

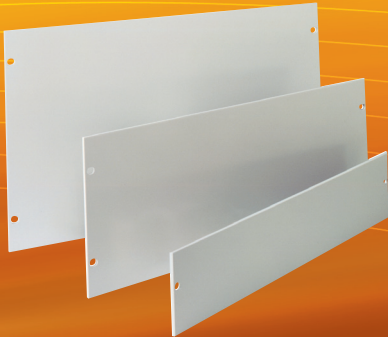
# 19" plug-in units



... the perfect shell for valuable electronics



# 19" plug-in units



## 19" front panels

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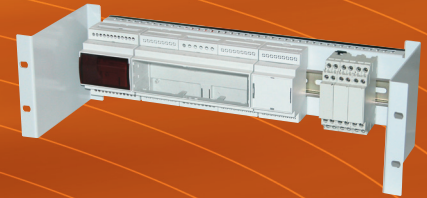
- natural colour anodised or painted
- ventilated / not ventilated
- available from 1 U up to 9 U
- customised treatment like screen print, digital print, milling, front foils, embossing, punched or lasered hole patterns available on request
- acc. to IEC 60297-3-100



## 19" universal plug-in unit

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- available from 2 U up to 6 U
- suitable for telescoping rails
- customised configuration
- customised front panel treatment with free front panel download
- acc. to IEC 60297-3-100



## 19" top hat rail support

page 75

- for a recessed mounting of top hat rail enclosures at 19" levels of cabinets, racks or enclosures
- standard fitted with top hat rail TS 35 (width 425 mm)
- perfect to mount our top hat rail enclosures apraRail



## 19" flat module, 1-3 U

page 76

- 2 versions and 3 heights available
- economic sheet metal design
- sturdy construction
- customised treatment possible
- EMC-compliant basic construction
- design cover panels available on request
- acc. to IEC 60297-3-100



## 19" drawers

page 78

- available as 1 U, 2 U and 3 U
- extractable
- optionally available with lock
- acc. to IEC 60297-3-100



### 19" front panels

- without holes for handles
- fit all 19" cabinets and enclosures
- with standardised mounting holes

**Material:**

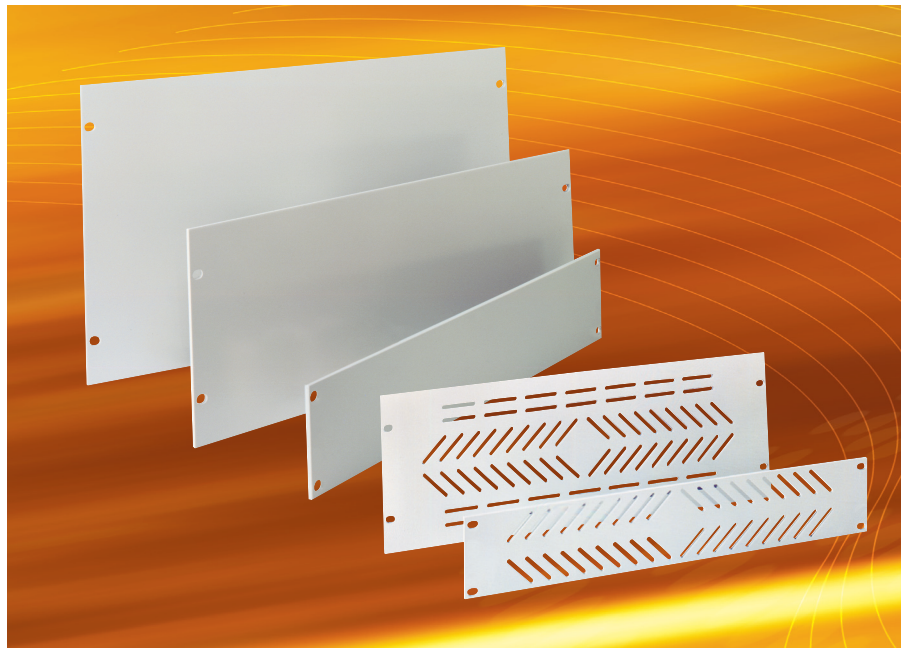
aluminium 2.5mm or 4mm (AlMg1)

