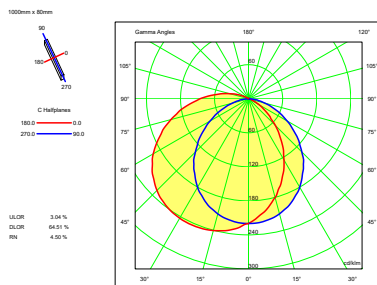
1x54W T5



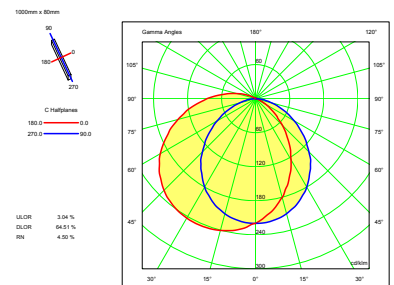
1x80W T5



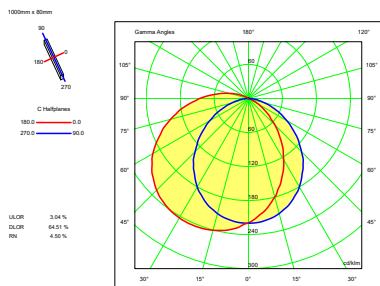
2x24W T5



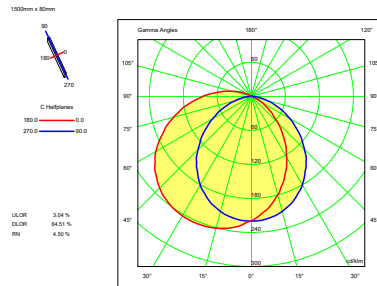
2x39W T5



2x54W T5



2x80W T5



## 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). Tests carried out on end-of-line product form an integral part of this manual.
EC CERTIFICATE 1548/MDD	The devices are made in compliance with Directive 93/42/EEC concerning medical devices Annex II with certification CE0051.
Regulation	The equipment should be <b>considered class IIb</b> .
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 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	220/230 V-AC 50/60 Hz different supply voltage available upon request.
Low voltage	12/24V-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 bed head unit does not require routine standard maintenance however a long term program can be adopted where required. Medical gases and electrical components are mechanically separated to ensure no special caution during maintenance or servicing is required.
Cleaning	The epoxy-polyester paint or the anodized finishing 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 installation.
Wall fixing	Screwed onto the wall.
Aluminium	Structural profile not less than 1.8mm/cover profile not less than 1.8mm Alloy 6063 T6.
Quality management systems	<b>ISO 9001:2008</b> <b>EN ISO 13485:2012</b>



ISO 9001:2008



REG. N. IT-79003



EN ISO 13485:2012



LM MEDICAL  
DIVISION

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[www.lmmmedicaldivision.com](http://www.lmmmedicaldivision.com)

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