Pendant systems

by EMALED

What is Pendant systems?

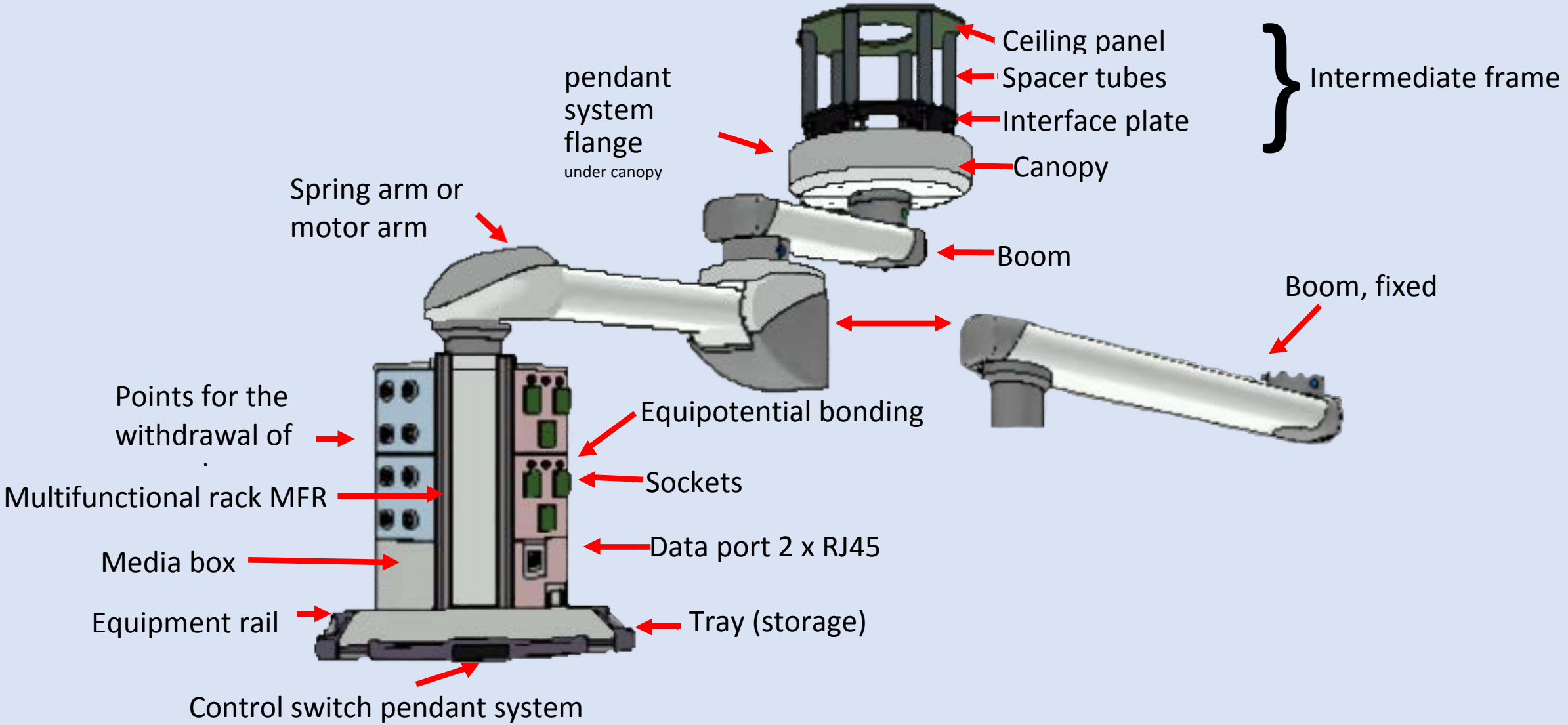
Pendant systems are used for the supply of medical gases and electrical and data connections in the operating room. All supply lines are collected on one interface plate located on the ceiling. The fixing on the ceiling is similar to the surgical lights, however, understandably, with larger dowels and more massive ceiling discs. As, on suspended ceilings, the interface plate sits directly above the dropped ceiling, intermediate frames are often used.

Pendant systems are used in different areas of a hospital:

- In operations, as anaesthetics or surgery pendant system
- In endoscopy
- At intensive care units

Pendant systems help prevent cables and tubes lying around on the floor of the operation rooms and thus prevent accidents and facilitate the cleaning of the operation rooms after surgery.

