

# Enclosures for Industrial PC





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## PC protection enclosure

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- protection system IP 54
- applicable as standing or wall mounted enclosure
- up to 5 external cords can be lead without removal of plugs due to separable cable entry
- mounting of 19" plug-in units up to 4 U possible

## 19" plug-in unit 4U „EVO 2.0“

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- quick mounting/ dismantling of device fixings
- fan may be assembled / disassembled without tooling
- EMC compatible construction
- protection against access for devices and control panel
- high stability
- all ATX form factors

## "Hard Box" industrial PC enclosure

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- for ATX applications
- for installing:
  - 1x 5 1/4" disk drive
  - 1x 3 1/2" floppy drive
  - 1x 3 1/2" hard drive
- cut-out for PS/2 power supply
- 19" installation, wall mounting or mounting on doors or mounting plates possible



## Embedded PC enclosure

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- Mini-ITX form factor
- suitable for TQ main boards
- ruggedized embedded PC enclosure
- economic design
- EMC compatible construction
- VESA 100 fixing at bottom

## 19" keyboard tray, 1 U

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- requires little vertical space
- extractable
- with integrated fold-out mousepad



### Industrial PC Enclosure

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- Mini-ITX form factors
- EMC compatible construction
- without fan
- vibration damped hard drive bracket
- 1x PCI-Slot by risercard
- 1x drive bracket for 3 1/2"-hard drive



### 19" keyboard tray, 2 U

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- keyboard plug-in unit with fold-down front panel
- front-mounted, large, extractable mouse rest



## 190 • PC protection enclosure

### PC protection enclosure

Computer systems are used for controlling in dusty and humid surroundings. The apra PC protection enclosure allows using standard computers within an industrial environment.

- protection system IP 54
- applicable as standing or wall mounted enclosure (with feet or wall fixing - please see accessories)
- up to 5 external cords can be lead without removal of plugs due to separable cable entry (IP 54)
- mounting of 19" plug-in units up to 4 U possible by means of screwable mountings and sliding rails (please see accessories)

#### Construction:

robust sheet steel design with front and rear door

#### Material:

sheet steel

#### Finish:

RAL 7035 light grey

#### Dimensions (H x W x D):

570 mm x 320 mm x 670 mm

#### Delivery:

assembled



Front view

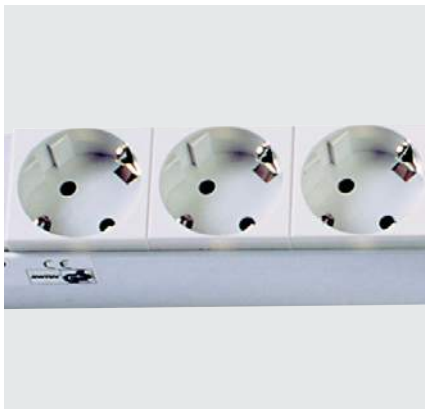
Rear view

Other colours on request!

Description	Order no.
PC protection enclosure	190-000-10
PC protection enclosure, lockable	190-000-20



### Multiple socket strip 3x



- with connecting cable (l= 3 m)
- incl. assembly material

<b>Order no.</b>
190-000-30

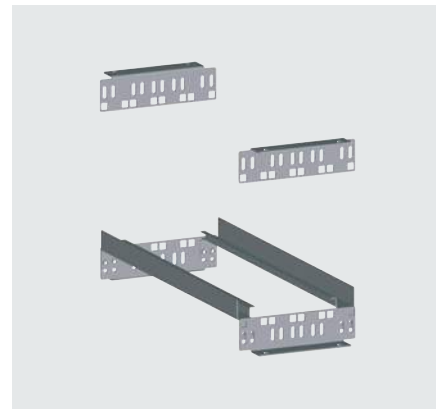
### Adjusting feet set



- set = 4 pieces
- incl. assembly material

<b>Order no.</b>
190-000-50

### Expansion kit for 19" plug-in units



- included in delivery:
  - sliding rails and vertical mountings 4 U
  - mounting material

