![Vertiv logo]

# Vertiv™ DCM Colocation Rack

Secure, Separate Server Hosting and Housing in Data Centers

# Vertiv™

Vertiv designs, builds and services mission critical technologies that enable the vital applications for data centers, communication networks, and commercial and industrial environments. We support today's growing mobile and cloud computing markets with our portfolio of power, thermal, infrastructure management products, software and solutions, all complemented by our global service network. Bringing together global reach and local knowledge, and our decades-long heritage including brands like ASCO®, Chloride®, Liebert®, NetSure™ and Trellis™, our team of experts is ready to take on your most complex challenges, creating solutions that keep your systems running—and your business moving. Together, we're building the future of a world where critical technologies always work.

*YOUR VISION, OUR PASSION.*
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# Colocation Rack – Secure, Separate Server Hosting and Housing in Data Centers

An intelligent physical infrastructure is required for the variety of applications in data centers which are subject to constant change.

Server racks form the organizational module for the mechanical integration of an extremely diverse range of components. As an experienced player in the market, Knürr developed the Data Center Module (DCM®) – the DCM Colocation Rack was also designed in order to continue fulfilling the various related requirements.

The DCM Colocation Rack was designed specifically for the secure, separate hosting and housing of different clients in a rack (2000 or 2200 mm).

Partitions can be independently switched at any time.

The DCM Colocation Rack can be integrated into a data center either at the end of a row of racks or between the racks themselves.

## FEATURES AND PERFORMANCES

- 2 separate sections, one with 20U (2000 mm), the other with 23U (2200 mm).

- 3 separate sections, each with either 13U (2000 mm), or 15U (2200 mm).

- Secure, horizontal, partitioning shelves.

- Secure, insertable, partitioning walls.

- Data and power supply cable ducts for subsequent installation or reconfiguration.

- Deep-adjustable, numbered 19" extrusions.

- Air partitioning at the front left and right with covered 1U opening for each section.

- Optimum airflow provided by 83 % perforated doors.

*Colocation rack - Server hosting and housing in data centers*

| Vertiv DCM® Colocation Rack 800 mm wide | Technical specifications |
|---|---|



DCM20085

- Perforated front doors with simple locking
- Perforated rear doors with simple locking
- Special 19" server extrusions for mounting all trade-standard 19" servers
- Components compliant with IEC 297-3
- Standard cable inlet with permanently mounted cable duct on the right
- Optional cable inlets left and right over the cover and shelf by reconfiguring the cable ducts
- Secure partitioning of the individual bays using securely mounted partition shelves
- Lateral air partitioning at the front left and right, each with 1U opening for mounting different components
- Doors with handle and mount for cylinder lock
- Adjustment of the 19" extrusions in a 50 mm grid



DCM20086

- Jumpering space
  - At the front: 80 mm
- Load rating
  - 25 kg per rack unit (stationary)
  - For example: 15U x 25 kg = 375 kg load for one bay
- Protection rating
  - IP 20
- Tests
  - Earthing in acc. with VDE 0100 T 450
  - IP test in acc. with DIN 40 050 / IEC 529
- Airflow circulation
  - Perforation: 83 %

- Material/Finish
  - Basic rack, extruded aluminum, polished
  - Corner piece, die-cast aluminum, polished
  - Doors, sheet steel, powder-coated texture
  - Partitioning walls, zinc-passivated sheet steel
  - 19" extrusion, 2.0 mm zinc-passivated sheet steel
  - Shelf supports, zinc-passivated
- Color
  - Visible surface of covers
  - Final digit of order number .1: RAL 7035 light gray
  - Final digit of order number .8: RAL 7021 dark gray

Dimensions in mm: W = width · U = standard rack unit · H = height · 1U = 44.45 mm · D = depth · UP = unit of packaging · h = installation height · kg = weight · d = insertion depth · L = length · Conversion: 1 mm = 0.03937 inch · 1 kg = 2.2046 pounds

