# Rittal - The System.

Faster – better – everywhere.



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# **SR IT Rack**

#### Next Generation SR IT Rack

As the major carrier of IT equipment, racks are the main part of data center construction. Reliability, efficiency and flexibility are the main requirements for the modern data centers. With a static load capacity up to 2,000KG, the next generation IT rack developed by Rittal can not only reliably satisfy the functional needs but also largely improve the room-level cooling efficiency with a ventilation rate up to 78%. The flexible optional accessory system can meet customers' various needs in modularization.

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**ENCLOSURES** 

POWER DISTRIBUTION

**CLIMATE CONTROL** 



IT INFRASTRUCTURE

**SOFTWARE & SERVICES** 













# High load capacity and variable internal structure

- Static load capacity up to 2,000KG
- Mounting angle with adjustable depth up to 19" for various dimension requirements. Width of mounting angle is adjustable for 800mm width racks. Reworking is not required for matching equipment 19", 21" or 23" wide
- "U" silkscreen

#### Roof of vented door rack

- Two inlet hole with caps installed in the front
- High-density hair brush strip installed in the back
- Wiring holder mounting holes reserved on the top

#### Roof of glazed door rack

- Four inlet hole with caps installed in the front and back
- Fan mounting plate installed in the middle for extended filter fan or passive ventilation

#### Front door design

- Vented door: 130° hinged single-leaf steel vented door, with a comfortable handle and a 4-way lock, vented ventilation rate 78%
- Glazed door: 130° hinged single-leaf glazed door, with a comfortable handle and a 4-way lock

#### Rear door design

- Vented door: 130° hinged double-leaf steel vented door, with a crank handle and a 3-way lock, vented ventilation rate 78%
- Glazed door: 130° hinged single-leaf steel sheet door, with a comfortable handle and a 4-way lock or back pane

#### Side panel installation

- Side panel is an option in rack accessory
- Installation: hook the side panel on frame then fasten it with screw

ENCLOSURES POWER DISTRIBUTION

**CLIMATE CONTROL** 



SR IT Rack

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### SR IT Server Rack



#### Product features:

- -Single-leaf steel Vented front door, 130° hinged,
- with a comfortable handle and a 4-way lock -Double-leaf steel Vented rear door,130° hinged, with a crank handle and a 3-way lock
- -Ventilation rate 78%
- -Static load capacity: 2,000 KG

#### Material& finishing:

- -Frame: high-strength steel, electrophoretic primer
- -Door and roof: cold-rolled steel sheet, electrophoretic primer, powder coating
- -19" mounting angle: galvanized steel sheet

#### Color:

- RAL 9005

#### Scope of supply:

- See the table below for the scope of supply

#### Vented door rack

U	Quantity	42	42	42	42	42	42	42
Width mm		600	600	600	800	800	800	800
Height mm		2000	2000	2000	2000	2000	2000	2000
Depth mm		1000	1100	1200	1000	1100	1200	800
Distance between prefitted 19" levels mm		645	745	745	645	745	745	545
Model	1	1194.453	1194.454	1194.455	1194.456	1194.457	1194.458	1194.459
Scope of supply								
19" mounting angle	2pairs	•	-	•	-	-	•	-
Single-leaf front door, 130° hinged, with a comfortable handle and a 4-way lock	1	•	•	•	•	•	•	•
Double-leaf rear door, 130° hinged, with a crank handle and a 3-way lock	1	•	•	•		•	•	-
Roof (including inlet hole with cap and high-density hair brush for cable guiding)	1		•	•		•	•	•
Accessory package (grounding wire, central grounding point, screws and nuts)	1	-	-	-	-	-	-	-
Accessories				`		`		
Side panel		Page 9						
Divided panel		Page 9						
Base panel		Page 9						
Baying connector		Page 10						
Blanking panel					Page 11			
L support rail		Page 11						
Component shelf		Page 12						
Vertical cable organizing route		Page 13						
Vertical cable organizing duct		Page 15						
Horizontal cable organizing panel					Page 15			
Caster					Page 16			
Leveling foot					Page 16		·	·