**Finish:**

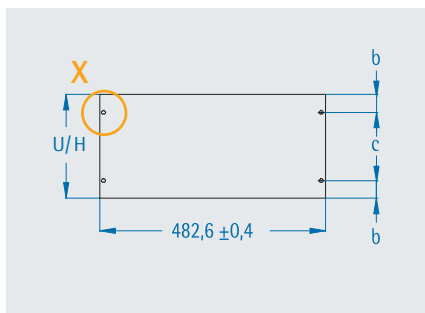
painted RAL 7035 light grey or natural colour anodised\*

**Standard:**

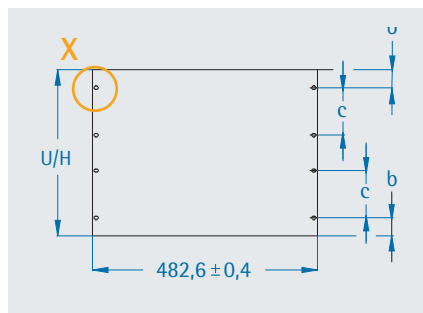
acc. to IEC 60297-3-100



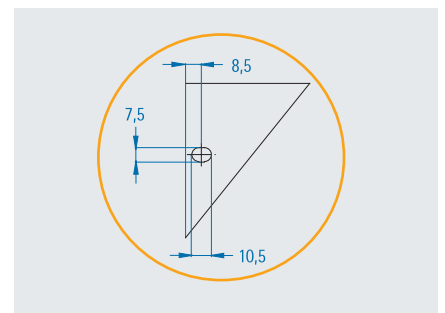
Customised blanking plates with printing, stamping and embossing available on request



Dimensions mounting height 1-6 U



Dimensions mounting height 7-9 U



Detail X

Material				AlMg1 - EQ; 2,5 mm	AlMg1 - EQ; 4 mm	
Edges				cut edges	cut edges	milled edges
Finish				natural colour anodised*	painted RAL 7035 light grey	natural colour anodised*
Installation height U	Installation height H mm	b mm	c mm	Order no.	Order no.	Order no.
1	44	5,90	32,2	-	200-021-20	200-201
2	88	5,90	76,2	200-122	200-022-20	200-202
3	132,5	37,75	57	200-123	200-023-20	200-203
4	177	37,75	101,5	200-124	200-024-20	200-204
5	221,5	37,75	146	200-125	200-025-20	200-205
6	266	37,75	190,5	200-126	200-026-20	200-206
7	310,5	37,75	88,9	-	200-027-20	200-207
8	354,5	37,75	101,6	-	200-028-20	200-208
9	399	37,75	101,6	-	200-029-20	200-209

\* Due to the material used, anodised front panels may be slightly different in colour. This variation is permitted within existing resource standards. Fissures at the anodised coating may occur.



### 19" ventilating front panels

**Material:**

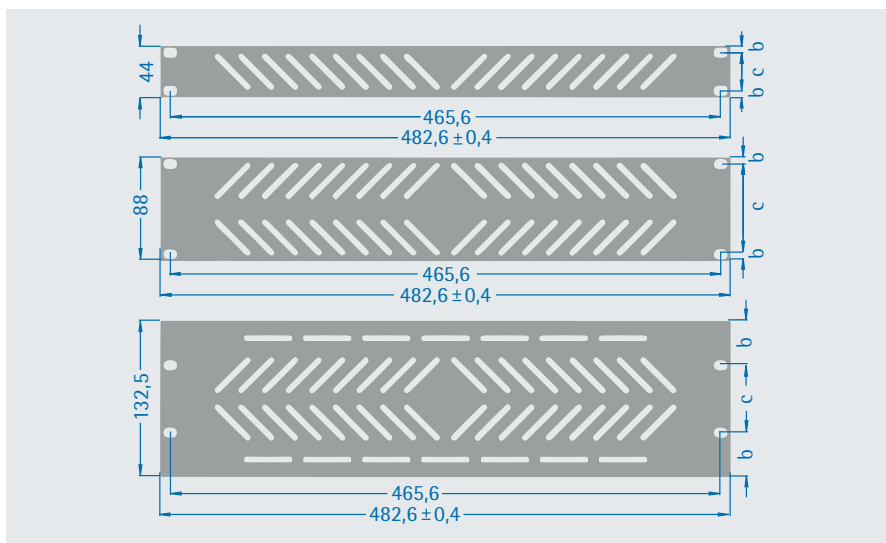
aluminium 2.5mm or 4mm (AlMg 1)