**Material:**

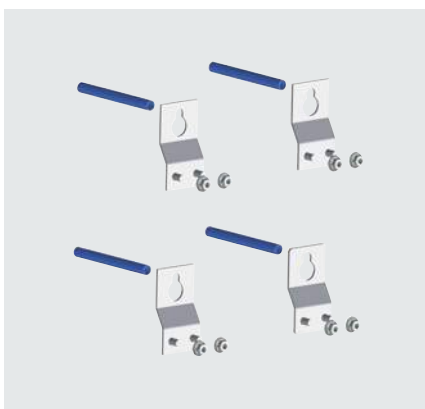
sliding rails: sheet steel 1.5 mm

vertical mountings: sheet steel 2.5 mm

**Finish:** galvanised

<b>Order no.</b>
190-000-60

### Wall mounting kit



incl. mounting pin

**Material:**

sheet steel 2.0 mm

<b>Order no.</b>
190-000-70

### Plug & play module



- with integrated, temperature regulated fan unit (temperature range: 0-60° C with thermostat)
- multiple socket 3-fold with overvoltage protection and connecting cable
- incl. mounting material

<b>Order no.</b>
190-000-40



**19" Computer plug-in unit 4 U „EVO 2.0"**

- vibration-cushioned fixing of device
- quick mounting/ dismounting of device fixings
- fan may be assembled / disassembled without tooling
- filter pad can be exchanged from the front
- optimised ventilation
- maximum ventilation capacity
- EMC compatible construction
- protection against access for devices and control panel
- high stability
- all ATX form factors

**Application:**

suitable for mounting of:

- telescopic rails
- HUB's (card readers, USB connectors, etc.)
- fan by means of a boot or fixing device
- an internal fixing of device (not in connection with an extended ATX mainboard)
- PS/2 or redundant power supply
- 3 additional fans (40 x 40 mm) to the slot insert at the rear panel

**Material:**

sheet steel 1.0 mm

**Finish:**

chassis: galvanised  
front: RAL 7035 light grey

**Dimensions (H x W x D):**

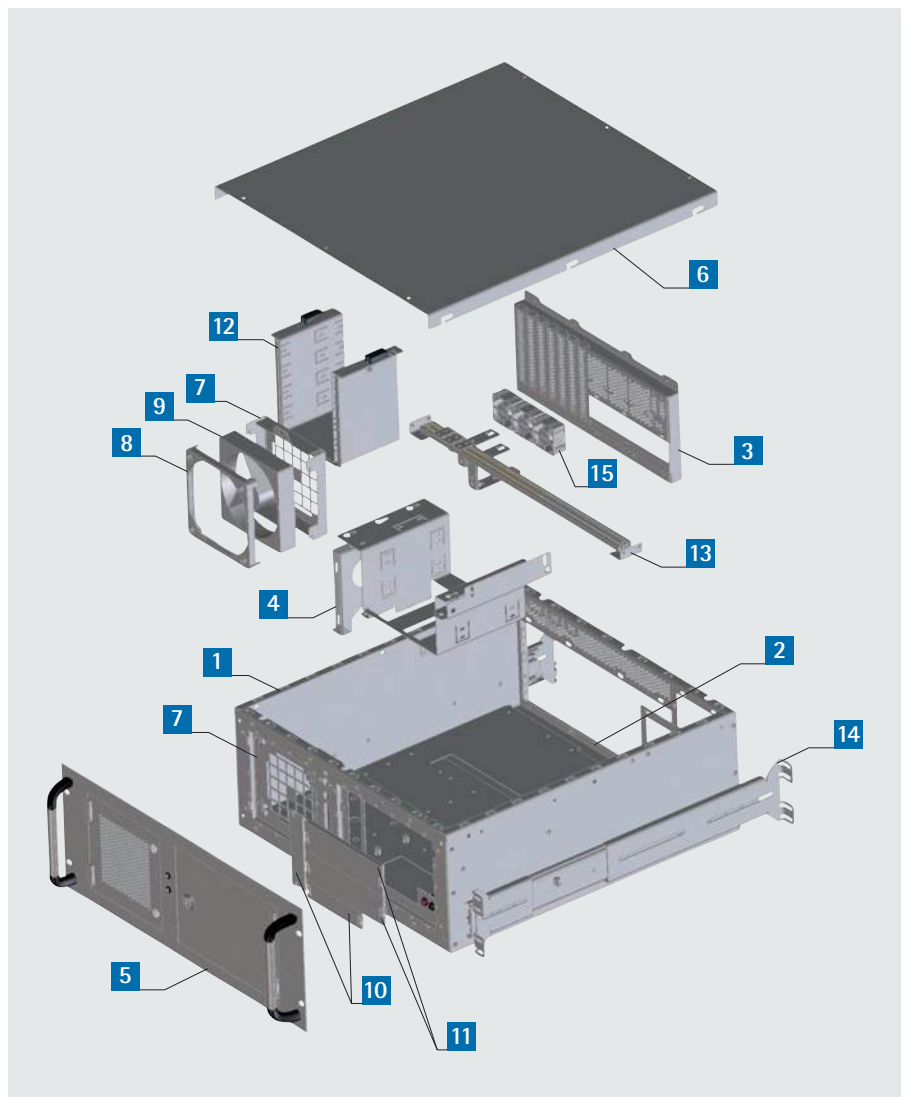
177 x 482,6 x 466 mm (without handles)

