We set standards – RiMatrix S.

Rittal opens up brand new perspectives for the IT world.

- Standardised, mass-produced data centre modules
- Only one item number
- Fully functional including server and network racks, climate control, power distribution and back-up, monitoring and DCIM (Data Center Infrastructure Management)
- Available for immediate delivery

The revolutionary alternative to individual data centre construction: RiMatrix S

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Advice and decision-making

RiMatrix S is based on ingenious data centre modules with defined interfaces for power, cooling and monitoring, dimensions and functions. This considerably reduces the amount of planning work required:

- Simple selection of the required modules
- Fast integration into an existing supply infrastructure
- Complete ROI calculation including planning expenditure, investments, operating costs, personnel and servicing
- Defined parameters for scalability, availability, efficiency and performance
- Data centre automation through monitoring and controlling

For you, this translates into a host of benefits in terms of investments, operating costs, future-proofness and scalability.

Advice   Decision

Faster.

Delivery and commissioning

All data centre modules are pre-manufactured,
available ex works, and designed for rapid con-
figuration of a customised solution:

- Short delivery times
- Very fast commissioning
- Complete documentation of the data centre
  module at the time of handover
- Simplified final certification of the ready-to-use
  data centre at the customer's premises

Delivery

Commissioning

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Better.

RiMatrix S provides peace of mind, thanks to:
- Reduced complexity
- Tested, quality-verified components
- Defined, monitored production processes
- Documented system test of the entire data centre module

For you as the user, this translates into:
- Low investment costs
- PUE (Power Usage Effectiveness) up to 1.15
- Tested characteristic curves and data sheets
- Precertification of the data centre modules by TÜV Rheinland

in Kooperation mit

TÜVRheinland®
Genau. Richtig.

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Worldwide.

The RiMatrix S modules are disengaged from the physical cover and defined infrastructure interfaces, which makes them extremely flexible.
For you as the user, this translates into:
■ Simple integration into new or existing rooms with hot or cold aisle containment
■ Installation in system-tested security rooms ...
■ ... or as a flexible container solution
■ Standardised modules for simplified worldwide delivery
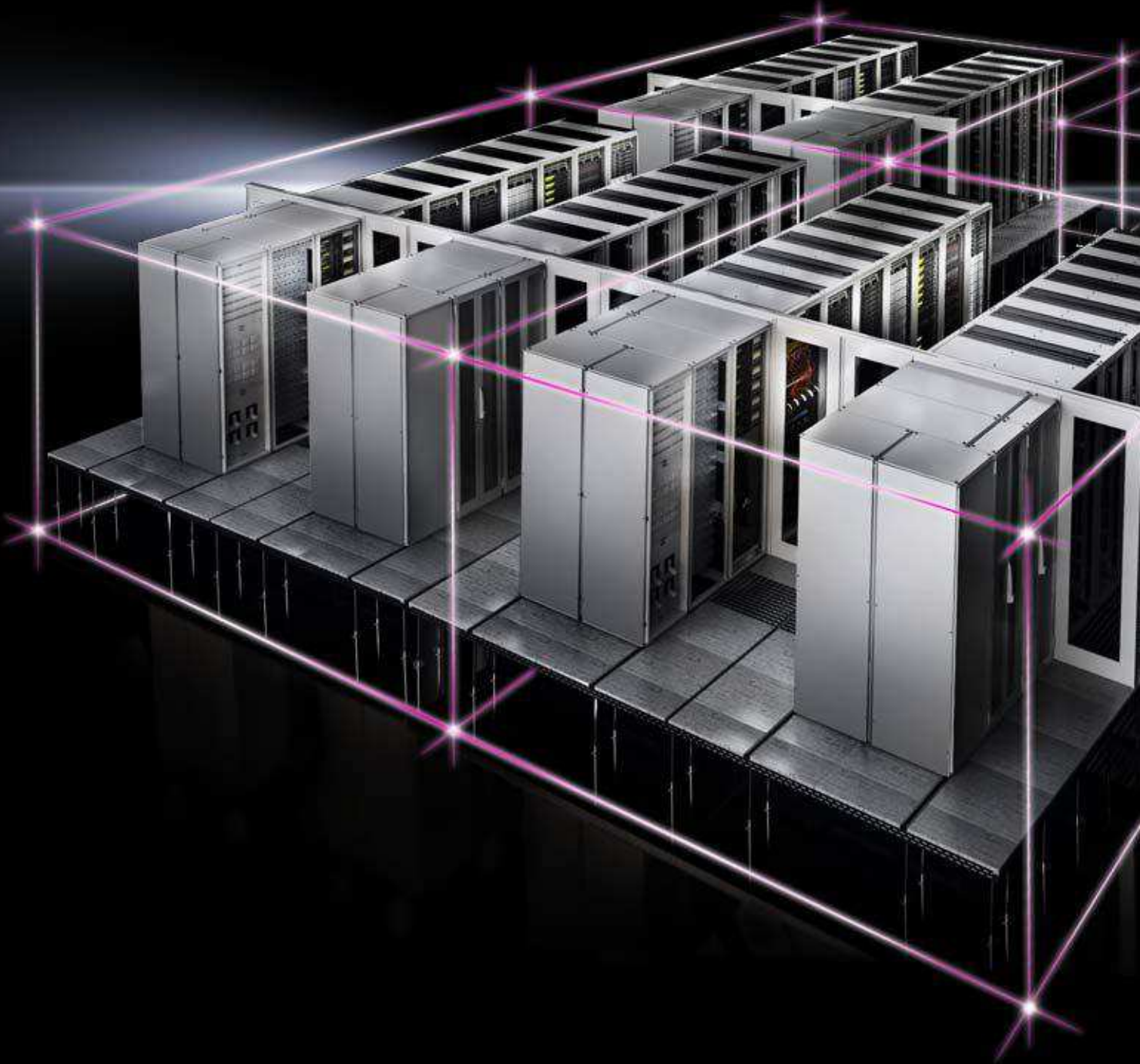■ Commissioning by our 1,000 international service engineers

