

# DATA NEXPAND



# **NEXPAND SR**

FOR OPTIMIZING SWITCHING AND ROUTING INFRASTRUCTURE INSTALLATION, OPERATION, AND MAINTENANCE





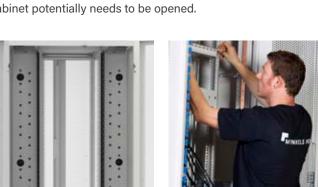
# **NEXPAND SR**

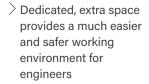
# WHAT WE PROMISE

The Minkels Nexpand SR cabinet is an advanced solution designed for Middle of Row (MoR) configurations in data centers, emphasizing innovation, flexibility, and efficiency. This cabinet is specifically engineered to enhance the installation, operation, and maintenance of switching and routing infrastructure. It aligns perfectly with MoR principles to simplify data center management challenges like cable management and equipment access.

This dedicated switching and routing infrastructure cabinet helps save time during initial hardware and cabling installation. For ongoing hardware, cable management and maintenance, the cabinet ensures a precise, safe, and secure solution. Thanks to the dedicated and spacious environment, along with the correctly specified accessories the SR cabinet allows for optimal cable management. It avoids any problems due to air mix and provides best-in-class airflow management, specifically in a containment set up.

In a containment solution, the Nexpand SR cabinet range provides one dedicated, central location for all of the required switching and routing infrastructure. This frees up more space for actual servers in the server cabinets and means that when switching and routing work is to be carried out, one single cabinet can be accessed. This scenario creates a much more efficient and safe way of managing such tasks as opposed to the current scenario, where every single cabinet potentially needs to be opened.







> Faster installation times because of one central hub, more efficient switching, routing, and associated cabling working environment



> 42, 47, and 52 U options, standard 1200mm depth and widths of either 1000 or 1200mm





> Fully airtight, fully compatible with the Nexpand range of cabinet and cable accessories. also fully customizable



# **HOW DOES IT WORK?**

In a traditional data center IT hardware corridor layout, servers are housed in standard cabinets, with the top of the cabinet also containing a switch and/ or router, along with the associated cabling, which is then distributed, as required, elsewhere through the building.

With the Nexpand SR cabinet range, Minkels has created one central, dedicated location to house all this switching, routing and cabling infrastructure. This innovation promises to transform installation, operation and, most important, maintenance of this critical data center infrastructure in several ways by providing a spacious, well-managed environment, away from the servers themselves.

More space is freed up in the server cabinets for additional server hardware. Switch & routing hardware, cabling installation and maintenance is much easier and faster to accomplish – no more trying to manoeuvre in cramped spaces, no longer the need to open every server cabinet in the corridor. As a result, work carried out on the switches, routers, and accompanying cabling is much safer, secure, and far less labour-intensive – the server cabinets, containing the 'beating heart' of the data center, are left untouched.





Dimensions:		Standard	
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Height	U	42, 47 and 52	
Height	mm	2028, 2250 and 2472	
Width	mm	1000 and 1200	
Depth	mm	1200	
General:			
Colour		RAL 9003 (white) and RAL 9005 (black)	
Static load capacity	kg	1500	
Airflow Management Package		Cabinet standard delivered with Airflow Management Package	



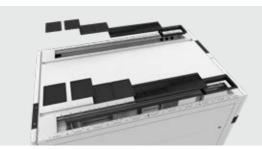
# **NEXPAND SR**

# **CABLE MANAGEMENT**

One of the major advantages of the new Nexpand SR cabinet range is the significant improvement it provides in terms of overall cable management. As already mentioned, the extra space available in the 1000 and 1200 SR cabinets means that cable installation, maintenance, and management are far easier, faster, safer, and more secure than ever before.



- > Faster -thanks to the extra space - no longer does a cabling engineer need to be a contortionist!
- > Easier because there is much more space in which to work.
- > Safer with such an improved working environment, the chances of mistakes being made are all but eliminated.
- Secure the routing and switching infrastructure, including the cabling, is removed from the server cabinets into a dedicated, secure environment.



### **NEXPAND TOP-OF-CABINET ACCESSORIES**

Standard Nexpand top-of-cabinet accessories can be added to the SR cabinets to allow for the provision of cable trays and the like, and the extra wide, 1200mm option has a double inlet for cables – providing significant extra cable entry capacity, along with extra space to handle the cables once inside the cabinet.



### **DOUBLE PLATE DESIGN**

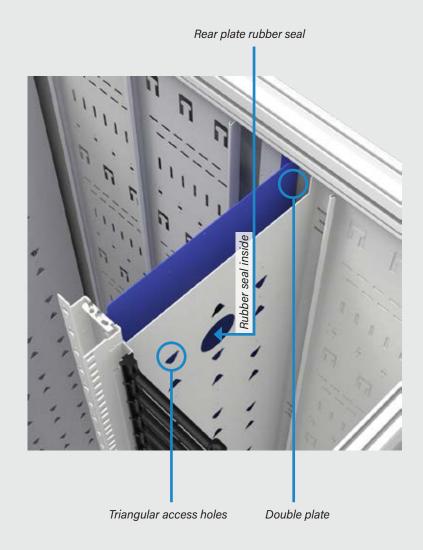
The new SR design also makes use of the space between the cabinet's height beams and side panels. A **double plate design** – with the front plate having **triangular access holes** which allows for some equipment, tools and/or accessories to be attached, alongside the option to use this plate for improved cable management. In simple terms the combination of the extra cabinet space and the triangular access holes means that, no matter what the length of the cables required or the excess cable on the spool, the cables can be routed and subsequently re-routed through the cabinet in any configuration.