### SR IT Server Rack

#### Vented door rack

U	Quantity	47	47	47	47	47	47
Width mm		600	600	600	800	800	800
Height mm		2200	2200	2200	2200	2200	2200
Depth mm		1000	1100	1200	1000	1100	1200
Distance between prefitted 19" levels mm		645	745	745	645	745	745
Model	1	1194.460	1194.461	1194.462	1194.463	1194.464	1194.465
Scope of supply							
19" mounting angle	2pairs	-	•	-	•	•	-
Single-leaf front door, 130° hinged, with a comfortable handle and a 4-way lock	1	•	•	-	•	•	-
Double-leaf rear door, 130° hinged, with a crank handle and a 3-way lock	1	-	•	•	•	•	•
Roof (including inlet hole with cap and high-density hair brush for cable guiding)	1	-	•	•	•		•
Accessory package (grounding wire, central grounding point, screws and nuts)	1	•	•	•	•	•	-
Accessories							
Side panel		Page 9					
Divided panel		Page 9					
Base panel		Page 9					
Baying connector				Page 10	)		
Blanking panel				Page 1	1		
L support rail		Page 11					
Component shelf		Page 12					
		Page 13					
Vertical cable organizing route		Page 15					
Vertical cable organizing route  Vertical cable organizing duct				Page 15	5		
				Page 15			
Vertical cable organizing duct					5		



### SR IT Network Rack



#### Product features:

- -Single-leaf steel glazed front door,  $130^\circ$  hinged, with a comfortable handle and a 4-way lock -Single-leaf steel rear door,  $130^\circ$  hinged,
- with a comfortable handle and a 4-way lock or back panel
- -Static load capacity: 2,000 KG

#### Material& finishing:

- -Frame: high-strength steel, electrophoretic primer -Door and roof: cold-rolled steel sheet,
- electrophoretic primer, powder coating
- -19" mounting angle: galvanized steel sheet

#### Color:

- RAL 9005

#### Scope of supply:

- See the table below for the scope of supply

#### Glazed door rack

U	Quantity	42	42	42	42		
Width mm		600	600	600	800		
Height mm		2000	2000	2000	2000		
Depth mm		600	800	1000	800		
Distance between prefitted 19" levels mm		345	545	645	545		
Model	1	1194.466	1194.467	1194.468	1194.469		
Scope of supply							
19" mounting angle	2pairs	•	•	•	•		
Single-leaf steel glazed front door, 130° hinged, with a comfortable handle lock	1	•	•	•	•		
Single-leaf steel rear door, 130° hinged, with a comfortable handle lock			•	-	•		
Steel back panel, screw fastened	1	•					
Roof panel	1	•	•	•	•		
Accessory package (grounding wire, central grounding point, screws and nuts)	1	•	•	•	•		
Accessories			`	`	`		
Side panel			Page 9				
Divided panel			Page 9				
Base panel			Page 9				
Baying connector			Page 10				
Blanking panel			Page 11				
L support rail		Page 11					
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Vertical cable organizing duct		Page 15					
Horizontal cable organizing panel			Page 15				
Caster			Page 16				
Leveling foot			Page 16	·			

#### Side panel

Applicable to TS IT & SR IT Screw fastened

Material:

-Carbon steel

Color:

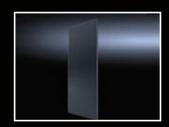
-RAL 9005

Scope of supply:

-Two side panels and installation accessories included

Rack			packs of		
Heigh	t mm	Depth mr		Of Model	
200	00	600	2 pcs	1194.470	
200	00	800	2 pcs	1194.471	
200	00	1000	2 pcs	1194.472	
200	00	1100	2 pcs	1194.473	
200	00	1200	2 pcs	1194.474	
220	00	1000	2 pcs	1194.475	
220	00	1100	2 pcs	1194.476	
220	00	1200	2 pcs	1194.477	





#### Divided panel

Applicable to TS IT & SR IT Screw fastened

Material:

-Galvanized Sheet steel

Scope of supply:

-Include two side panels and installation accessories

	D 1 (	ck	Ra
Model	Packs of	Depth mm	Height mm
1194.478	2 pcs	1000	2000
1194.479	2 pcs	1100	2000
1194.480	2 pcs	1200	2000
1194.481	2 pcs	1000	2200
1194.482	2 pcs	1100	2200
1194.483	2 pcs	1200	2200