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Make IT easy.

All RiMatrix S modules may be scaled to almost any output between 60 and 450 kW. Only the container solution is limited to scaling with the Single 6/Single 9 modules, due to the spatial conditions inside the containers.

Examples:
- Simple assembly of chessboard-like structures
- Parallel or serial arrangement
- Shared cold aisle and/or hot aisle
- Simple connection to supply infrastructures

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RiMatrix S at a glance

	Buildings		
	Integration of the RiMatrix S modules into an existing property. In order to achieve optimum air routing, precise-fit aisle containment is included with the supply.	Aisle containment is a combination of door and roof components which allow consistent separation of the hot and cold air. – Enhanced energy efficiency – Superior output density, thanks to guaranteed cold air supply – Water- and dust-proof up to IP 20 – Double door optionally with door monitoring or electronic lock	

	Single 6 basic cover	Double 6 basic cover	Single 9 basic cover	Double 9 basic cover	
Model No.	**7998.106**	**7998.107**	**7998.406**	**7998.407**	
Fire protection	–				
Burglar resistance	–				
Acrid gas-tightness	–				
Water and dust-tightness	IP 20				
Battery ventilation	▪	▪	–	–	
Fire alarm system	▪				
Room extinguisher system	Optional, extinguisher nozzle only in the area to be extinguished				
Humidification and dehumidification system	Optional				
External dimensions					
Width mm	2828	4854	2828	4854	
Height mm	2750	2750	2750	2750	
Depth mm	7080	7080	7080	7080	
Rack configuration					
Server rack **(600 x 2000 x 1200 mm)**	6	12	8	16	
Combined network/server rack **(800 x 2000 x 1200 mm)**	1	2	1	2	
Uninterruptible power supply	1 x PMC 120 60 kW + 20 kW	2 x PMC 120 2 x (60 kW + 20 kW)	–	–	

	Security rooms		Containers	
LER Extend – Fire resistance EI 90 to EN 1363, system-tested – Dust- and watertight to IP 56 to IEC 60 529 – Protection from unauthorised access – Resistance class II – EMC basic protection – Flue gas-tightness based on EN 1634-3 – Shock test with 3,000 Nm energy after 30 minutes flame impingement over standard temperature curve	**Construction of the LER room systems** – Element core made of thermally effective insulation substance – Robust, encapsulated sheet steel cassette panels – Innovative connection technology using patented profile technology – Use of temperature- and humidity-resistant seals – Use of fire protection valves – Dismantling and reassembly is possible at any time		**IT system container** Robust sheet steel container specifically designed for IT applications. The reinforced frame structure allows optimum weight distribution. Housed interior wall structure with thermal insulating materials. – Vandal-resistant inner zone to resistance class II – Fire resistance EI 30 to EN 1363 – EMC basic protection – Dust- and watertight to IP 54 to IEC 60 529	

	Single 6 security room LER	Double 6 security room LER	Single 9 security room LER	Double 9 security room LER	Single 6 container	Single 9 container	
	7998.306	**7998.307**	**7998.606**	**7998.607**	**7998.206**	**7998.506**	
	EI 90 to EN 1363/F90 to DIN 4102				EI 30 to EN 1363		
	WK II				WK II		
	Optional				–	■	
	IP 56		IP 56		IP 54	IP 54	
	■		–		■	–	
	■				■		
	Optional, extinguisher nozzle only in the area to be extinguished				Optional, extinguisher nozzle only in the area to be extinguished		
	–				Optional		
	2950	4974	2950	4974	3000	3000	
	2800	2800	2800	2800	3000	3000	
	7500	7500	7500	7500	7250	7250	
	6	12	8	16	6	8	
	1	2	1	2	1	1	
	1 x PMC 120 60 kW + 20 kW	2 x PMC 120 2 x (60 kW + 20 kW)	none	none	1 x PMC 120 60 kW + 20 kW	none	

Buildings

The RiMatrix S solution, including the basic cover, is commissioned at your premises and tested in accordance with our guidelines. The supply includes complete technical documentation of all components and works, together with the relevant user manuals.

We can optionally supply the relevant chapters of an operating and emergency manual.