**Delivery:**

assembled, in single cardboard box

**Standard**

19" installation dimensions acc. to IEC 60297-3-100, ATX specification 2.03



**Delivery: standard version**

Item	Description
1	Chassis
2	Integrated boardchassis
3	Slot inlet
4	Drive holder
5	Front panel
6	Cover plate

<b>Order no.</b>
206-460-00



## Components list of the standard model 206-460-00

### 1 Chassis

- EMC compatible basic design

### 2 Board chassis

- integrated, to protect the PC board against torsional stress

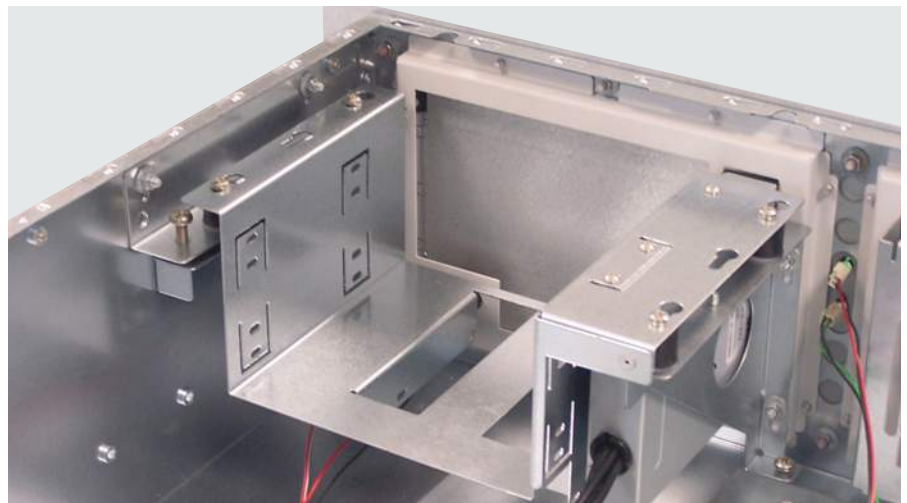
### 3 Slot insert

- ATX 7-fold with slot covers and 3 x SUB-D for break out
- optimised ventilation capacity
- 3 fans 40 x 40 mm can be installed



### 4 Drive slot

- can be assembled externally
- mounting of 2x 5 1/4" and 2x 3 1/2" drives
- safe and quick adjustment while mounted



### 5 Front cover

- incl. fan door, Filter pad and drive-units door
- incl. handles
- incl. - 2 x LED
  - 1 x Reset button
  - 1 x Power button
- lockable doors with rapid fastenings and sash fastener

