

# Rack-mount systems for CPCI and VMEbus

## Features



### Slim-Box rack-mount systems 1, 2, 3, 4 U

The 300 mm deep Slim-Box Vario enclosures are designed for horizontal installation of CPCI, CPCI Express/VME64x boards (6 U/160 mm). The technical features offered by the enclosures are truly impressive:

2 front and rear slots per U; excellent heat dissipation from left to right due to a fan tray fitted on the left, installation space for slim CD-ROM and 3.5" HDD on the right.

The enclosure is supplied fully assembled and includes the power supply and the backplane. Enclosures can be configured individually using standard components as an extra option.



**2 slots per U** for CPCI/VME boards at the front and rear.

Keyable plastic guide rail.



Includes backplane for VME64x or CPCI.



Installation space for slim CD-ROM and 3.5" HDD.



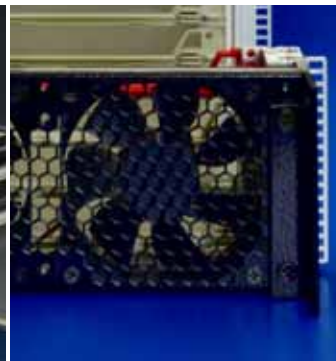
Includes an ATX power supply or . . .



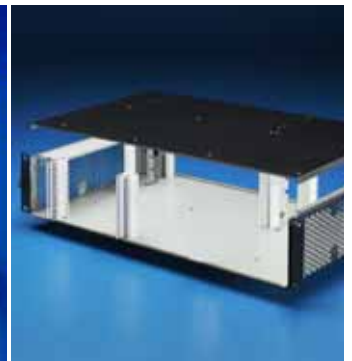
. . . **optional plug-in power supply** (hot swap capability).



Pull-out fan unit and filter mat.

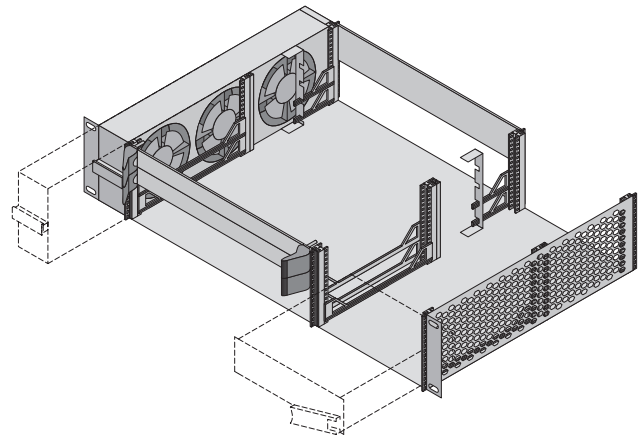


**DC fans** for optimum horizontal ventilation.



Optional: Basic enclosure can be upgraded separately.

## Rack-mount systems, Slim-Box Vario 1 U, 2 U



### Technical specifications:

- Rack-mount enclosure 482.6 mm (19") for the horizontal installation of boards
- Front and rear 2 slots per U for CPCI boards
- Enclosure cooling from left to right
- EMC and ESD-compatible design
- Includes fan tray
- Complies with IEC 60 297-3-101, -102, -103

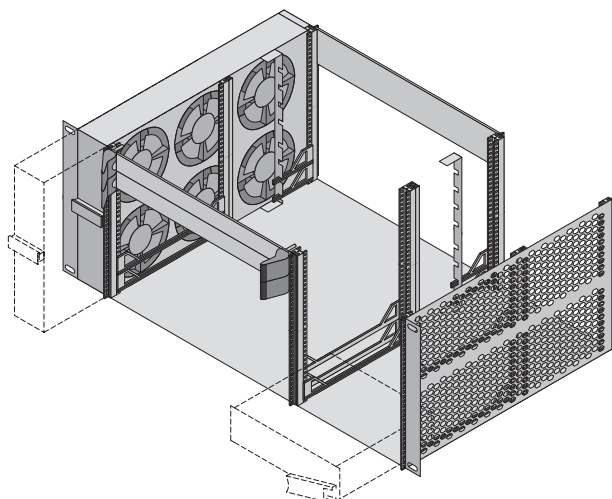
### Material:

Sheet steel, spray-finished (black)

Slim-Box Vario CPCI		1 U			2 U		
Model No. RP complete system		With rear I/O 9909.580	With rear I/O 9909.582		With rear I/O 9909.586	Without rear I/O 9909.588	
Item	Package description			Model No. RP			Model No. RP
1	Basic enclosure, EMC, fully assembled, 300 mm deep	1	1	9912.459	1	1	9912.048
2	ATX PSU control front panel, 3 U x 4 HP, EMC (kit)	-	1	9912.049	-	-	9912.049
3	Rear panel for AC/DC ATX PSU, 1 U, 200 W	-	1	9909.961	-	-	9912.050
4	AC Power Entry Module, 3 U x 8 HP, IEC (kit)	1	-	9910.972	1	1	9912.288
5	Slim drive support (kit)	-	-	-	1	1	9912.289
6	Rails for standard 3 U components (kit)	1	1	9912.464	-	-	9912.056
7	Front sub-division rails in 2 x 3 U (kit)	-	-	9912.920	-	1	9912.053
8	Guide supports, rear I/O	1	1	9912.470	1	-	9912.054
9	Fan tray with fan filter and 12 V DC fan, fully wired	1	1	9912.473	1	-	9909.191
10	Fan tray with fan filter and 12 V DC alarm fan, fully wired	-	-	-	-	1	9909.194
<b>Monitoring</b>							
11	EMC front panel, 3 U x 4 HP with MPS controller module	-	-	-	-	1	9909.193
12	MPS display module, EMC, 3 U x 4 HP	-	-	-	-	1	9912.294
13	EMC front panel, 3 U x 4 HP with MPS fan module	-	-	-	-	1	9912.293
<b>Power supplies/backplanes for plug-in power supplies</b>							
14	ATX PSU, AC/DC, wide range, 1 U, 200 W	-	1	9907.585	-	-	-
15	Prepared for plug-in PSU, AC/DC, wide range, 3 U, 200 W <sup>1)</sup>	(1)	-	3688.694	(1)	(1)	3688.694
16	PSU backplane 3 U, single	1	-	9905.105	1	-	9905.105
17	PSU backplane 3 U, dual	-	-	-	-	1	3688.603
<b>Guide rails/filler panels</b>							
18	Keyable guide rails, 160 mm, grey	2	2	3684.669	6	6	3684.669
19	Keyable guide rails, 160 mm, red, for system slots	2	2	3686.063	2	2	3686.063
20	Keyable guide rails, 160 mm, green, with offset, for PSU	2	-	3687.832	2	4	3687.832
21	Guide rails for rear I/O, 80 mm, grey, top	2	2	3687.936	4	-	3687.936
22	Guide rails for rear I/O, 80 mm, grey, bottom	2	2	3687.937	4	-	3687.937
23	Grounding bush + contact spring for rear I/O	4	4	3689.036	8	-	3689.036
24	ESD board contact spring	4	4	3684.978	8	8	3684.978
25	ESD contact spring for front panel	2	2	3684.979	4	4	3684.979
26	Guide rails 4.4" for drive support	-	-	-	2	2	3686.990
27	Filler panel, EMC, 3 U x 8 HP (kit)	-	-	-	1	1	3685.182
28	Filler panel, EMC, 6 U x 16 HP (kit)	-	-	-	-	1	3685.349
<b>Backplanes</b>							
29	Backplane CPCI, 3 U, 4 slot, system slot on right, 64 bit	-	-	-	-	1	3689.309
30	Backplane CPCI, 6 U, 2 slot, system slot on right, 64 bit	1	1	3689.321	-	-	-
31	Backplane CPCI, 6 U, 4 slot, system slot on right, 64 bit	-	-	-	1	-	3689.323

<sup>1)</sup> Not included in the supply!