Structure of a pendant system



Intermediate frame	Similar to the surgical lights.
Canopy	Similar to the surgical lights.
Boom	For expansion of the range as well as better positioning of the pendant systems. A boom is not strictly necessary.
Boom, fixed	Most simple boom type without elevation.
Spring arm	Most simple height-adjustable possibility for pendant systems. Also including cases when load is changed, spring arms must be set by a technician. The spring assemblies in the spring arm must thereby be set. A spring arm is not appropriate for alternating loads.
Motor arm	An electric motor is used for lifting and releasing, thus making a precise setting possible, regardless of the load, up to the max. weight (per pendant systems by EMALED, approx. 115 kg).

Friction brakes	A purely mechanical brake with brake screws, the same as on the surgical lights.
Air-brake	The brake runs on compressed air and thus requires a compressed air connector on the pendant systems.
E-brake	The e-brake is operated on electric power and is almost wear-free.
CGU	Central Gas Unit. The medical gases are fed into a pipe network system in the hospital and thus taken into all areas where they are needed.
Points for the withdrawal of med. gases	The points of withdrawal are standardised plug outlets which are coded differently and thus make the medical gases usable with appropriate plugs. The common medical gases are: Oxygen, compressed air, nitrous oxide, vacuum, CO2. Other gases are also partially present, and not all of the listed gases are always present.
Equipment rail	The standardised equipment rail is used for the fastening of accessories on the pendant systems.

Multifunctional rack MFRA	Clamping system for accessories and trays on the pendant system.
Tray	Storage for mounting on the MFR - height-adjustable (with tools). Each tray is loadable with max. 50 kg, up to the permissible total load of the pendant system.
Data sockets	Connection sockets for networks
Equipotential bonding	Possibility to connect all electrical devices in the operation room with each other, in order to avoid any dangerous voltage between devices in case of error of a device.
Air motor	Connection for tools operated on compressed air in the operation room.
NGA or AGFS	Suction of anaesthetic gases in anaesthesia.

Standard pendant system

Basic
Performance
Premium I
Premium II

What does “Standard pendant system” mean?

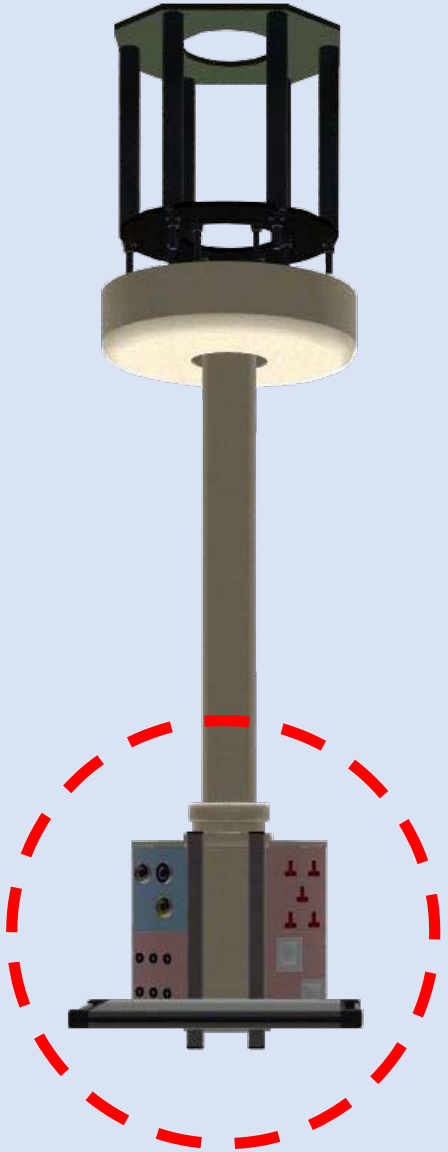
- The intended installations can only be adjusted within very narrow areas.
- The prices for these pendant system are fixed.
- The usage of the pendant system is designed for a raw ceiling of up to 4000 mm and a finished ceiling of up to 3000 mm, the intermediate frame is a constituent part of the pendant system.
- The delivery times are shorter with Standard pendant system, as no individual planning nor testing must be carried out.
- We can plan and install anything that is not covered by the Standard. However, additional planning requires more time.

Basic

The “Basic” series offers basic equipment for the operation room with an excellent price-performance ratio.

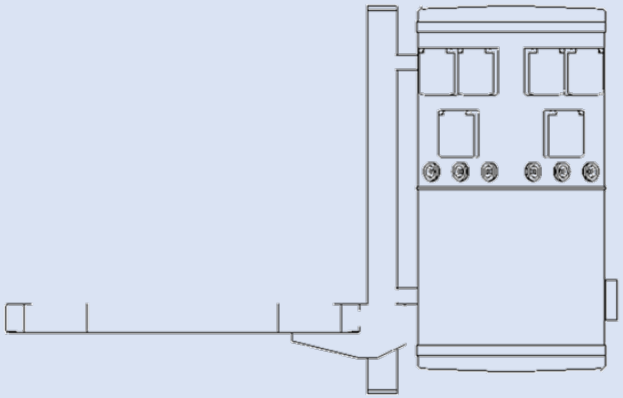
The media box can be rotated around the stand tube by 320°.