## Vertiv DCM® Colocation Rack 800 mm wide

## Technical specifications



DCM20087

- Included in the delivery
  - 1 basic rack.
  - 4 19" server extrusions with egular perforations, sheet steel with rack unit marking for each bay
  - 1 cap, including covers for cable entry on the left and right sides
  - 1 shelf, including covers for cable entry on the right, open on the left for cable duct -> cable entry
  - 2 partitioning shelves for colocation rack with 3 compartments
  - 1 partitioning shelf for colocation rack with 2 compartments
  - 3 perforated front and rear doors for colocation rack with 3 compartments
  - 2 perforated front and rear doors for colocation rack with 2 compartments
  - Air partitioning at the front with covered 1U opening
- Supplied as
  - Assembled
- Please note
  - Mounting adapters for 19" server extrusion to mount Knürr accessories (see page 5)
  - Lateral partitioning walls must be ordered separately (see page 5)
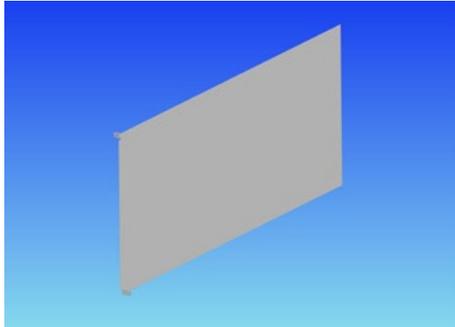  - Cylinder locks must be ordered separately



DCM20088

| W | H | D | U | D | Model | Order No. | UP |
|---|---|---|---|---|---|---|---|
| 800 | 2000 | 1100 | 13 | 740 | 3 compartment colocation without side panels | 01.143.000.X-001 | 1 unit |
| 800 | 2000 | 1200 | 13 | 740 | 3 compartment colocation without side panels | 01.143.000.X-002 | 1 unit |
| 800 | 2200 | 1100 | 15 | 740 | 3 compartment colocation without side panels | 01.143.000.X-003 | 1 unit |
| 800 | 2200 | 1200 | 15 | 740 | 3 compartment colocation without side panels | 01.143.000.X-004 | 1 unit |
| 800 | 2000 | 1100 | 20 | 740 | 2 compartment colocation without side panels | 01.143.001.X-001 | 1 unit |
| 800 | 2000 | 1200 | 20 | 740 | 2 compartment colocation without side panels | 01.143.001.X-002 | 1 unit |
| 800 | 2200 | 1100 | 23 | 740 | 2 compartment colocation without side panels | 01.143.001.X-003 | 1 unit |
| 800 | 2200 | 1200 | 23 | 740 | 2 compartment colocation without side panels | 01.143.001.X-004 | 1 unit |
| 800 | 2000 | 1100 | 13 | 740 | 3 compartment colocation with side panels | 01.143.002.X-001 | 1 unit |
| 800 | 2000 | 1200 | 13 | 740 | 3 compartment colocation with side panels | 01.143.002.X-002 | 1 unit |
| 800 | 2200 | 1100 | 15 | 740 | 3 compartment colocation with side panels | 01.143.002.X-003 | 1 unit |
| 800 | 2200 | 1200 | 15 | 740 | 3 compartment colocation with side panels | 01.143.002.X-004 | 1 unit |
| 800 | 2000 | 1100 | 20 | 740 | 2 compartment colocation with side panels | 01.143.003.X-001 | 1 unit |
| 800 | 2000 | 1200 | 20 | 740 | 2 compartment colocation with side panels | 01.143.003.X-002 | 1 unit |
| 800 | 2200 | 1100 | 23 | 740 | 2 compartment colocation with side panels | 01.143.003.X-003 | 1 unit |
| 800 | 2200 | 1200 | 23 | 740 | 2 compartment colocation with side panels | 01.143.003.X-004 | 1 unit |

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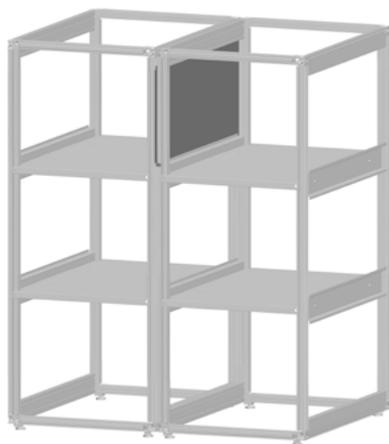
| Vertiv DCM® Colocation Rack Accessories | Technical specifications |
|---|---|