Rack-mount systems, Slim-Box Vario 3 U, 4 U



**Technical specifications:**

- Rack-mount enclosure 482.6 mm (19") for the horizontal installation of boards

- Front and rear 2 slots per U for CPCI boards
- Enclosure cooling from left to right

- EMC and ESD-compatible design
- Includes fan tray
- Complies with IEC 60 297-3-101, -102, -103

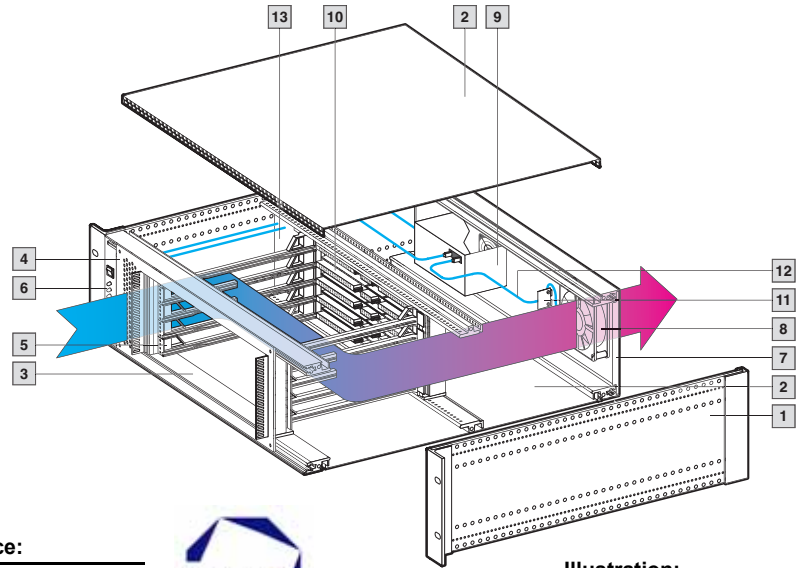
**Material:**

Sheet steel, spray-finished (black)

Slim-Box Vario CPCI		3 U			4 U		
		With rear I/O 9912.355	With rear I/O 9912.356	Model No. RP	With rear I/O 9912.357	With rear I/O 9912.358	Model No. RP
<b>Model No. RP complete system</b>							
Item	Package description			Model No. RP			Model No. RP
1	Basic enclosure, EMC, fully assembled, 300 mm deep	1	1	9912.460	1	1	9912.461
2	ATX PSU control front panel, 3 U x 4 HP, EMC (kit)	-	1	9912.049	-	-	9912.049
3	Rear panel for AC/DC ATX PSU, 3 U x 8 HP (kit), 300 W	-	1	9912.921	-	-	9912.921
4	AC Power Entry Module, 3 U x 8 HP, IEC (kit)	1	-	9912.288	1	1	9912.288
5	Slim drive support (kit)	1	1	9912.462	1	1	9912.463
6	Guide supports, rear I/O	1	1	9912.471	1	1	9912.472
7	Fan tray with fan filter and 12 V DC fan	1	1	9912.474	-	-	9912.475
8	Fan tray with fan filter and 12 V DC alarm fan	-	-	-	1	1	9912.478
<b>Monitoring</b>							
9	EMC front panel, 3 U x 4 HP with MPS controller module	-	-	-	1	-	9909.193
10	MPS display module, EMC, 3 U x 4 HP	-	-	-	1	-	9912.294
11	MPS controller module and LCD display module, EMC, 6 U x 8 HP	-	-	-	-	1	9912.483
12	EMC front panel, 3 U x 4 HP with MPS fan module	-	-	-	1	1	9912.293
13	EMC front panel, 3 U x 4 HP with MPS temperature module	-	-	-	1	1	9909.230
14	Red temperature sensor, L = 600 mm	-	-	-	2	2	3397.538
<b>Power supplies/backplanes for plug-in power supplies</b>							
15	ATX PSU, AC/DC, wide range, 1 U, 300 W	-	1	9907.584	-	-	-
16	Prepared for plug-in PSU, AC/DC, wide range, 3 U, 200 W <sup>1)</sup>	(1)	-	3688.694	(2)	(1)	3688.694
17	PSU backplane 3 U, single	1	-	9905.105	-	1	9905.105
18	PSU backplane 3 U, dual	-	-	-	1	-	3688.603
<b>Guide rails/filler panels/backplanes</b>							
19	Keyable guide rails, 160 mm, grey	10	10	3684.669	14	10	3684.669
20	Keyable guide rails, 160 mm, red, for system slots	2	2	3686.063	2	2	3686.063
21	Keyable guide rails, 160 mm, green, with offset, for PSU	2	-	3687.832	4	2	3687.832
22	Guide rails for rear I/O, 80 mm, grey, top	6	6	3687.936	8	6	3687.936
23	Guide rails for rear I/O, 80 mm, grey, bottom	6	6	3687.937	8	6	3687.937
24	Grounding bush + contact spring for rear I/O	12	12	3689.036	16	12	3689.036
25	ESD board contact spring	24	24	3684.978	32	24	3684.978
26	ESD contact spring for front panel	12	12	3684.979	16	12	3684.979
27	Guide rails 4.4" for drive support	2	2	3686.990	2	2	3686.990
28	Filler panel, EMC, 3 U x 8 HP (kit)	1	-	3685.182	-	-	-
29	Filler panel, EMC, 3 U x 12 HP (kit)	-	1	3685.184	-	-	-
30	Filler panel, EMC, 3 U x 16 HP (kit)	1	1	3685.348	1	1	3685.348
31	Filler panel, EMC, 6 U x 8 HP (kit)	-	-	-	-	1	3685.190
32	Backplane CPCI, 6 U, 6 slot, system slot on right, 64 bit	1	1	3689.325	-	1	3689.325
33	Backplane CPCI, 6 U, 8 slot, system slot on right, 64 bit	-	-	-	1	-	3689.327

