IV-Series



modul technik
medical supply systems and equipment

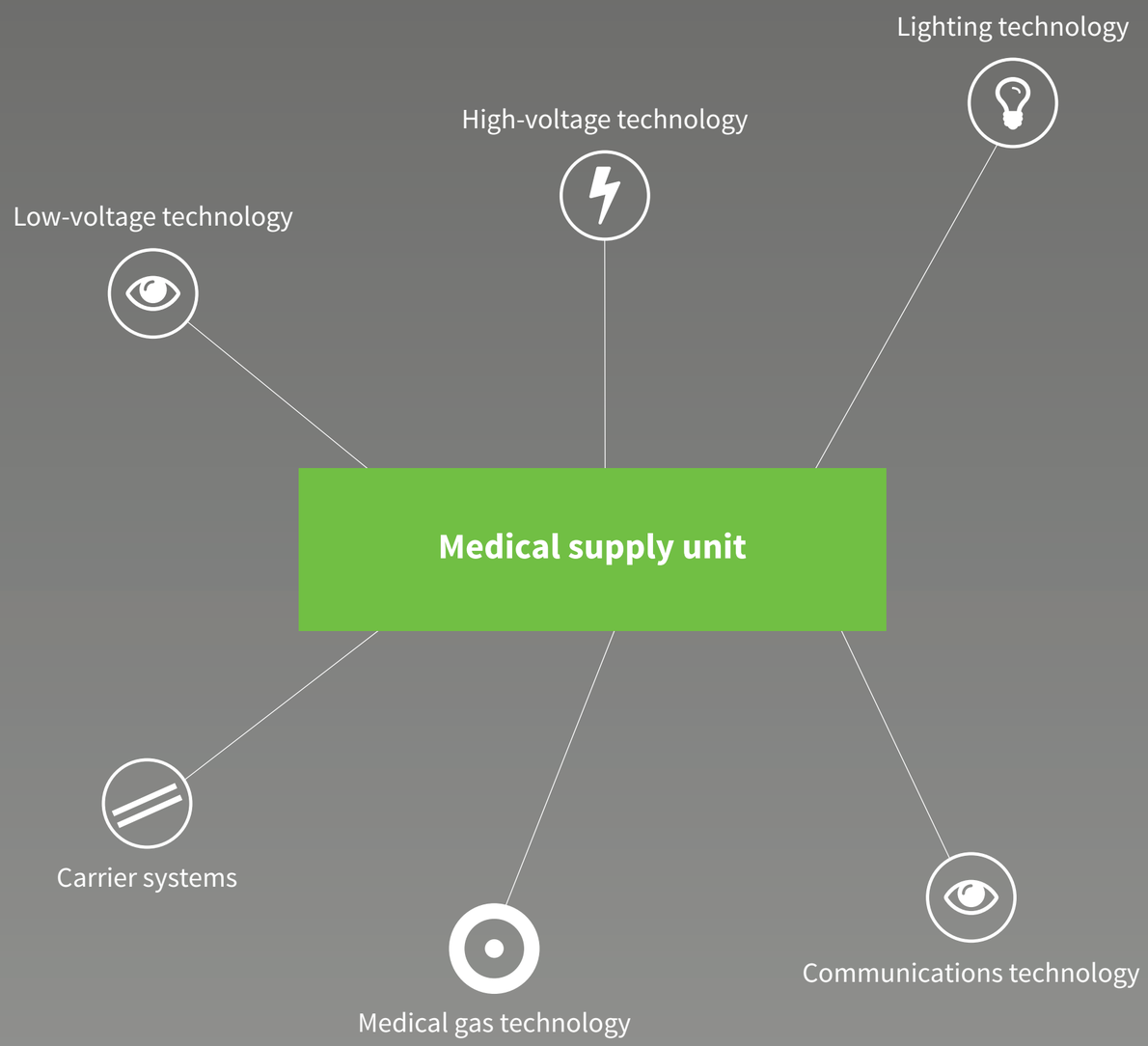


fig. 001 | Chart Medical Supply System

OUR MEDICAL SUPPLY UNITS

OUR MODULAR CONCEPT: FLEXIBLE COMBINATIONS AND TOTALLY CUSTOMISABLE!

What makes the medical supply units from **modul technik** so special? Actually everything! This is because our Class B medical products are modular in their design and can be easily and cost-effectively adjusted through combinations and customisations to the most diverse areas of application.

This is how we meet all the essential requirements for the optimum supply of the patient place with low and high voltage current, data and communications technologies and medical gases, and thereby enable the adaptation of diverse medical apparatus. Our individual design options as regards the colour, material and image motifs applied make each unit that we deliver a unique, connection-ready device.