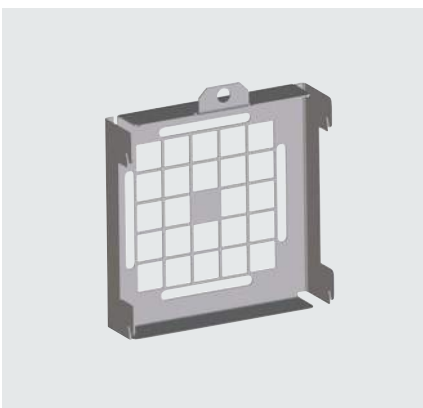
### 6 Cover plate

- easy mounting due to "apra-fix" mounting system





**7** Fan clamp



- fixing for fans size 119 x 119 x 25 mm
- can be mounted without any tools
- suitable for fan Item 9

**Material:**  
sheet steel 1.0 mm  
**Finish:**  
galvanised

<b>Order no.</b>
205-459-11

**8** Fan boot

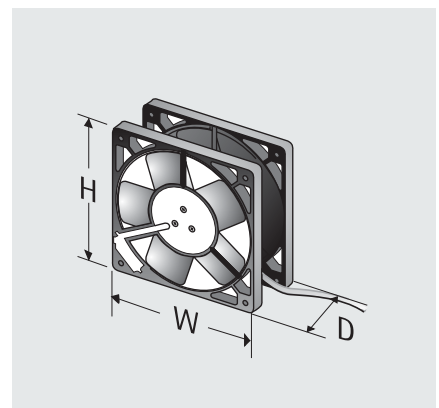


- fixing for fans size 119 x 119 x 25 mm
- reduces fan noise
- suitable for fan Item 9

**Material:**  
thermoplastic elastomer

<b>Order no.</b>
206-460-31

**9** Fan 12 V 119 x 119 mm



- high-quality PAPST-fan
- incl. connector plug for power supply or speed-monitored on the motherboard

**Dimensions (H x W x D):**  
119 x 119 x 25

Description	Air flow rate/ Noise level	Order no.
Connected to power supply	140 m <sup>3</sup> /h / 38 dB(A)	230-815
Connected to motherboard, speed-monitored	94 m <sup>3</sup> /h / 26 dB(A)	230-824
Replacement filter mat		671-200-51

**10** Blind cover for drive slot 3 1/2"



- snap-in from front side
- mounting/ dismounting without tool

**Material:**  
polystyrene PS, flammability tested acc. to UL94-HB

**Finish:**  
similar to RAL 7035 light grey

<b>Order no.</b>
206-460-42

**11** Blind cover for drive slot 5 1/4"



- snap-in from front side
- mounting/ dismounting without tool

**Material:**  
polystyrene PS, flammability tested acc. to UL94-HB

**Finish:**  
similar to RAL 7035 light grey

<b>Order no.</b>
206-460-41

**12** Internal hard drive cage



- for up to 4 hard drives 3 1/2 "
- vibration covered
- fast removing / change of hard drive cage with quick-fastener system

Not suitable for extended ATX Mainboards

<b>Order no.</b>
205-460-16





**13** Card holder set



- steplessly adjustable in height by card fixing brackets
- horizontal regulation of card fixing bracket by threaded strips
- please order card fixing brackets separately (see below)

**Material:** sheet steel 1.0 mm

**Finish:** card holder: galvanised  
mounting rail: chromated

Description	Order no.
Card holder	206-460-50
Card fixing bracket for card height 100 – 88 mm	206-460-61
Card fixing bracket for card height 88 – 65 mm	206-460-62
Card fixing bracket for card height 64 – 40 mm	206-460-63