<sup>1)</sup> Not included in the supply!

## Rack-mount systems, Ripac 3 U, 5 slots/4 U, 7 slots horizontal



**Technical specifications:**  
 Subrack, 405 mm deep, for installation in 482.6 mm (19") enclosures or cases. Prepared to accommodate CPCI boards and drives. Includes MPS Monitoring (see page 501/502). Complies with IEC 60 297-3-101, -102, -103. Fully assembled, pre-wired and tested.



**Rittal service:**

Modifications or individual system solutions can be provided at short notice. Rittal's system specialists will be happy to assist you with planning and configuration.



**Illustration:**  
MPS system 3 U for CPCI

B  
3.2  
CPCI

U	3	4	Page
Side panel depth mm	405	405	
Wiring space (depth in mm)	210	210	
For PCB	6 U x 160 mm	6 U x 160 mm	
<b>MPS system Model No. RP for CPCI</b>	<b>9910.944</b>	<b>9910.945</b>	

**Mechanical supply includes**

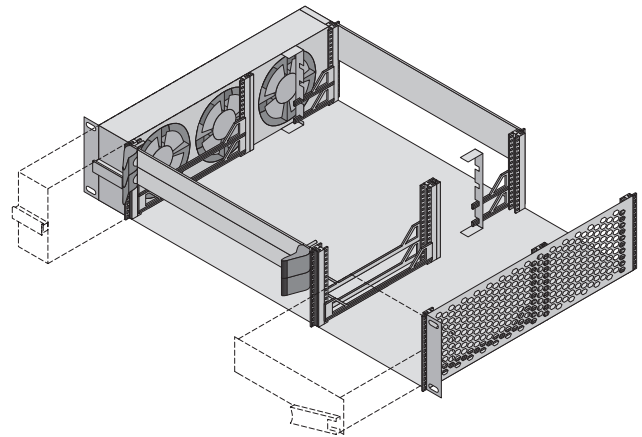
Description	Material	Qty.		
<b>1</b> Ripac basic subrack system (side panels, horizontal rails, flanges, EMC gaskets)	Aluminium, clear-chromated/stainless steel	1	1	-
<b>2</b> Top and bottom covers, solid	Aluminium, unplated	2	2	581
<b>13</b> Air partition	Aluminium	1	1	586
EMC shielding plate for fan	Aluminium, clear-chromated	1	1	589
<b>3</b> Horizontal mounting kit	Aluminium, clear-chromated	1	1	574
<b>4</b> Trim frame for horizontal mounting kit	2.5 mm aluminium, clear-chromated	1	1	575
<b>5</b> Plastic guide rails, keyable	Polycarbonate UL 94-V0	8	12	576
Plastic guide rails, keyable, red	Polycarbonate	2	2	576
<b>6</b> EMC front panel 3 U/5 HP for MPS monitoring	2.5 mm aluminium, clear-chromated	1	-	-
EMC front panel 4 U/5 HP for MPS monitoring	2.5 mm aluminium, clear-chromated	-	1	-
<b>7</b> EMC rear panel 3 U/84 HP with fan and connector cut-out	2.5 mm aluminium, clear-chromated	1	-	-
EMC rear panel 4 U/84 HP with fan and connector cut-out	2.5 mm aluminium, clear-chromated	-	1	-