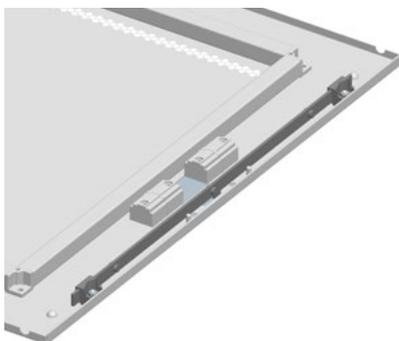## Partitioning wall for retrofitting



DCM20101



DCM20102

- For secure separation of individual bays to prevent unauthorized access
- Each bay can be closed off separately after initial installation
- The partitioning walls are inserted above and below on specially provided mounting strips
- The partitioning wall is screwed into place at the front and then covered by the door

- Material
  - Sheet steel, 1.0 mm
- Finish/color
  - Sheet steel, zinc-passivated
- Included in the delivery
  - 1 partitioning wall for retrofitting
  - Mounting material

- Supplied as
  - Flat-packed kit
- Please note
  - The partitioning wall can be mounted in any position (top, middle, bottom, left or right)

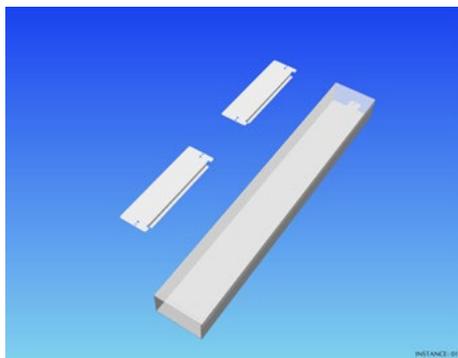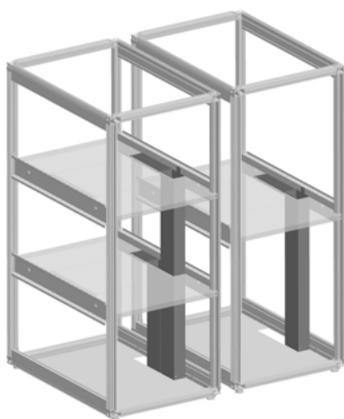| W | H | D | Model | Order No. | UP |
|---|---|---|---|---|---|
| | 2000 | 1100 | For 3 compartment colocation | 01.143.100.X-001 | 1 unit |
| | 2000 | 1200 | For 3 compartment colocation | 01.143.100.X-002 | 1 unit |
| | 2200 | 1100 | For 3 compartment colocation | 01.143.100.X-003 | 1 unit |
| | 2200 | 1200 | For 3 compartment colocation | 01.143.100.X-004 | 1 unit |
| | 2000 | 1100 | For 2 compartment colocation | 01.143.100.X-005 | 1 unit |
| | 2000 | 1200 | For 2 compartment colocation | 01.143.100.X-006 | 1 unit |
| | 2200 | 1100 | For 2 compartment colocation | 01.143.100.X-007 | 1 unit |
| | 2200 | 1200 | For 2 compartment colocation | 01.143.100.X-008 | 1 unit |

## 3-point locking system Upgrade kit



DCM20089

- Upgrade kit for conversion to 3-point locking system
- Greater security with this locking system
- Can be upgraded at any time
- Suitable for heights of 2000 and 2200 mm

- Included in the delivery
  - Lock intermediate rod
  - Rod guidance

- Supplied as
  - Flat-packed kit

| W | H | D | Model | Order No. | UP |
|---|---|---|---|---|---|
| | 2000, 2200 | | For 3 compartment colocation | 01.143.102.X-001 | 1 unit |
| | 2000, 2200 | | For 2 compartment colocation | 01.143.102.X-002 | 1 unit |

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| Vertiv DCM® Colocation Rack Accessories | Technical specifications |
|---|---|