#### Base panel

Applicable to TS IT & SR IT

Can be installed after the rack is positioned Material:

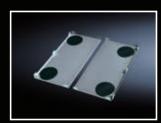
-Galvanized Sheet steel

Scope of supply:

-Include two Base panels (for one rack) and installation accessories

Ra	ck	Packs of	N4I-I
Height mm	Depth mm	Packs of	Model
600	600	2 pcs	1194.494
600	800	2 pcs	1194.495
600	1000	2 pcs	1194.496
600	1100	2 pcs	1194.497
600	1200	2 pcs	1194.498
800	600	2 pcs	1194.499
800	800	2 pcs	1194.500
800	1000	2 pcs	1194.501
800	1100	2 pcs	1194.502
800	1200	2 pcs	1194.503







#### Additional fastening attachment for mounting angle

For additional fastening of 800mm W SR

IT rack mounting angle

prevents the mounting angles mounted on installation brackets from twisting in case of unevenly distributed loads.

It is attached directly to 482.6 mm (19") mounting angles and to the punched section with mounting flange fitted in the depth (inner mounting level).

Material:

-Sheet steel Scope of supply:

-Assembly parts

Applicable rack width mm	Packs of	Model
800	2 pcs	7284.135

### ! Additionally required:

- TS system profile for internal mounting level



#### Baying cover, top

A cover with two end caps may additionally be clipped over the seal between the two enclosures. This prevents dirt and liquid from collecting on the baying seal.

#### Scope of supply:

- Assembly parts
- 2 end caps colors:
- RAL9005

- May also be fitted in the width with enclosure suites bayed back-to-back

Applicable depth mm	Model
600	1194.452
800	1194.451
1000	1194.450
1100	1194.449
1200	1194.448



#### TS punched profile with mounting flanges 17x73mm

With five rows of holes for internal extension. Simply suspended and fixed in TS frame.

#### Material:

- Sheet steel

Surface:

- Zinc plated

Scope of supply:

Including set screws

Applicable depth mm	Packs of	Model <b>DK</b>
600	4 pcs	8612.060
800	4 pcs	8612.080
1000	4 pcs	8612.000
1100	4 pcs	1194.661
1200	4 pcs	8612.020

#### Blanking panel, 2U

Applicable to TS IT & SR IT

Tool-less installation

Each 2U Blanking panel can be disassembled

into two 1U Blanking panels

Material:

- ABS Color:

- RAL 9005

Fireproof level:

- UL94-V0

Scope of supply:

- Five 2U Blanking panels included

Packs of	Model
5 pcs	1194.506



#### Blanking panel, 482.6 mm (19")

For covering the blank area or individual option.

Material:

Sheet

steel

color:

RAL 9005

U	Installation height mm	Packs of	Color	Model <b>DK</b>
1	44	2 pcs	RAL 9005	7187.119
2	88	2 pcs	RAL 9005	7187.118



#### L guide rail

Applicable to TS IT & SR IT

Material:

- Galvanized Sheet steel

Static load:

- 80 KG

Scope of supply:

- Include one pair of guide rails and installation accessories

9"installation ace spacingmm	Packs of	Model
345	2 pcs	1194.490
545	2 pcs	1194.491
 645	2 pcs	1194.492
745	2 pcs	1194.493



#### L guide rail, fixed

Applicable to TS IT & SR IT

For mounting on one 482.6 mm (19") mounting level.

■System punchings for mounting accessories and cooling active components

Load capacity:

30 kg, static

Material:

Sheet steel

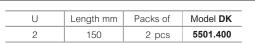
Surface finish:

- Zinc plated

Scope of supply:

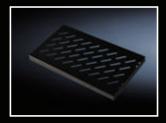
Assembly parts

surface spacingmm		Packs of	Model
	345	2 pcs	1194.490
	545	2 pcs	1194.491
	645	2 pcs	1194.492
	745	2 pcs	1194.493









#### Fixing component shelf

Applicable to SR IT

Material:

- Carbon steel

Color:

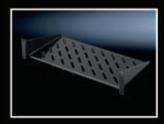
- RAL 9005

Static load: - 100 KG

Scope of supply:

- Include one component shelf and installation accessories

19"installati on surface spacing mm	Height	Packs of	Model
345	1U	1 pcs	1194.484
545	1U	1 pcs	1194.485
645	1U	1 pcs	1194.486
745	1U	1 pcs	1194.487



# Component shelf 2U, static installation

482.6 mm (19")

For mounting between 482.6 mm (19") mounting angles.