The pendant system is not height-adjustable.

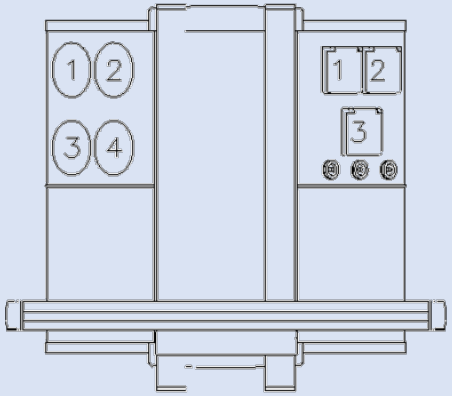


Basic

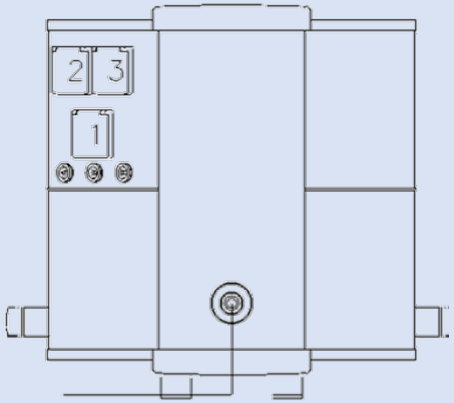
Right view



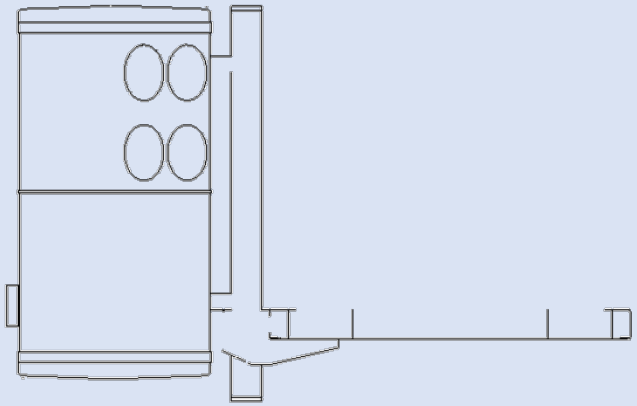
Front view



Back view



Left view



Surgery

- 4 x gas withdrawal point Air5
- 1 x air motor, optional
- 5 x sockets
- 1 x storage
- 400 mm length of media box