Our ideal scenario is when we can work closely with you early in the planning phase of your facility. Then we can give architects and planners valuable and project-specific advice and assistance, saving you both time and effort.

All our basic modules are made from high-quality aluminium with its inherent long durability and ease of use. The powder coatings of all extruded aluminium profiles take specific hospital hygiene requirements into account and can be supplied in any colour you want from the RAL or NCS colour scale.

For those areas where particular comfort is to be provided, we also use wood décor and decorative graphics to transform a technical assistance device into an elegant piece of furniture. You can choose from our standard range or choose whatever you want. Whether you want atmospheric photos, artistic graphics, paintings or image-text combinations, we create all graphics in high-resolution, brilliant quality digital printing.

It goes without saying that all our products meet the “Essential Requirements” of EU Directive 93/42/EEC and are manufactured according to DIN EN ISO 11197. Our products only leave our premises after rigorous final testing for functionality and workmanship quality. This is also guaranteed by our quality management system that is certified according to DIN EN ISO 9001 and DIN EN ISO 13485.

STANDARD DESIGN

You do not have any customisation requirements and simply want to install proven and well-tested systems. Then we recommend our standard units to you which are described in more detail in an information box on many product pages. We can offer you these standard products at special conditions.

GENERAL EQUIPMENT FEATURES

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GENERAL EQUIPMENT HIGH-VOLTAGE TECHNOLOGY

The medical supply unit can be equipped with both earthed sockets (230 V/16 A with control light) and with CEE sockets (230 V/16 A 3 pole or 400 V/16 A 5-pole). The brand, number and electric circuit types of the installation elements and the voltage type of the supply voltage are specified depending on the project. Potential equalisation sockets can also be specified in accordance with the number of sockets.

As a preference PEHA COMPACTA safety sockets are installed.

Custom installation of additional elements is also possible. The electrical connecting terminal block is factory-installed and wired to the electrical equipment.

GENERAL EQUIPMENT MEDICAL GAS TECHNOLOGY

The medical supply unit is connected to the on-site medical gas supply at the central feed-in point. Current is usually supplied to the media either laterally, at the back or from the top directly into the respective media-specific channels or ceiling columns. The copper pipes installed inside the supply unit meet the quality requirements for medical gases according to DIN EN ISO 7396-1.

If required, the system is delivered ready for use with integrated tapping points according to DIN EN ISO 9170-1 and DIN EN ISO 9170-2. Market-available brands such as DRÄGER, GREGGERSEN, HEYER, MEDAP or other country-specific brands can be installed. Based on the specific project, the specialist planners will decide whether single or dual-circuit systems are to be used.

GENERAL EQUIPMENT MONITORING AND COMMUNICATIONS TECHNOLOGY

The connection sockets for monitors and patient monitoring devices are usually provided by the operator. In other cases we can arrange for delivery in consultation with the planners. Whereas specialist companies connect the monitor systems, we of course install all connector systems, sockets and IT inputs in accordance with manufacturer specifications. This is the best possible preparation for a fast and smooth apparatus connection after the installation of the supply unit.

GENERAL EQUIPMENT APPARATUS CARRIER SYSTEM G 1000

The apparatus carrier system (25x10 mm) is used to attach medical accessories such as flowmeters, catheter baskets, examination lights and much more. Consult our comprehensive Accessories Catalogue for a wide range of equipment options.

GENERAL EQUIPMENT LIGHTING TECHNOLOGY

There are many different lighting technology options available for the optimum lighting of the workplace and for the patient environment.

These include lamps for indirect general lighting, reading and examination lighting and lamps to provide lighting orientation. All technical data and lighting options can be found in the table on the respective product page.

Lighting modules meet the standards listed in DIN 5035 “Interior room lighting by artificial light” - Part 3, lighting in hospitals and in DIN EN ISO 11197. The lighting modules used in 2E user group rooms are generally equipped with low-stray field ballasts and are subjected to an EMC test.

Furthermore, many units can also be equipped with the bio-dynamically effective Visual Timing Light. More information on this can be found in the next chapter.

ASSEMBLY, CLEANING, MAINTENANCE AND REPAIR

ASSEMBLY

The medical supply unit can be assembled and fixed to both solid and lightweight construction walls. For lightweight construction walls an additional supporting structure is required on-site. For ceiling-suspended supply units, supporting structures are used based on the specific project.

CLEANING

The supply unit can be cleaned with standard cleaning agents and disinfected with alcohol-free disinfectants.
A high-quality electrostatic powder coating has been applied to the surface. Blank parts are made of anodised aluminium or stainless steel. The plastic components are cleaning and disinfectant-resistant.