## Cable duct for retrofitting



DCM20099



DCM20100

- Secure cabling for data and power supply lines
- Subsequent installation in colocation rack with 2/3 compartments
- Cable duct can be reassembled at any time

- Material
  - Sheet steel, 1.0 mm
- Finish / color
  - Sheet steel, zinc-passivated

- Included in the delivery
  - 1 cable duct for retrofitting
  - Covers
  - Mounting material
- Supplied as
  - Flat-packed kit

| W | H | D | Model | Order No. | UP |
|---|---|---|---|---|---|
| | 2000 | | Short, for 3 compartment colocation | 01.143.101.X-001 | 1 unit |
| | 2000 | | Long, for 3 compartment colocation | 01.143.101.X-002 | 1 unit |
| | 2200 | | Short, for 3 compartment colocation | 01.143.101.X-003 | 1 unit |
| | 2200 | | Long, for 3 compartment colocation | 01.143.101.X-004 | 1 unit |
| | 2000 | | For 2 compartment colocation | 01.143.101.X-005 | 1 unit |
| | 2200 | | For 2 compartment colocation | 01.143.101.X-006 | 1 unit |

## DCM® mounting adapter for 19" server extrusion



DCM20052

- For mounting Knürr standard components (storage shelves, drawers, chassis runners, keyboard runners, etc.) in the 19" installation space

- Material
  - Sheet steel, 2.5 mm, zinc-passivated

- Included in the delivery
  - 4 adapters

| W | H | D | U | h | d | kg | Model | Order No. | UP |
|---|---|---|---|---|---|---|---|---|---|
| 44 | 44 | 44 | 1 | | | | | 01.147.640.9 | 1 set |

Dimensions in mm: W = width · U = standard rack unit · H = height · 1U = 44.45 mm · D = depth · UP = unit of packaging · h = installation height · kg = weight · d = insertion depth · L = length · Conversion: 1 mm = 0.03937 inch · 1 kg = 2.2046 pounds

| Vertiv DCM® Colocation Rack Accessories | Technical specifications |
|---|---|

## DCM® colocation side panel
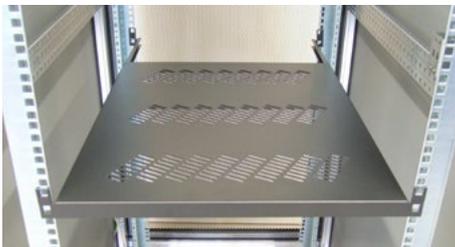


DCM20069

- Side panel module for DCM colocation rack

- Material
  - Sheet steel, 1.0 mm
- Finish / color
  - Final digit of order number .1:
  - Powder-coated texture, RAL 7035, light gray Final digit of order number .8: Powder-coated texture, RAL 7021, dark gray

- Included in the delivery
  - 1 side panel
  - Mounting material
- Supplied as
  - Flat-packed kit

| W | H | D | Model | Order No. | UP |
|---|---|---|---|---|---|
| | 2000 | 1100 | | 01.147.877.X | 1 unit |
| | 2000 | 1200 | | 01.147.878.X | 1 unit |
| | 2200 | 1100 | | 01.147.881.X | 1 unit |
| | 2200 | 1200 | | 01.147.882.X | 1 unit |

## 19" QuickFix shelf, tool-free assembly



SUN20015

- Quick and easy tool-free mounting by inserting the 19" cut-outs
- Quick and easy attachment (one click) and removal (quarter turn) without tools
- Perforated to optimize air supply

- Material
  - Sheet steel, 1.0 mm
- Finish
  - Final digit of order number .1:
  - Powder-coated texture, RAL 7035, light gray
  - Final digit of order number .8: Powder-coated texture, RAL 7021, dark gray