Anaesthesia

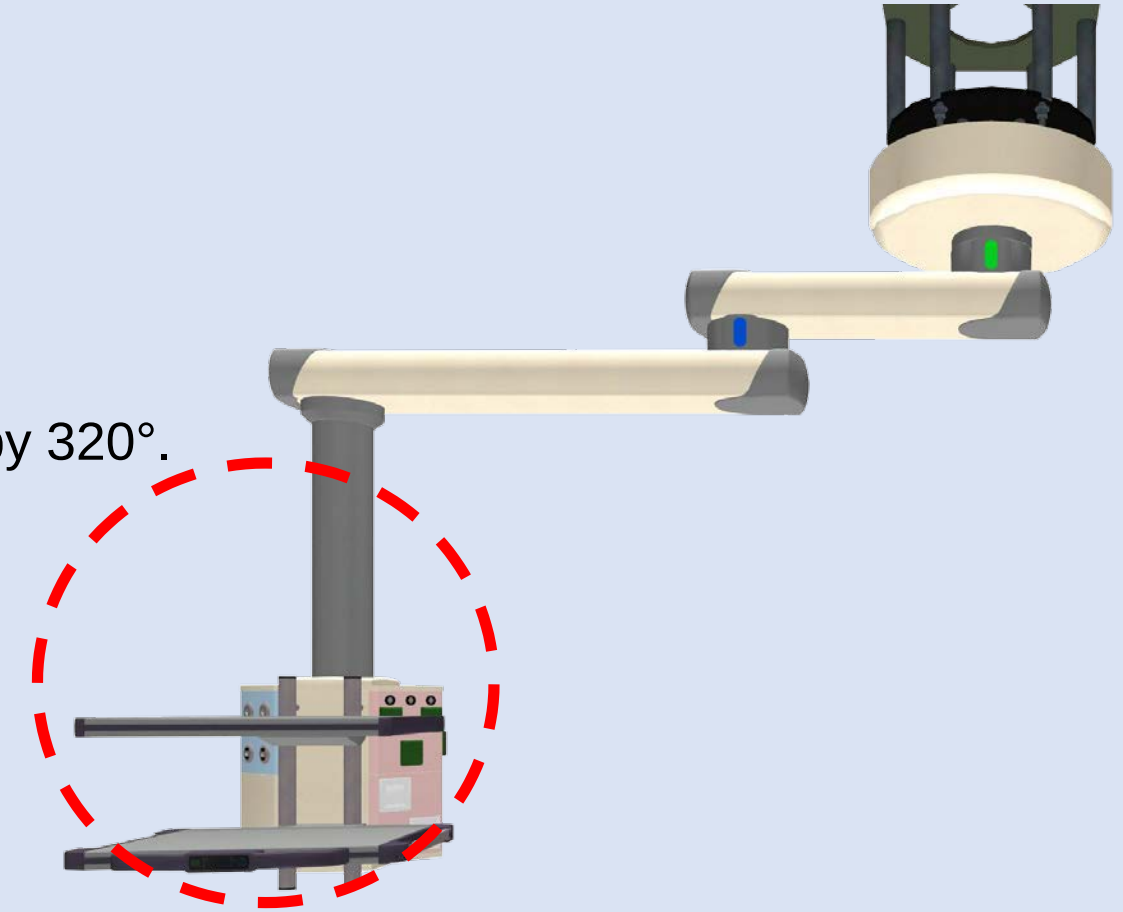
- Gas withdrawals points, each 2x, for O2 and Air5
- 1 x AGFS
- 5 x sockets
- 1 x storage
- 400 mm length of media box

Performance

The “Performance” series offers expanded basic equipment for the operation room.

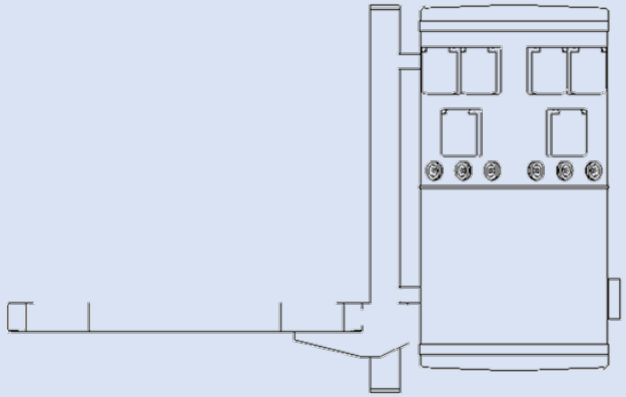
The pendant system is not height-adjustable, has 2 swivel arms, each of which is 800 mm long and has a swivel area of 320°.

The media box can be rotated around the stand tube by 320°.

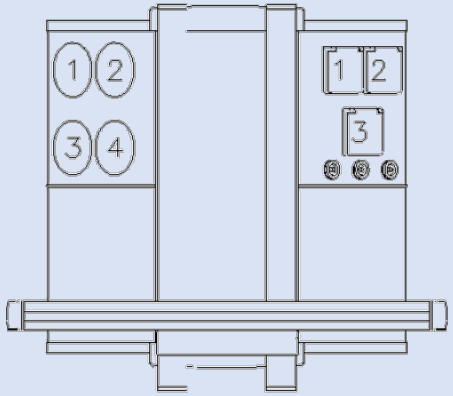


Performance

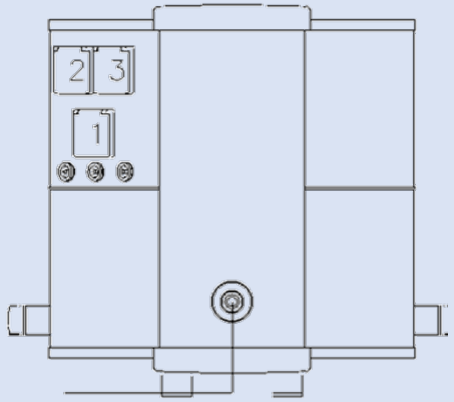
Right view



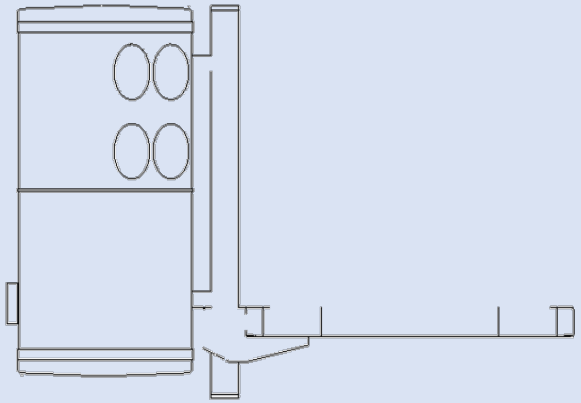
Front view



Back view



Left view



Surgery

- 4 x gas withdrawal points Air5
- 1 x air motor, optional
- 6 x sockets
- 2 x storage
- 400 mm length of media box
- 600 mm length of media box with BS