MAINTENANCE AND REPAIR

The system must be maintained for the first time after 5 years and then after every 2 years. A contractual service agreement can be concluded for the maintenance work if required. More information can be found in the respective operating instructions.

ACCESSORIES

Our comprehensive range of accessories means you can set up your work area exactly as you want it. Consult our Accessories Catalogue to find out about the wide range of options available to you.

IV 1054



fig. 047 | IV 1054 in combination with modulux pure and equipment carrier rail G1000

OUR INTENSIVE CARE CLASSIC

The benefits of the **IV 1054** can be briefly summarised as follows – a clear design which can be equipped with all the media required for intensive care and the recovery room and which is robustly finished and mounted connection-ready and with a media feed-in at a central input point.

In the same way as all **modul technik** products, **IV 1054** offers maximum flexibility through a wide-ranging accessories range. Apparatus carrier systems and equipment rails enable a very accessible, space-saving and transparent installation of all apparatus, infusion and lighting elements. However, there is also the option to order the system in single, double, triple channel versions. In all variants the media are physically separated from each other by a multi-chamber system which increases the functional safety. We plan medical gases, high voltage current, data and communications technologies according to your needs. modulux pure is the ideal enhancement as a lighting solution.

And we are pleased to take your design wishes into account. We design the screw-free and thereby safe and hygienically designed aluminium surfaces to be either anodised or electrostatically powder-coated in any RAL or NCS colour.

IV 1054

OUR INTENSIVE CARE CLASSIC

TECHNICAL DATA

(country-specific differences possible)
Further techncial data and design options on request

Electric specifications
Nominal voltage: 230 V - 240 V / 50 Hz - continuous operation
Protection class: I
Protection type: IP 20

Operating pressure of medical gas technology
Oxygen: 5 bar
Compressed air: 5 bar
Vacuum: - 0,8 bar
CO_2: 5 bar
AGSS: 5 bar

General information
Media current feed: Rear, from top or side
Optional equipment rail: Above and below
Material of optional equipment rail: Stainless steel or aluminium
Number of media channels: One to four
Additional load: max. 50 kg/m

tab. 022



fig. 048 | IV 1054, customized solution — *Unfallkrankenhaus Berlin, Germany*



fig. 049 | IV 1054 in combination with equipment carrier system FS 4500 — *Deutsches Herzzentrum Berlin, Germany*

IVV 1054



fig. 050 | IVV 1054 with mounting tubes

MORE SPACE IN INTENSIVE CARE THROUGH ITS VERTICAL DESIGN

All the benefits of the **IV 1054** can also be found in the **IVV 1054**, which due to its vertical design is particularly well-suited for use where room conditions do not permit a horizontally arranged system.

Its interior equipment also reflects this rotation and **IVV 1054** is distinguished by its single, double or triple channel system, a central feed-in point for all integrated media, multi-chamber systems for separating media within the system, wireless and screw-free surfaces and total flexibility regarding media placement with high voltage current, medical gases, data and communications connections.

The optionally available supporting tube systems (rigid or swivel) are used to attach monitors, for infusion management or other medical apparatus. This ensures transparent operation and supports the professional treatment of patients.

This can be combined with the modulux pure lighting system that is available, as the **IVV 1054**, in any electrostatically powder-coated RAL or NCS colour. As an option, the aluminium surfaces of the **IVV 1054** are anodised.

Your additional benefit is that **IVV 1054** is delivered pre-assembled and connection-ready and requires only one central connection point for all media which can be fed either at the back or from the top.

IVV 1054

MORE SPACE IN INTENSIVE CARE THROUGH ITS VERTICAL DESIGN

TECHNICAL DATA

(country-specific differences possible)
Further technical data and design options on request

Electric specifications
Nominal voltage: 230 V - 240 V / 50 Hz - continuous operation
Protection class: I
Protection type: IP 20

Operating pressure of medical gas technology
Oxygen: 5 bar
Compressed air: 5 bar
Vacuum: - 0,8 bar
CO_2: 5 bar
AGSS: 5 bar