**Finish:**

natural colour anodised\*

**Standard**

acc. to IEC 60297-3-100



Installation height U	b mm	c	Material	Order no.
1	5,90	32,20	aluminium 2,5 mm	200-141
2	5,90	76,20		200-142
3	37,75	57,00		200-143
1	5,90	32,20	aluminium 4 mm	200-151
2	37,75	76,20		200-152
3	37,75	57,00		200-153

Customised hole patterns on request!

\* Due to the material used, anodised front panels may be slightly different in colour. This variation is permitted within existing resource standards. Fissures at the anodised coating may occur.

### 19" blindpanel 1 U

- air separation function: cost-saving and very effective option for reducing energy costs in data centres
- visual upgrade of the rack by concealing free 19" surfaces
- stylish design due to rounded front surface of the panel
- short assembly time: the blind panel is easily clipped into the 19" grid without tools
- can be removed and reinserted at any time without wear and tear and without tools
- protection against dust entry
- fire protection classification to UL94 V-0
- weight-saving in comparison to traditional metal panels

**Material:**

Lexan 920, listed acc. to UL 94 V-0, RoHS-conform

**Finish:**

RAL 7016 anthracite grey or RAL 7035 light grey

**Delivery:**

set = 10 pieces  
set = 136 pieces



RAL 7016 anthracite grey

RAL 7035 light grey

Colour	Delivery	Order no.
RAL 7016	Set = 10 pieces	213-156-25
RAL 7035		213-156-30
RAL 7016	Set = 136 pieces	213-156-40
RAL 7035		213-156-45



### 19" universal plug-in unit

- suitable for telescoping rails
- multiple dimensions
- can be customised to your needs
- sturdy construction
- variable construction due to perforated grind in side panels
- 19" installation dimensions acc. to IEC 60297-3-100
- standard versions or customised versions available
- IP 20
- max. load capacity on sliding rails: 50 kg