Anaesthesia

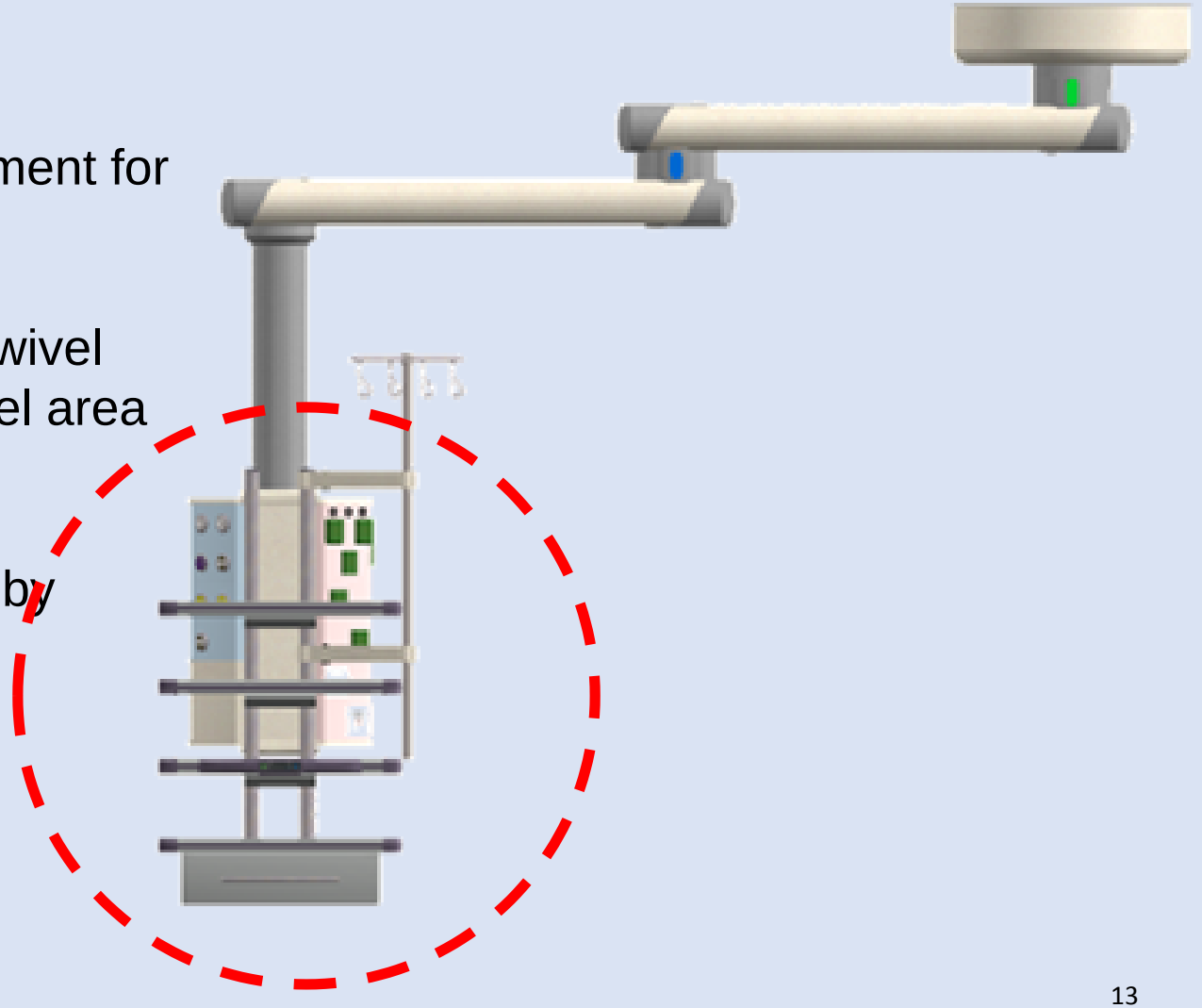
- Gas withdrawal points, each 2x, for O2 and Air5
- 1 x AGFS
- 5 x sockets
- 2 x storage
- 400 mm length of media box
- 600 mm length of media box with BS

Premium II

The “Premium II” series offers expanded basic equipment for the operation room.