- Load rating
  - 700 N static with even load distribution
- Included in the delivery
  - 1 side panel
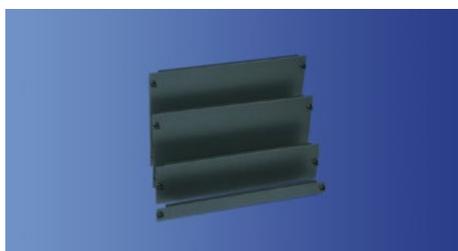  - Mounting material
  - Supplied as
  - Flat-packed kit

| W | H | D | U | d | w x l | Order No. | UP |
|---|---|---|---|---|---|---|---|
| | | | | 565 - 740 | 430 x 500 | 01.102.072.X | 1 unit |

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## Technical specifications

## 19" QuickFix blanking panel, tool-free mounting



MEC20179



MEC20180



MEC20178

- To cover free 19" spaces (cold-hot separation)
- Quick and easy tool-free attachment (one click) and removal (quarter turn)
- Suitable for 9.5 x 9.5 square holes

- Material
  - Sheet steel, 1.0 mm
- Finish
  - Final digit of order number .1:
  - Powder-coated texture, RAL 7035, light gray
  - Final digit of order number .8: Powder-coated texture, RAL 7021, dark gray

- Included in the delivery
  - X (see ON for quantity) 19" blanking panel
  - QuickFix
  - Mounting material
- Supplied as
  - Sets (see ON for quantity); fixing clips pre-mounted

| W | H | D | U | D | L | For rack type | Order No. | UP |
|---|---|---|---|---|---|---|---|---|
| 482.6 | 43.6 | | 1 | | | powder-coated | 01.103.301.X | 6 units |
| 482.6 | 88.1 | | 2 | | | powder-coated | 01.103.302.X | 3 units |
| 482.6 | 132.5 | | 3 | | | powder-coated | 01.103.303.X | 2 units |
| 482.6 | 265.9 | | 6 | | | powder-coated | 01.103.306.X | 1 unit |
| 482.6 | 399.2 | | 9 | | | powder-coated | 01.103.309.X | 2 units |

## 19" QuickFix blanking panel, tool-free mounting



MEC20181



MEC20178

- For orderly cable management in the rack's internal space
- Quick and easy attachment tool-free (one click) and removal (quarter turn)
- Suitable for 9.5 x 9.5 square holes

- Material
  - Sheet steel, 1.0 mm
- Finish
  - Final digit of order number .1
  - Powder-coated texture, RAL 7035, light gray
  - Final digit of order number .8: Powder-coated texture, RAL 7021, dark gray

- Included in the delivery
  - 6 19" blanking panel cable ports
  - QuickFix
  - Mounting material
- Supplied as
  - Flat-packed kit; fixing clips pre-mounted

| W | H | D | U | D | L | For rack type | Order No. | UP |
|---|---|---|---|---|---|---|---|---|
| 482.6 | 43.6 | | 1 | | | Powder-coated | 01.103.331.X | 6 units |

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## Vertiv DCM® Colocation Rack Accessories

## Technical specifications

### Slot-in rails (can be hooked on and screwed in)

MEC20162

MEC20219

MEC20167

- Can be hooked on for quick and easy mounting
- Can also be screwed in for heavier loads
- Can be screwed in from inside (use in rack suites)
- Adjustable for various main section heights

- Material / finish
  - Sheet steel, 2.0 mm
  - Zinc-passivated, blue chrome-plated
- Load rating
  - 1000 N max., with even load distribution
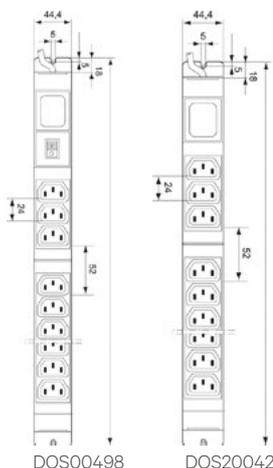- Included in the delivery
  - 2 slot-in rails
  - Mounting material

- Supplied as
  - Pairs
- Please note
  - A mounting adapter 01147.640.9 should also be ordered for 19" server extrusion (see page 5)

| W | H | D | U | D | L | Order No. | UP |
|---|---|---|---|---|---|---|---|
| | | | | 740 | 711 | 01.103.056.0 | 1 pair |