**Application:**

all-purpose, sturdy plug-in unit

**Material:**

front panel: aluminium 4 mm

side panel/chassis: sheet steel 1.5 mm

cover panel: sheet steel 1,0 mm

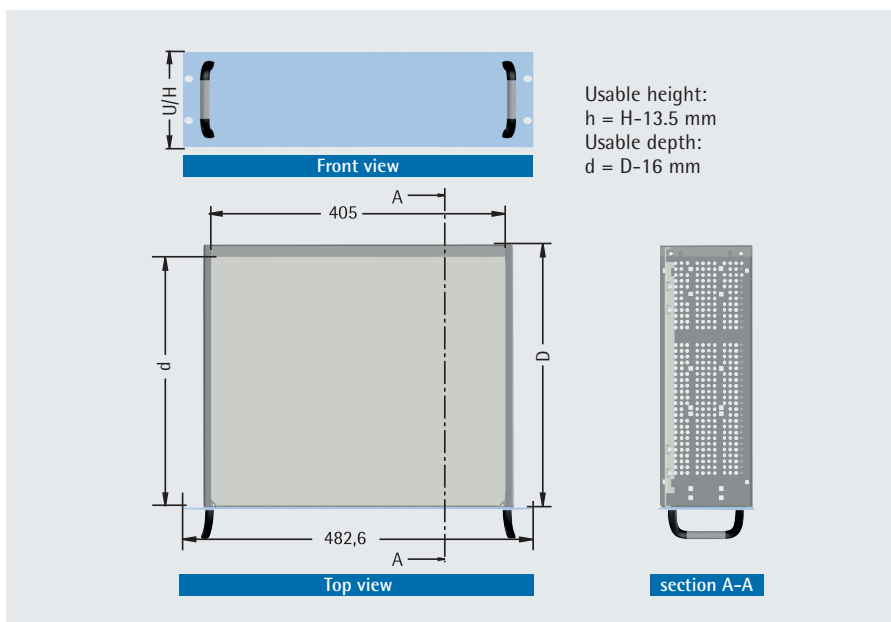
**Finish:**

front panel: RAL 7035 light grey

enclosure parts: galvanised

**Delivery:**

not assembled



**Delivery**

Item	Pc.	Description
1	1	Front panel, 4mm
2	2	Handles
3	2	Side panel
4	1	Rear panel
5	1	Chassis plate
6	1	Top panel, not ventilated
		Assembly material

Installation height H mm	Installation height U	D mm	Order no.
88	2	260	205-526-20
		360	205-536-20
		460	205-546-20
132	3	260	205-526-30
		360	205-536-30
		460	205-546-30
177	4	260	205-526-40
		360	205-536-40
		460	205-546-40
222	5	260	205-526-50
		360	205-536-50
		460	205-546-50
266	6	260	205-526-60
		360	205-536-60
		460	205-546-60

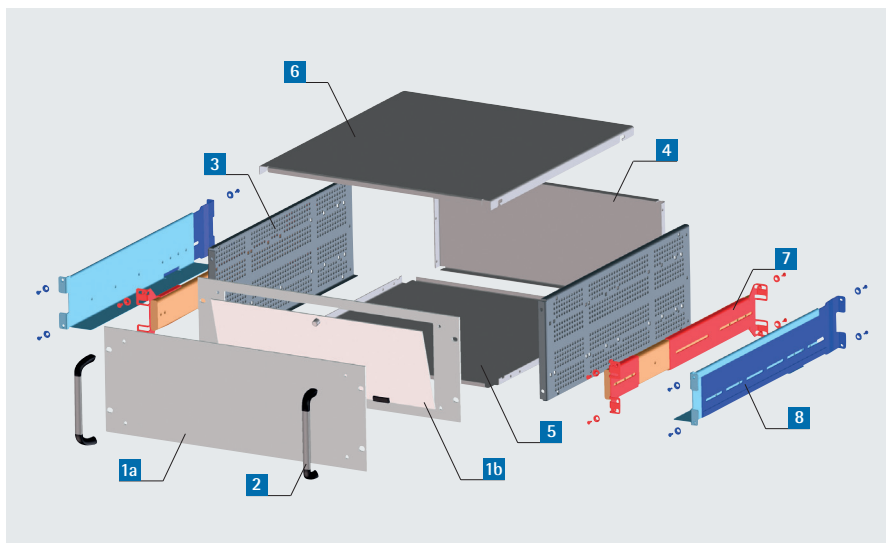


## Components

Design your own customised universal plug-in unit.

### Available components

Item	Description
1a	Front panel
1b	Front panel, hinged
2	Handles
3	Side panel
4	Rear panel
5	Bottom cover
6	Top cover
7	Telescopic rail set
8	Set of sliding rails, depth-adjustable