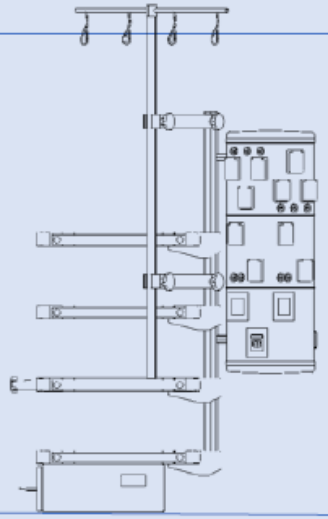
The pendant system is not height-adjustable, has 2 swivel arms, each of which is 1000 mm long and has a swivel area of 320°.

The media box can be rotated around the stand tube by 320°.

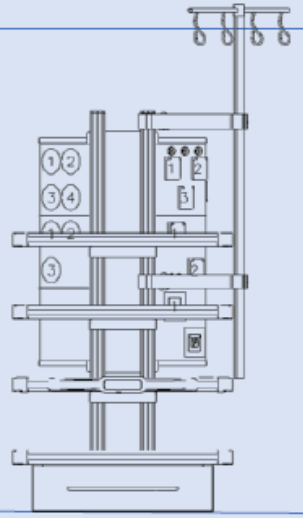


Premium II

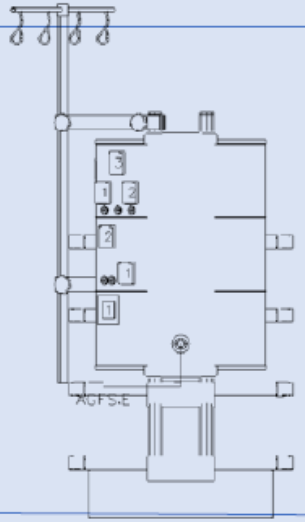
Right view



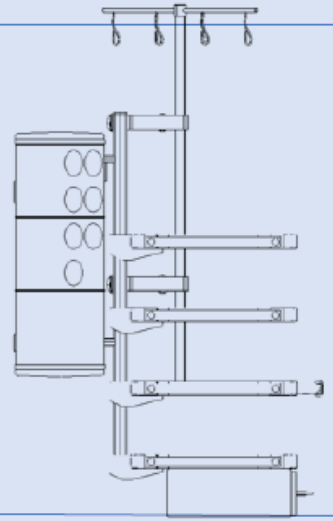
Front view



Back veiw



Left view



Surgery

- Gas withdrawal point 4 x Air5 and 2 x Vac
- 1 x air motor, optional
- 10 x sockets
- 4 x storage, thereof 1 x with drawer
- 1 x data module with 2 x RJ45 Cat6
- 1 x infusion frame
- 600 mm length of media box with BS