Load capacity:

25 kg surface load, static

Material:

Sheet steel

Surface finish:

Spray-finished

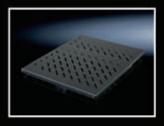
Color:

RAL 9005 Scope of supply:

Assembly parts.

Component shelf depth mm	Packs of	Model <b>DK</b>
250	1 set	5501.615
400	1 set	5501.625





# Component shelf static installation

**482.6 mm (19"),** depth-variable for TS IT & SR IT (L mounting angle, 19" mounting frame)

For mounting between 482.6 mm (19") mounting levels.

■ Depth-variable to adapt to individual distances between levels

■Tool-less, time-saving one-man assembly

Material:

Sheet steel

Surface finish:

Spray-finished

Color:

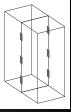
**RAL** 9005

Scope of supply:

Assembly parts.

Front and back angle rail plan distance mm	Static bearing kg	Height U	Packs of	Model <b>DK</b>
400–600	50	1/2	1 set	5501.655
600–900	50	1/2	1 set	5501.665
400–600	100	1	1 set	5501.695
600–900	100	1	1 set	5501.705





#### Baying, external

Material:

- Carbon steel

Surface finish:

- Zinc plating

Scope of supply:

- 6 Bayings and installation accessories

Packs of	Model
6 pcs	8800.490

#### Top wire organizing holder

#### Applicable to SR IT

Fixed on the top for separating strong and weak current wires

#### Material:

- Sheet steel

#### Color:

- RAL 9005

#### Scope of supply:

- Type 1: including 1 top wire organizing holder and fasteners
- Type 2: including 1 set (2 pcs) top wire organizing holder and fasteners

Туре	Rack width mm	Packs of	Model
1	600	1 pcs	1194.446
1	800	1 pcs	1194.447
2	600	1 set (2 pcs)	1194.754
2	800	1 set (2 pcs)	1194.755





#### Vertical cable organizing route

#### Applicable to SR IT

For cable support and laying in network and server fields and PDU installation

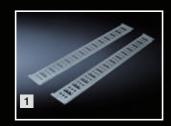
#### Material:

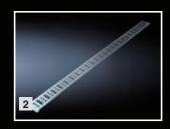
- Galvanized Sheet steel

#### Scope of supply:

- Type 1: for 600mm W racks, including 2 wire organizing plates and fasteners
- Type 2: for 800mm W racks, including 1 wire organizing plates and fasteners

Туре	Rack height mm	Rack width mm	Packs of	Model
1	2000	600	2 pcs	1194.504
1	2200	600	2 pcs	1194.505
2	2000	800	1 pcs	1194.441
2	2200	800	1 pcs	1194.442





#### Nylon tie

#### Applicable to TS IT & SR IT

Can be fixed in any 10.5mm\*12.5mm square hole inside the rack

#### Material:

- Plastic

#### Scope of supply:

- 10nylon ties and snap clips included

Packs of	Model
10 pcs	5502.155







#### Cable management panel, 2 U 482.6 mm (19")

The cable routing chamber has cut-outs from above, into which the patch cables can be inserted. The cable management panel is equipped with a flap and quick-release fasteners at the front, for optimum access to the cables. From the rear, the cables can be inserted via a cut-out with brush strips. Material:

Sheet steel Color:

**RAL 9005** 

U	Depth	Packs of	Model
2	55	1 pcs	5502.235



#### Cable routing channel, 1 U 482.6 mm (19")

To hold the patching cables. Material:

- Sheet steel

Color:

- RAL 9005

U	Depth	Packs of	Model
1	85	1 pcs	5502.245



#### Cable entry panel 482.6 mm (19")

Cut-out 390 x 40 mm (2 U) or 390 x 20 mm (1 U), with brush insert.