General information
Media current feed: Rear or from top
Optional support tubes: Side-mounted, rigid or swivel
Number of media channels: One to four
Total additional load: max. 100 kg/m

tab. 023



fig. 051 | IVV 1054, equipping example

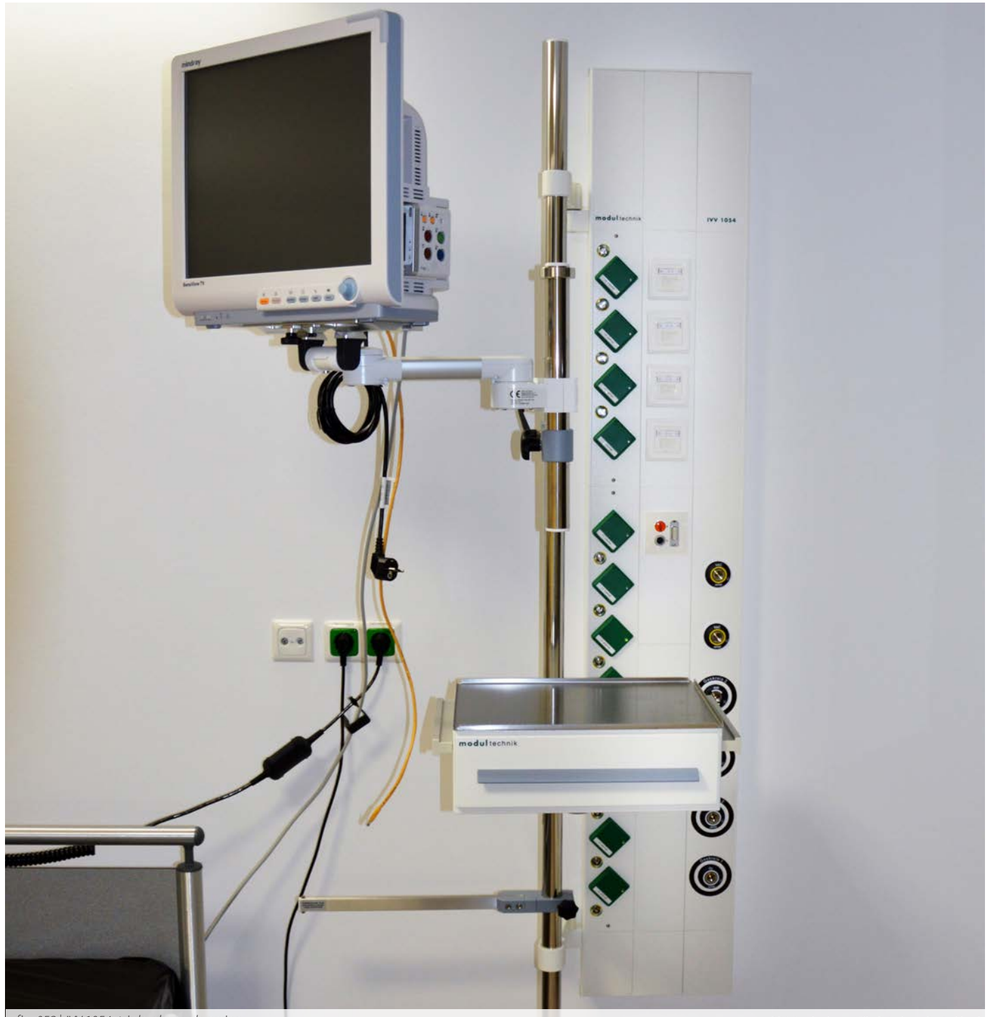


fig. 052 | IVV 1054, triple-channel version

DRK-Krankenhaus Mölln-Ratzeburg, Deutschland

IV 1054 + **modulux pure** + **FS 4500**

fig. 056 | IV 1054 in combination with modulux pure and FS 4500

DIVERSE COMBINATIONS ARE OUR STRENGTH

modul technik's greatest strength is reflected in the countless combination options of the various system components. This becomes clear, for example, in the **IV 1054**, **modulux pure** and **FS 4500** systems which have been closely coordinated to each other.

The central media supply is provided via the **IV 1054** which can be designed as a single, double or triple-channel version and is supplied via a central connection point with all media. modulux pure positioned above includes various technical light components which provide indirect room lighting, examination lighting and patient reading lights. Further media and connections, e.g. for medical gases, can also be integrated into modulux pure.

The combination example is completed with the flexible **FS 4500** apparatus carrier system.
Here all devices, pumps, infusions and materials required in intensive care always have their place ready to hand. This is ensured by the wide equipment range which includes equipment rails, drawers, retractable keyboards, equipment consoles and infusion holders.

We will assemble the system according to what you want. Depending on the treatment need, the position of individual accessory parts can also be changed at any time with just a few hand movements.

modul technik

Medizinische Versorgungssysteme und Geräte
medical supply systems and equipment

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The technical data in the catalouges as well as the weight, load and dimensions have been issued to the best of our knowledge.
Errors reserved. We reserve the right to make technical alterations for the purpose of progress.

TÜV NORD CERT GmbH ISO 9001/ISO 13485

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