Anaesthesia

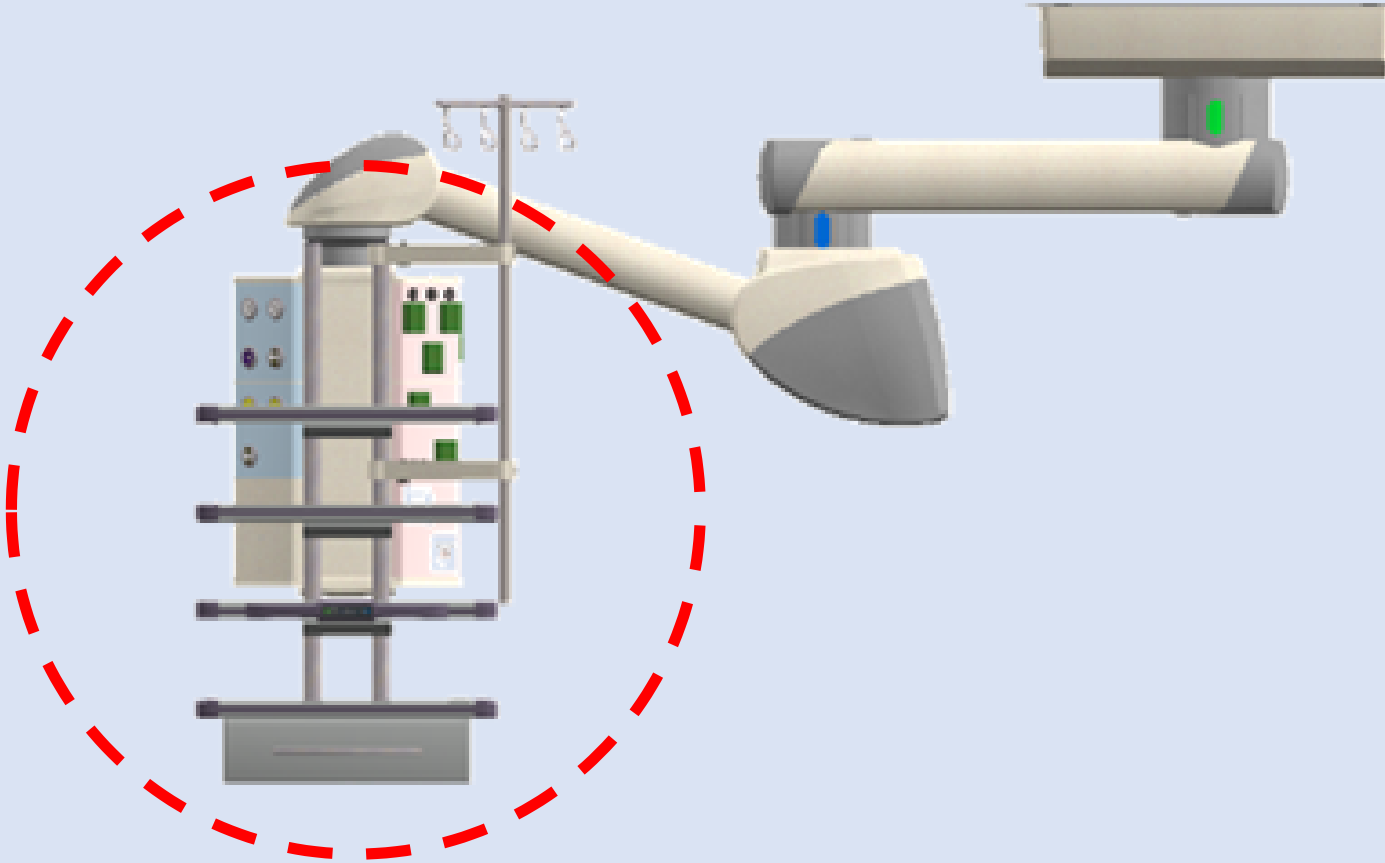
- Gas withdrawal point 2 x O2, 2 x Air5, 1 x Vac and 1 x N20
- 1 x AGFS
- 10 x sockets
- 4 x storage, thereof 1 x with drawer
- 1 x data module with 2 x RJ45 Cat6
- 1 x infusion frame
- 600 mm length of media box with BS

Premium I

The “Premium II” series offers upscale operation room equipment with an excellent price-performance ratio.

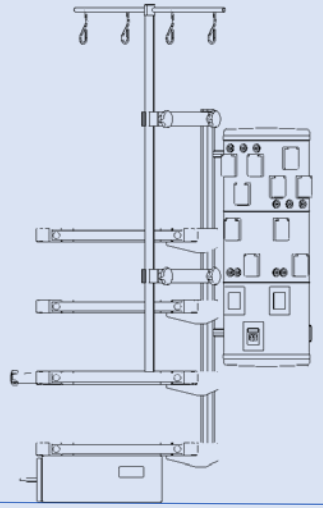
The pendant system is height-adjustable and has one swivel arm and one motor arm, each of which is 1000 mm long and has a swivel area of 320°.

The media box can be rotated around the stand tube by 320°.

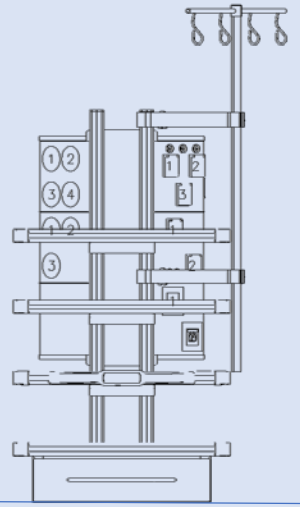


Premium I

Right view



Front view



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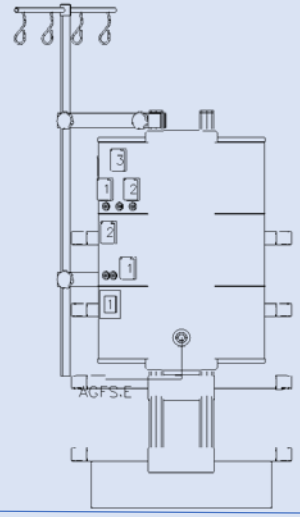
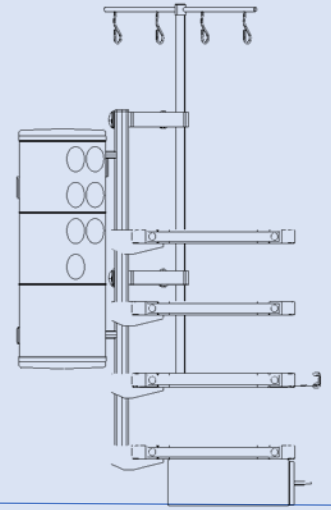