Our services include:

- Advice and ROI calculation
- Delivery and integration into the customer infrastructure
- Commissioning and handover
- Documentation, training and instruction
- Hotline and service/service agreements
- Optional packages: Efficiency package, redundant infeed, extinguisher system …

		Single 6 basic cover	Double 6 basic cover	Single 9 basic cover	Double 9 basic cover
External dimensions mm	Width	2828	4854	2828	4854
	Height	2750	2750	2750	2750
	Depth	7080	7080	7080	7080
Internal dimensions mm	Width	2750	4774	2750	4774
	Height	2700	2700	2700	2700
	Depth	7000	7000	7000	7000
Model No.		**7998.106**	**7998.107**	**7998.406**	**7998.407**
Physical security					
Fire protection		–			
Burglar resistance		–			
Acrid gas-tightness		–			
Water and dust-tightness		IP 20			
Battery ventilation		■	■	–	–
Fire alarm system		■			
Room extinguisher system		Optional, extinguisher nozzle only in the area to be extinguished			
Infrastructure					
Server rack (600 x 2000 x 1200 mm)		6	12	8	16
Combined network/server rack (800 x 2000 x 1200 mm)		1	2	1	2
Uninterruptible power supply		1 x PMC 120 60 kW + 20 kW	2 x PMC 120 2 x (60 kW + 20 kW)	–	–
Redundancy		1 x 20 kW	2 x 20 kW	–	–
Low-voltage main distributor		1	2	1	2
PDU Basic		14	28	18	36
Climate control (ZUCS)		(5 + 1) + 1	14	8 + 1	18
Redundancy		n+1			

The security rooms offer high-quality, system-tested solutions. This means that system-tested products are tested as a complete structure, taking into account the interactions between all components.

During testing, allowance is made for built-in modules such as doors, cable shielding systems and ventilation units. Benefit from multifunctional risk coverage (fire, water, burglary etc.) and compliance with the latest EN and DIN standards.

Our services include:

- Advice and ROI calculation
- Delivery and integration into the customer infrastructure
- Commissioning and handover
- Documentation, training and instruction
- Hotline and service/service agreements
- Optional packages: Efficiency package, redundant infeed, extinguisher system …

		Single 6 security room LER	Double 6 security room LER	Single 9 security room LER	Double 9 security room LER
External dimensions mm	Width	2950	4974	2950	4974
	Height	2800	2800	2800	2800
	Depth	7500	7500	7500	7500
Internal dimensions mm	Width	2750	4774	2750	4774
	Height	2700	2700	2700	2700
	Depth	7300	7300	7300	7300
Model No.		**7998.306**	**7998.307**	**7998.606**	**7998.607**
Physical security					
Fire protection		EI 90 to EN 1363/F90 to DIN 4102			
Burglar resistance		WK II			
Acrid gas-tightness		Optional			
Water and dust-tightness		IP 54		IP 56	
Battery ventilation		■		–	
Fire alarm system		■			
Room extinguisher system		Optional, extinguisher nozzle only in the area to be extinguished			
Infrastructure					
Server rack (600 x 2000 x 1200 mm)		6	12	8	16
Combined network/server rack (800 x 2000 x 1200 mm)		1	2	1	2
Uninterruptible power supply		1 x PMC 120 60 kW + 20 kW	2 x PMC 120 2 x (60 kW + 20 kW)	–	–
Redundancy		1 x 20 kW	2 x 20 kW	–	–
Low-voltage main distributor		1	2	1	2
PDU Basic		14	28	18	36
Climate control (ZUCS)		(5 + 1) + 1	14	8 + 1	18
Redundancy		n+1			

Containers

The RiMatrix S solution is assembled in the container, then commissioned and tested in accordance with our guidelines. The supply includes complete technical documentation of all components and works, together with the relevant user manuals.

We can optionally supply the relevant chapters of an operating and emergency manual.

Our services include:

■ Advice and ROI calculation
■ Delivery and integration into the customer infrastructure
■ Commissioning and handover
■ Documentation, training and instruction
■ Hotline and service/service agreements
■ Optional packages: Efficiency package, redundant infeed, extinguisher system …

		Single 6 container	Single 9 container
External dimensions mm	Width	3000	3000
	Height	3000	3000
	Depth	7250	7250
Internal dimensions mm	Width	2750	2750
	Height	2700	2700
	Depth	7000	7000
Model No.		**7998.206**	**7998.506**
Physical security			
Fire protection		–	
Burglar resistance		–	
Acrid gas-tightness		–	■
Water and dust-tightness		IP 54	IP 56
Battery ventilation		■	–
Fire alarm system		■	
Room extinguisher system		Optional, extinguisher nozzle only in the area to be extinguished	
Infrastructure			
Server rack (600 x 2000 x 1200 mm)		6	8
Combined network/server rack (800 x 2000 x 1200 mm)		1	1
Uninterruptible power supply		1 x PMC 120 60 kW + 20 kW	–
Redundancy		1 x 20 kW	–
Low-voltage main distributor		1	2
PDU Basic		14	18
Climate control (ZUCS)		(5 + 1) + 1	8 + 1
Redundancy		n+1	

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The first mass-produced data centre. Simply plug in and it's ready to use.