**USB Hub**



- 2 x USB 2.0
- 2 x USB 3.0
- suitable for mounting into a 3 1/2" drive

Order no.
206-460-45

**14** Telescopic rails extension set



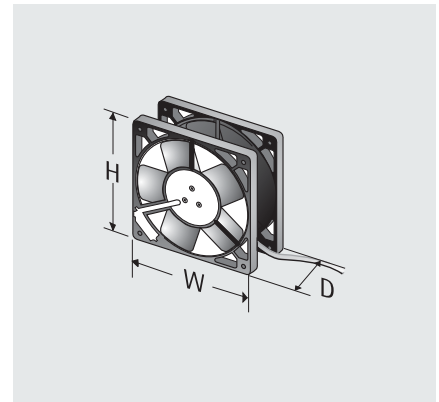
- patent pending "aprafix" mounting system
- for cabinet depth 600 and 800 mm
- high-class telescopic rails with
  - full extension
  - separable
  - interlocking when extended
- complete with 2 telescopic rails and mounting material

**Load capacity:**

66 kg per pair

Order no.
680-075-00

**15** Fan 12 V 40 x 40 mm



- for speed-monitored connection to motherboard
- dimensions (W x H x D):  
40 x 40 x 25 mm

Order no.
230-865



**"Hard Box" industrial PC enclosure**

- for ATX applications
- for installing:
  - 1x 5 1/4" disk drive
  - 1x 3 1/2" floppy drive
  - 1x 3 1/2" hard drive
- cut-out for PS/2 power supply
- fans can be installed at the rear
- board chassis for holding the mother-board
- can be customised for your specific applications
- numerous assembly options:
  - 19" installation (optional)
  - wall mounting
  - mounting on doors or mounting plates

**Application:**

compact, universal IPC enclosure

**Construction:**

clinch sheet metal design

**Material:**

sheet steel 1.0 mm

**Finish:**

galvanised

**Dimensions (H x W x D):**

177 mm x 405 mm x 362,5 mm

**Delivery:**

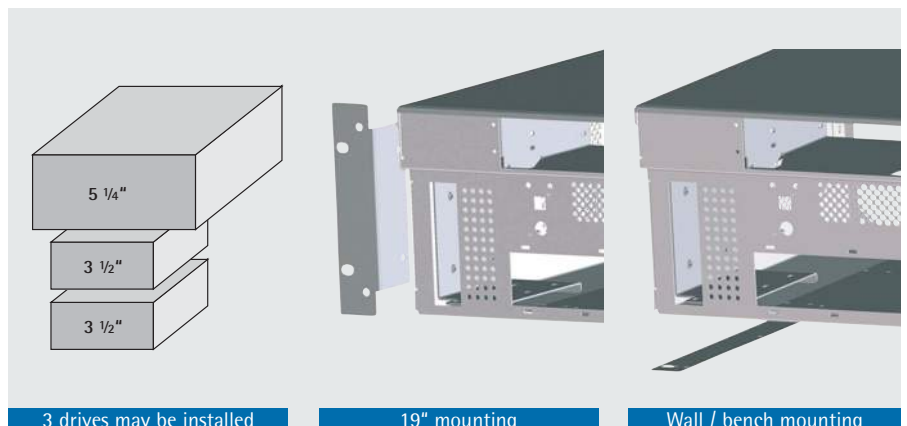
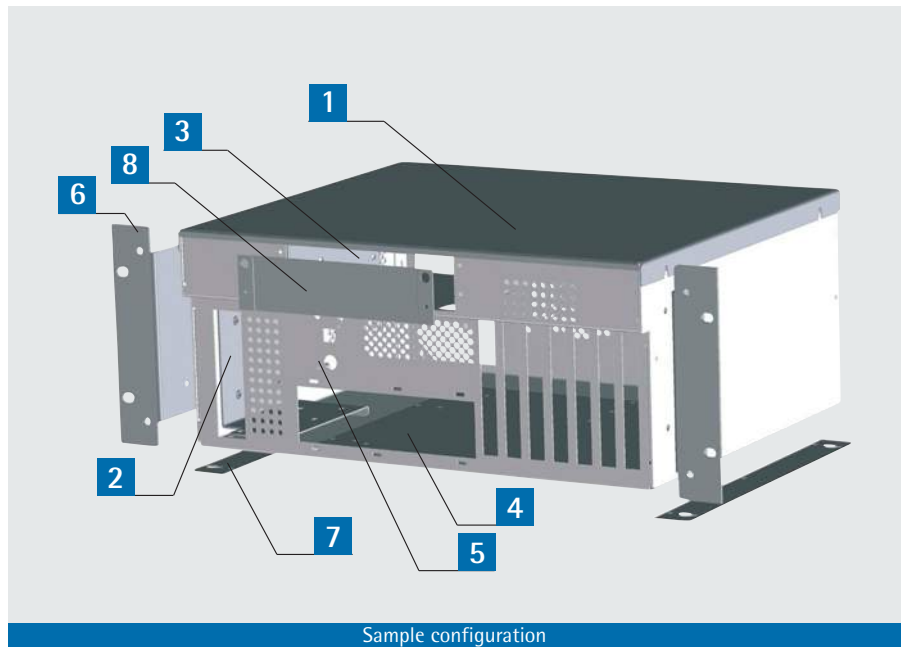
assembled