Material:

Panel: steel, sprayed Brush strip: plastics

Color:

RAL 9005

U	Opening mm	Packs of	Model
1	390 x 20	1 pcs	5502.255
2	390 x 40	1 pcs	5502.265

#### Vertical cable organizing duct

Applicable to SR IT 800 W racks

Installed on the side of 19" mounting angle of 800 W rack, realizing high-density layout and cable management

Material:

- Sheet steel, plastics (UL94-V0)

Color:

- RAL 9005

Scope of supply:

- Wiring duct, cover plate, finger wire organizing holder and fasteners.

Rack height mm	Wire organizing duct length U	Packs of	Model
2000	36	1 pcs	1194.488
2200	42	1 pcs	1194.489





# Cable management panel with steel rings

Applicable to TS IT & SR IT

Installed on 19" mounting angle for horizontal cable management

Material:

- Panel: steel

- Steel rings: steel

Surface finish:

Steel rings: zinc plating

Color:

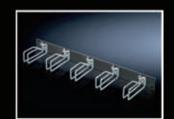
Operating panel: RAL 9005

Scope of supply:

- 1 operating panel and 5 cable shunting rings as

well as fasteners

	l	Ring size mm	Packs of	Model
1		43 x 55	1 pcs	5502.205
1		43 x 105	1 pcs	7257.005
2		85 x 125	1 pcs	7257.105



# Cable management panel with cable routing bars

Applicable to TS IT & SR IT

Installed on 19" mounting angle for horizontal cable management

Material:

- Panel: Sheet steel, sprayed
- Cable routing bars: plastics

Color:

- Panel: RAL 9005
- Cable routing bars: black

U	Bar depth mm	No. of bars/U	Packs of	Model
1	About 80	5	1 pcs	5502.225



#### PDU mounting panel

Applicable to TS IT & SR IT Material:

- Sheet steel with zinc plated

Scope of supply:

- Four mounting panels and installation accessories included

Packs of	Model
4 pcs	1194.507





#### Cable shunting ring

Applicable to TS IT & SR IT Material:

- Zinc plated carbon steel

Scope of supply:

- Ten wire organizing rings and mounting accessories included

Dimensions mm	Packs of	Model
125 x 65	10 pcs	7111.000
125 x 85	10 pcs	7111.900
85 x 43	10 pcs	7112.000



### Shunting ring

Applicable to TS IT & SR IT

Shunting rings are used for mounting frames with sides fixed on 19" mounting angle and 800 mm W network racks, for accommodating a large number of cables Material:

- Zinc plated carbon steel

Scope of supply:

- Assembly parts

Dimensions mm	Packs of	Model <b>DK</b>
330 x 90/70	4 pcs	7220.600



#### Casters

Applicable to TS IT & SR IT Material:

- Carbon steel, nylon

Static load:

- 500 KG

Scope of supply:

- Four casters (two guide casters) and fasteners included

Packs of	Model
1 set	1194.443



#### Leveling foot

Applicable to TS IT & SR IT

Fastening screw M12, thread length 35mm

Adjusting range:

+18mm~+43mm

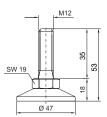
Material:

- Carbon steel

Scope of supply:

- Four leveling foots included

Packs of	Model
1 set	1194.575



#### Grounding rail, horizontal

Applicable to TS, TS IT, SE, SR IT Scope of supply:

- Grounding rail made from E-Cu 57, according to DIN EN12 163 and DIN EN 13 601, 15 x 5 mm
- 20 connecting points with screw M5
- Two grounding wire 25 mm2
- Two insulating parts
- Assembly parts

Applicable rack width mm	Width mm	Height mm	Length mm	Packs of	Model
600, 800	15	5	450	1 pcs	7113.000



#### Grounding rail, vertical

Applicable to TS, TS IT, SR IT

Convenient installation on 25 mm DIN mounting hole array or on 482.6 mm (19") mounting angles. The accessory grounding wire can be used for grounding the panel snap clip.

The grounding terminal has various adjusting possibilities.

Current load capacity of rail: about 200A.