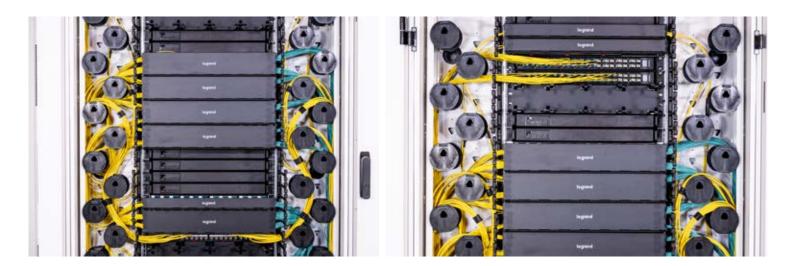
### **REAR PLATE RUBBER SEAL**

The rear plate is completely sealed – ensuring the airtightness for which Nexpand cabinets are renowned. If cables are required to be run from the front to the back of the SR cabinet, then the **rear plate rubber seal** can be opened as necessary but will still provide an airtight environment.

### **CABLE BEND RADIUS MANAGEMENT**

A further benefit of the SR cabinet comes in terms of **cable bend radius management**. While standard Nexpand cabinets have the option of bend radius guides, in the roof, in the cable fingers, or in multiple places within the cabinet, the extra, dedicated space available in the new design means that the chances of fiber cables ever snapping because of restricted space and tight bends are virtually eliminated.







# **NEXPAND SR**

# **AIRFLOW MANAGEMENT**

Minkels has built a deserved, unrivalled reputation for the design and manufacture of truly airtight cabinets. When developing Nexpand, one of our core goals was to provide you with the best airflow management solution to reduce your cooling costs to a minimum. The use of the correct airflow optimisation accessories leads to an enormous reduction in power usage. Minkels has developed accessories which provide concrete products for specific airflow optimisation needs. This expertise provides two major advantages: reduced data costs and environmental impact. The SR cabinet design incorporates Minkels' key measures to ensure optimized data center efficiency.

Our airflow management package seals the space between the vertical mounting rails (VMRs) and the side panels; our solution will cover every possible gap.

# **SMART**

Recognizing that engineers installing IT equipment, cabling, and accessories ideally want to stand inside the cabinet – especially when carrying out work near the top of the unit – the SR cabinet includes an airtight base plate designed to support up to a 100kg load without any deformation. Depending on the depth of your VMR, you can add more plates.

Combined with the already referenced airtight design, truly flexible cabinet layout, and the extra space provided by a dedicated switching and routing environment, these smart attributes – whether incorporated in a standard or customized cabinet format – make the SR range an innovative, efficient, and cost-effective data center infrastructure solution in the market today.

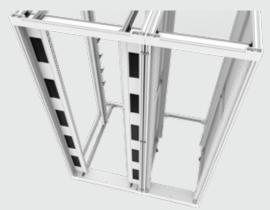
Other smart features include the supply of cable trays on both sides of the cabinet and the integral wheels, which make for easy movement and positioning.





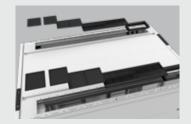
# MINKELS NEXPAND FEATURES

Nexpand SR also benefits from the features of the Minkels Nexpand platform. The Minkels Nexpand platform offers a best-in-class airflow management for improved energy performance, as well as a fully modular and customizable design to best meet the needs of your servers, storage, switches, and other IT equipment. This means that you can complete your cabinet platform with accessories from our extensive portfolio, covering cable management, a range of door and locking options, different roof layouts and PDU mounting options.









## > Frame

Offers unique flexibility through stepless mounting possibilities in all three dimensions of the cabinet. Threaded mounting rails in width, depth and height direction enable stepless adjustibility (for example cable management).

# Door

Clean and minimalistic design with high level perforation.
Full integration of the locking mechanism and cabling (in case of smart lock). Offers high level access security.

# Roof

Smart top-of-cabinet design. The amount of cabling in cabinets has increased considerably. To be able to continue to meet the changing needs, we have developed a cabinet with a smart, optimized design. For example, the top-of-cabinet section contains more space to guide the cables through and the positioning of the entries is improved.

# **ENGINEER TO ORDER**

We understand your needs might be very specific based on the location and conditions of the data center. Therefore there is not one solution to fit all needs. Even with the almost unlimited configurable design options available, it is still possible that your requirements may fall outside of the standard specifications of a data center cabinet.

If the standard portfolio does not accompany all of these needs, we are open to create a special solution in order to meet all of your needs. Whatever your requirements, contact us and let's talk about the possibilities.





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