**Delivery**

Item	Pc.	Description
1	1	Enclosure chassis with top panel
2	1	Drive cage 3 1/2"
3	1	Drive cage 5 1/4"
4	1	Board chassis
5	1	Board with LED, reset button and piezo speakers
6		Optional: 19" front brackets (see p. 61, please order separately)
7		Optional: mounting angle (see p. 61, please order separately)
8		Optional: panel for "Hard Box" (see p. 61, please order separately)

<b>Order no.</b>
205-880-00

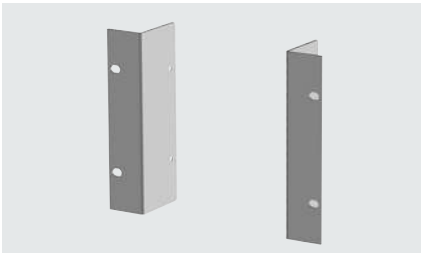




# "Hard Box" industrial PC enclosure / Industrial PC Enclosure



## 6 19" brackets, 4 U



- incl. assembly material

**Material:**

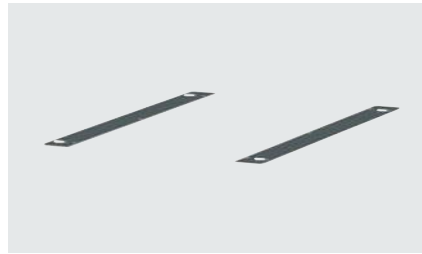
sheet steel 2.0 mm

**Finish:**

galvanised

<b>Order no.</b>
205-880-10

## 7 Set of mounting brackets



- incl. assembly material

**Material:**

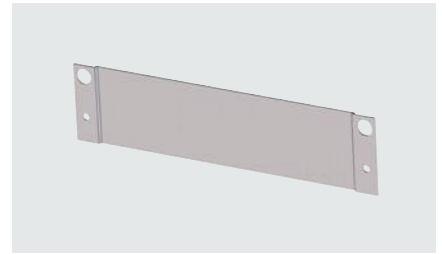
sheet steel 1.0 mm

**Finish:**

galvanised

<b>Order no.</b>
205-880-12

## 8 5 1/4" cover



- for covering the 5 1/4" drive

**Material:**

cover: sheet steel 1.5 mm

cover EMC: sheet steel 1.0 mm

**Finish:**

cover: galvanised

cover EMC: RAL 7035 light grey

Description	Order no.
Panel for Hard Box	205-880-11
Panel for Hard Box EMC	202-800-26

## Industrial PC Enclosure

- Mini-ITX form factors
- EMC compliant construction
- without fan
- vibration damped hard drive bracket
- 1x PCI-Slot by risercard
- 1x drive bracket for 3 1/2"-hard drive