Scope of supply:

- The grounding rail is made from E-Cu 57, according to DIN EN 12 163 and DIN EN 13 601, 15  $\times$  5 mm
- 16 terminals, 2.5 16 mm2
- 15 grounding wires, 6 mm2, length 500 mm
- Assembly parts

ra	Applicable ack width mm	Length mm	Packs of	Model
	1200	945	1 set	7543.000
	1800	1545	1 set	7546.000
	2000	1745	1 set	7547.000
	2200	1945	1 set	7548.000





#### M6 screw se

Applicable to TS IT & SR IT Material:

- Carbon steel, plastics Scope of supply:
- 50 sets of M6 floating nuts, M6 screws and plastic washers included

i dono oi	Packs of	Model
50 set <b>7187.137</b>	50 set	7187.137







#### Application and mode of operation:

The aisle closing system is a combination of door and cover components for completely separating heat air and cool air of the data center. This is very important for energy saving and efficiency improving of the existing temperature control system. The system may be used for cool aisle or heat aisle, combining CRAC.

- Inlet (cool air) and outlet (heat air) will not be mixed. The entire cooling system may operate at a higher set temperature.
- CRAC can operate at the maximum efficiency as the temperature difference between cool air and heat air is large.
- The aisle has similar modularized structure which is extensible and convertible.
- Easy installation
- An economical rational solution for the existing data center for the best cooling result

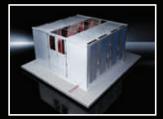


- Can be installed out of the server area with highly
- cost-efficiency CRAC unit
- Sufficient cool air can be provided free of flow loss
- through the elevated floor even if the room height is very low
- The balanced cool air without turbulence provided in the cool aisle ensures high efficiency
- All equipment can work in a sound environment due to relatively low temperature, reasonable air flow organization and low noise
- The cooling effect will not be reduced by any rack unclosed in the cool aisle



#### Without elevated floor (cool aisle)

- Convenient pipe laying on the support base
- Even distributed cool air in the cool aisle ensures high efficiency
- All equipment can work in a sound environment due to relatively low temperature, reasonable air flow organization and low noise
- The cooling effect will not be reduced by any rack unclosed in the cool aisle
- Loose requirement of room height

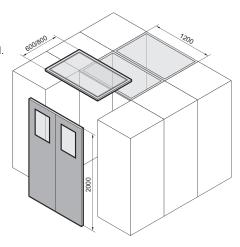


#### Without elevated floor (heat aisle)

- Easily installed aisle closing parts
- Convenient pipe laying on the support base
- For occasions with large heat dissipation
- Can also eliminate internal heat dissipation

#### Remark:

Please consult us for any specific supply mode and the matching system.





#### Product features:

- Compact structure PDU for flexible installation
- All selected materials conform to ROHS
- Strong extension capability for various output units
- widely used for the installation and operation of 482.6mm (19")standard racks and non-standard racks

#### Material:

- Extruded aluminum profiles, anodized Standard:
- IEC 60320, IEC 60309
- IEC 60950-1, GB 1002

#### Certification:

- Passed DEKRA test

#### Protection level:

- IP20

Scope of supply:
- 8digits and 12 digits output

Standard configuration: 3m input cable and plug

- Over 16 digits (16 included) output: Standard configuration: 2m input cable and plug

#### GB standard parameters

	Power supply		Socket type		Di	mensions (ı	mm)	Mounting	Color	Model
Phase	Current	Input	Output 10A	Output 16A	Length	Width	Depth	method		
Single- phase	16A	GB1002	8		437	44	44	1U horizontal rack mounted	RAL9005	7187.114
Single- phase	16A	GB1002	10	2	627	44	44	0 U vertical mounted	RAL9005	1194.515
Single- phase	32A	IEC60309	10	2	677	44	44	0 U vertical mounted	RAL9005	1194.516
Single- phase	32A	IEC60309	20	4	1227	44	44	0 U vertical mounted	RAL9005	1194.523

#### IEC standard parameters

Power supply		Socket type			Dimensions (mm)			Mounting	Color	Model
Phase	Current	Input	Output C13	Output C13	Length	Width	Depth	method	Coloi	Model
Single- phase	16A	GB1002	10	2	607	44	44	0 U vertical mounted	RAL9005	7187.110
Single- phase	32A	IEC60309	14	2	827	44	44	0 U vertical mounted	RAL9005	1194.520
Single- phase	32A	IEC60309	16	4	997	44	44	0 U vertical mounted	RAL9005	1194.522

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