**Electrical/electronic supply includes**

Description	Technical specifications	Qty.		
<b>8</b> DC fan	12 V DC, 48 m³/h, per fan (UL, CSA, VDE) optionally speed-controlled	1	1	588
<b>9</b> Power supply unit ATX, PS/2 (RP 3687.793)	300 W	1	1	545
<b>10</b> CPCI backplane	6.5 U, 5 slots	1	-	512
CPCI backplane	6.5 U, 7 slots	-	1	512
LED display module for MPS monitoring	for 3.3 V, +5 V, ±12 V, fan failure	1	1	-
<b>11</b> Fan module for DC fan	-	1	1	-
<b>12</b> DC cable harness	-	■	■	-
Controller module	with interface for RS-232 and CMC-TC	1	1	-

■ Included with the supply.

## Rack-mount systems, Slim-Box Vario 2 U, 4 U



### Technical specifications:

- Rack-mount enclosure 482.6 mm (19") for the horizontal installation of boards
- Front and rear 2 slots per U for VME64x boards
- Enclosure cooling from left to right
- EMC and ESD-compatible design
- Includes fan tray
- Complies with IEC 60 297-3-101, -102, -103

### Material:

Sheet steel, spray-finished (black)

Slim-Box Vario VME64x		2 U		4 U	
		VME64x without rear I/O 9912.354	Model No. RP	VME64x without rear I/O 9912.484	Model No. RP
<b>Model No. RP complete system</b>					
Item	Package description		Model No. RP		Model No. RP
1	Basic enclosure, EMC, fully assembled, 300 mm deep, black	1	9912.048	1	9912.461
2	ATX PSU control front panel, 3 U x 4 HP, EMC (kit)	1	9912.049	1	9912.049
3	Rear panel for AC/DC ATX PSU, 3 U x 8 HP (kit), 200 W/300 W	1	9912.050	1	9912.921
4	Slim drive support (kit)	1	9912.289	–	9912.463
5	Rails for standard 3 U components (kit)	–	9912.056	1	9912.466
6	Fan tray with fan filter and 12 V DC fan, fully wired	1	9909.191	1	9912.475
<b>Power supply units</b>					
7	ATX PSU, AC/DC, wide range, 1 U, 200 W	1	9907.585	–	–
8	ATX PSU, AC/DC, wide range, 1 U, 300 W	–	–	1	9907.584
<b>Guide rails</b>					
9	Keyable guide rails, 160 mm, grey	8	3684.669	16	3684.669
10	ESD board contact spring	8	3684.978	32	3684.978
11	ESD contact spring for front panel	4	3684.979	16	3684.979
12	Guide rails 4.4" for drive support	2	3686.990	–	–
<b>Filler panels</b>					
13	Filler panel, EMC, 3 U x 4 HP (kit)	–	–	1	3685.178
14	Filler panel, EMC, 3 U x 8 HP (kit)	1	3685.182	1	3685.182
15	Filler panel, EMC, 3 U x 16 HP (kit)	–	–	1	3685.348
16	Filler panel, EMC, 6 U x 16 HP (kit)	1	3685.349	–	–
17	Filler panel, EMC, 6 U x 28 HP (kit)	–	–	1	3684.260
<b>Backplanes</b>					
18	VME64x backplane, with P0, 6 U, 4 Slot, active/passive	1	9912.362	–	–
19	VME64x backplane, with P0, 6 U, 8 Slot, active/passive	–	–	1	9912.413