**Application:**

compact, universal IPC enclosure

**Material:**

sheet steel 1.0 mm

**Finish:**

RAL 7035 light grey / galvanised

**Dimensions (H x W x D):**

96 mm x 303 mm x 221 mm

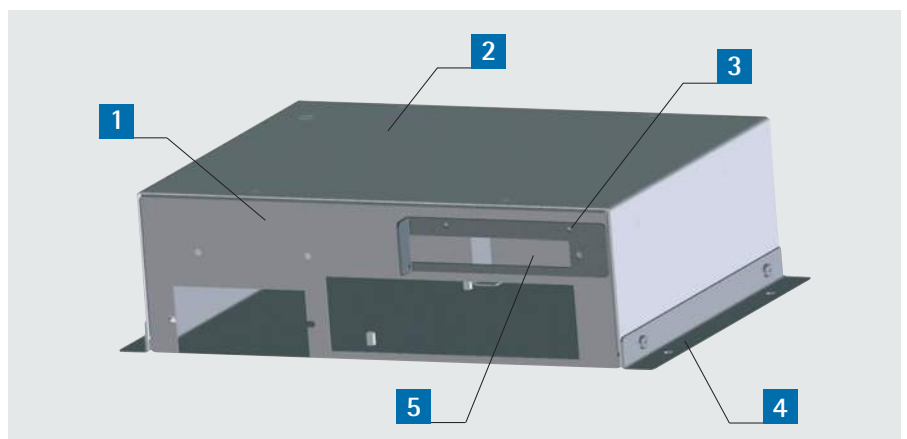
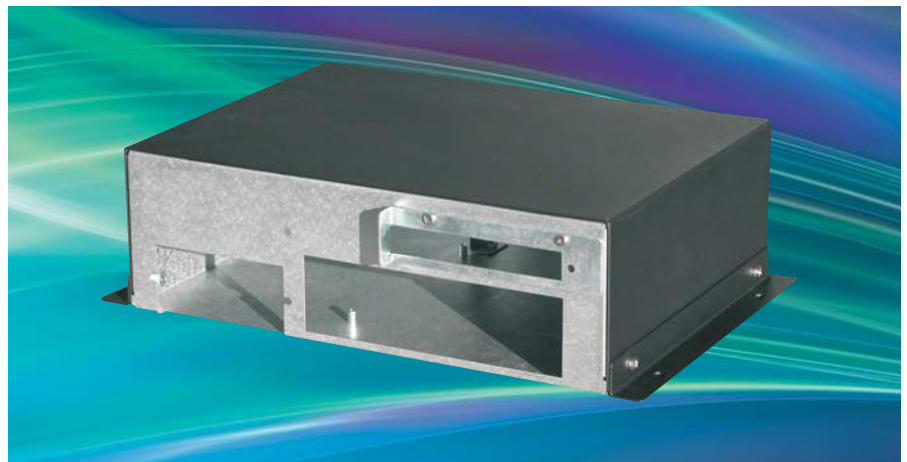
**Delivery:**

assembled

Other form factors and configuration levels on request.

## Delivery

Item	Pc.	Description
1	1	Chassis
2	1	Top
3	1	Slot cover
4	2	Wall mounting bracket
5	1	Internal drive holder 3,5"



<b>Order no.</b>
205-820-00



**Embedded PC enclosure**

This embedded PC enclosure has been especially designed for scalable platforms, for application in extreme industrial environments or directly use at machinery. Direct connection of the enclosure to the cooling elements of the board is possible by connecting the board mechanically to the top cover.

- Mini-ITX form factor
- suitable for TQ main boards
- ruggedized embedded PC enclosure
- economic design
- EMC compatible construction
- VESA 100 fixing at bottom
- customised adaption possible

**Material:**

enclosure: aluminium  
front panel, rear panel: plastics

**Finish:**

enclosure: powder coated RAL 7035 light grey or RAL 9005 deep black  
front panel, rear panel: black or RAL 7035 light grey

**Dimensions (H x W x D):**

61,5 mm x 203 mm x 213 mm

**Delivery:**

unmounted, mounting material included

Further types on request please ask us!