### Knürr DI-STRIP® Cooling Devices Connector System IEC 320 with angle connector

DOS20062

DOS00498   DOS20042

- With optional illuminated switch, 2-pole switching
- Without fusing

- Material / finish
  - Housing: closed sheet steel extrusion, zinc-passivated, powder-coated texture
  - Plastic parts: Vampamid 6 0024 VO (UL94)
- Dimensions
  - Height: 45.5 mm
  - Housing width: 44.4 mm (= 1U)
  - Supply line: 2.5 m
- Approvals / certificates
  - CE labeling compliant with low-voltage Directive 2006/95/EU

- EMC Directive 2004/108/EU
- GS, CB-scheme
- Color
  - Housing: RAL 7021 dark gray
  - Plastic parts: RAL 7021 dark gray
- Load rating
  - 250 Vac/10 A, C13
- Approval for IEC 320 3-time cooling device combinations
  - VDE, UR, CSA
- Included in the delivery
  - 1 socket strip
  - 2 mounting angle connectors

| L | S | Input values | Input connector | Outputs | Order No. | UP |
|---|---|---|---|---|---|---|
| 483 | • | 230 VAC, 16 A | Schuko CEE7 | 9 x C13 | 03.602.009.1 | 1 unit |
| 483 | | 230 VAC, 10 A | IEC60320 Sheet E | 12 x C13 | 03.600.312.1 | 1 unit |

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| Vertiv DCM® Colocation Rack Accessories | Technical specifications |
| --- | --- |

## Liebert MPH™ Rack PDU



DOS20153

- The Liebert MPH Type RM is a monitored power distribution unit that monitors phase inputs. Measured per phase are: Power, current, voltage and consumption The power is also monitored per group (only 32A model)
- The Liebert MPH Type C can also switch individual outputs on and off remotely
- The integrated Liebert RPC 1000 communication card enables remote monitoring and maintenance of MPH units
- The Liebert MPH can be monitored directly on-site with the RPC BDM-1000, an optional display module that is connected directly to the communication card The monitoring unit can be flexibly mounted on the rack

- Material / finish
  - Housing: sheet steel extrusion
- Dimensions
  - Width: 178 mm
  - Height: 44 mm
  - Supply line: 3 m
- Color
  - Housing: RAL 7021 dark gray

- Approvals / certification
  - CE labeling compliant with low-voltage Directive 2006/95/EU
  - EMC Directive 2004/108/EU
  - GS
- Included in the delivery
  - 1 Liebert MPH socket strip (PDU)
  - 1 mounting angle connector

| L | Type | Input values | Input connector | Outputs | Order No. | UP |
| --- | --- | --- | --- | --- | --- | --- |
| 438 | RM | 230 VAC, 16 A | IEC320 Sheet I | 9 x C13 | MPH-EBR09NXXO30 | 1 unit |
| 438 | RM | 230 VAC, 32 A | IEC60309 1ph/N/PE 6h | 9 x C13 | MPH-EBR09NXXQ30 | 1 unit |
| 438 | C | 230 VAC, 16 A | IEC320 Sheet I | 9 x C13 | MPH-ECR09NXXO30 | 1 unit |
| 438 | C | 230 VAC, 32 A | IEC60309 1ph/N/PE 6h | 9 x C13 | MPH-ECR09NXXQ30 | 1 unit |

## Mounting Holes Server Extrusion Mounting Kit, M5 / Plate, 2.5 mm



MEC20126

- For mounting 19" front panels and 19" components

- Included in the delivery
  - 100 caged nuts M5 / plate, 2.5 mm 100 oval head screws, Z form, M5 x 16 20 spring nuts, M5 wide 20 cylinder screws, M5 x 8

- Supplied as
  - Flat-packed kit

| W | H | D | U | D | L | Model | Order No. | UP |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | | | | | | 05.041.325.9 | 1 set |

Dimensions in mm: W = width · U = standard rack unit · H = height · 1U = 44.45 mm · D = depth · UP = unit of packaging · h = installation height · kg = weight · d = insertion depth · L = length · Conversion: 1 mm = 0.03937 inch · 1 kg = 2.2046 pounds

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