Left view



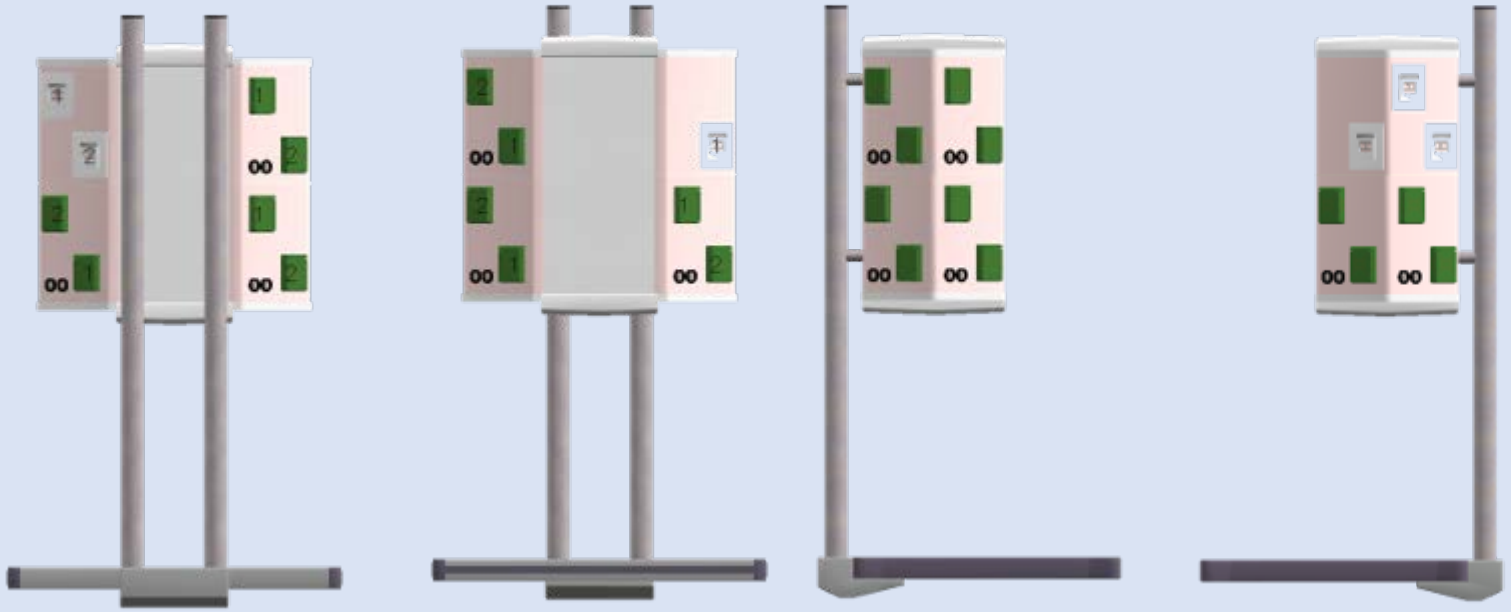
Surgery

- Gas withdrawal point 4 x Air5 and 2 x Vac
- 1 x air motor, optional
- 10 x sockets
- 4 x storage, thereof 1 x with drawer
- 1 x data module with 2 x RJ45 Cat6
- 1 x infusion frame
- 600 mm length of media box with BS

Anaesthesia

- Gas withdrawal point 2 x O2, 2 x Air5, 1 x Vac and 1 x N20
- 1 x AGFS
- 10 x sockets
- 4 x storage, thereof 1 x with drawer
- 1 x data module with 2 x RJ45 Cat6
- 1 x infusion frame
- 600 mm length of media box with BS

Mediabox med. gases



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Max. equipment:

- 6 sockets with 2 electric circuits
- 6 equipotential bonding
- 1 data socket 2 x RJ 45 incl. cable
- 2 different gases, each with 2 withdrawal points, in accordance with DIN, or 2 withdrawal points for vacuum in accordance with DIN
- 1 x storage
- Additional load media box: 18 kg