Description	Colour	Order no.
not ventilated	RAL 7035 / black	205-400-00
ventilated	RAL 7035 / black	205-400-20
not ventilated	RAL 9005 / RAL 7035	205-400-30

**VESA fixing**



**Material:**

sheet steel 1.5 mm

**Finish:**

galvanised

**Delivery:**

unmounted, mounting material included

Order no.
205-400-07

**Top hat rail fixing**



**Material:**

holder: sheet steel 1.5 mm  
top hat rail bracket: aluminium

**Finish:**

holder: galvanised  
top hat rail bracket: anodised

**Delivery:**

unmounted, mounting material included

Order no.
205-400-08

**Wall holder**



**Material:**

sheet steel 1.5 mm

**Finish:**

RAL 7035 light grey

**Delivery:**

unmounted, mounting material included

Order no.
205-400-26



### 19" keyboard tray, 1 U

- requires little vertical space
- extractable
- with integrated fold-out mousepad
- mouse pad can be installed on the right or left
- for keyboards up to 433 mm wide and 36 mm high

**Application:**

input console in 19" cabinets or control panels

**Material:**

sheet steel

**Finish:**

RAL 7035 light grey

**Dimensions (H x W x D):**

44 mm x 482.6 mm x 470 mm

**Delivery:**

assembled



- Mouse and keyboard not included in delivery.
- Maximum keyboard/mouse height is 36 mm.
- We recommend installing tray on guide rails.

**Delivery**

Item	Pc.	Description
1	1	Chassis
2	1	Drawer
3	1	Mouse support
4	1	Mouse pad
5		Assembly material
6	(1)	Keyboard (optional)



Description	Order no.
Plug-in unit without keyboard	202-870-50
Plug-in unit with German keyboard, QWERTZ-type	202-870-00
Keyboard, German, QWERTZ-type	202-870-09



## 202 • 19" keyboard tray, 2 U

### 19" keyboard tray, 2 U

- keyboard plug-in unit with fold-down front panel
- accommodates all standard keyboards
- existing keyboards can be integrated in to the 19" rack, even if they are not 19"-compatible
- front-mounted, large, extractable mouse rest
- mounting on front and rear 19" level, whereby the clearance to the front/rear level can be individually adjusted from 445 mm up to 845 mm.

#### Application:

input console in 19" cabinets or control panels

#### Material:

sheet steel

#### Finish:

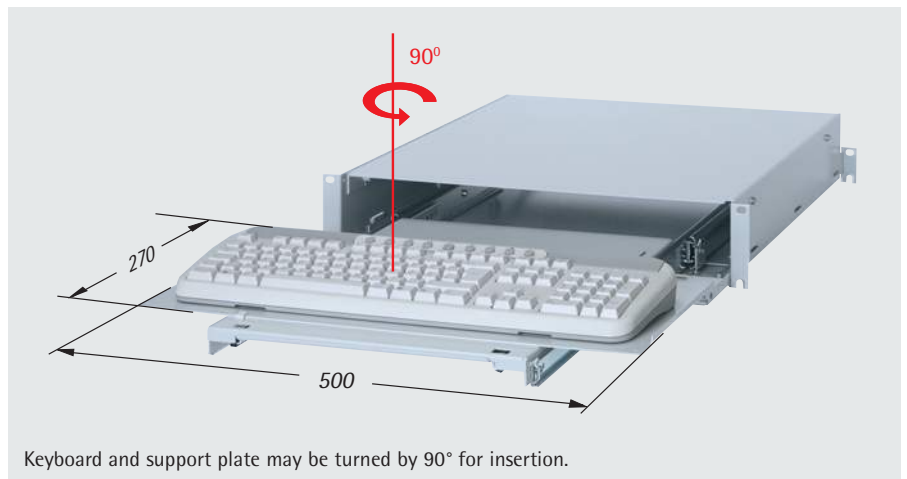
RAL 7035 light grey

#### Dimensions (H x W x D):

2 U (88 mm) x 19" (482.6 mm) x 550 mm

#### Delivery:

assembled



- Keyboard not included in delivery
- The maximum height of the keyboard/mouse is 36 mm

#### Delivery

Pc.	Description
1	Chassis top cover
1	Drawer
1	Keyboard support plate, rotat.
1	Mouse rest
2	Telescopic rails
1	Front panel
	Mounting material

Description	Order no.
19" keyboard tray 2 U	202-868-30