### 1a Front panel

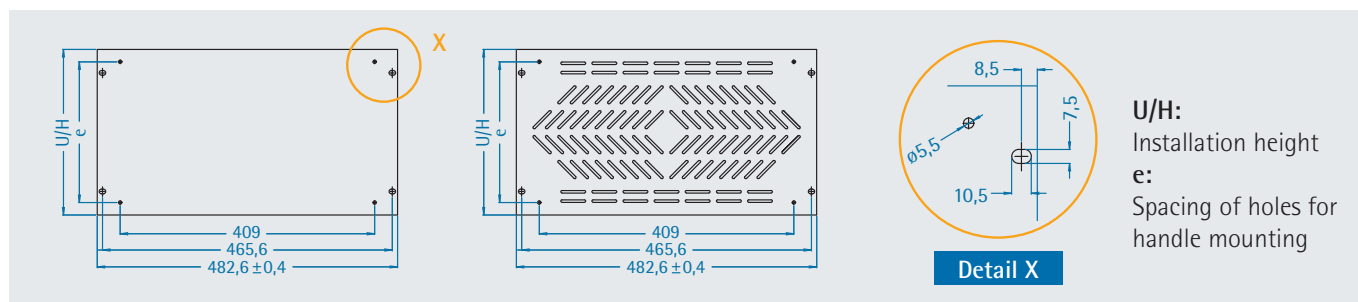
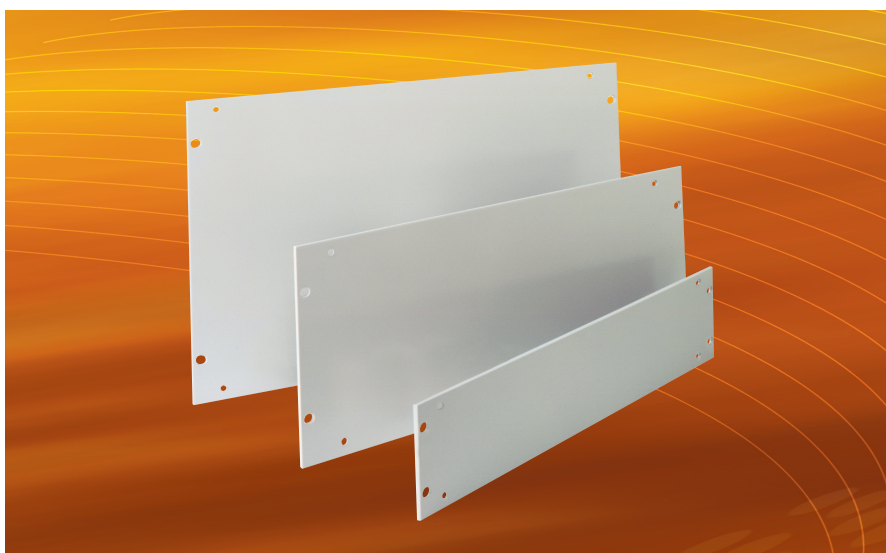
- with standardised mounting holes
- with holes for mounting handles and plug-in unit side walls
- customised front panels with printing, stamping and embossing available on request
- internet front panel service: [www.apra.de](http://www.apra.de)
- 19" installation dimensions acc. to IEC 60297-3-100

#### Material:

aluminium 2.5 mm resp. 4 mm (AlMg1)

**Finish:** RAL 7035 light grey, rear conductive

**Edges:** cut edges



Material			AlMg1 - EQ; 2,5 mm		AlMg1 - EQ; 4 mm
Ventilation			ventilated	not ventilated	not ventilated
Installation height U	Installation height H mm	Spacing of holes e mm	Order no.	Order no.	Order no.
2	88	72	205-002-52	205-002-42	205-000-42
3	132,5	92,5	205-002-53	205-002-43	205-000-43
4	177	137	205-002-54	205-002-44	205-000-44
5	221,5	181,5	205-002-55	205-002-45	205-000-45
6	266	226	205-002-56	205-002-46	205-000-46



## 1b Fold-up front panel

- with fastener
- with holes for handle mounting

### Material:

frame: sheet steel 3.0 mm  
front panel: sheet steel 2.5 mm

### Finish:

RAL 7035 light grey



Installation height U	Installation height H mm	Spacing of holes e	Order no.
3	132,5	92	205-002-73
4	177	137	205-002-74
5	221,5	182	205-002-75
6	266	226	205-002-76

## apra handle



Height H = 40 mm

### Material:

head parts: plastic, black  
middle part: aluminium extrusion,  
anodised

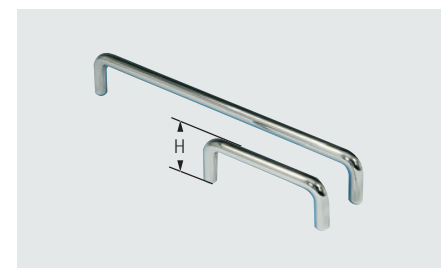
U	Spacing of holes e	Order no.
2	72 mm	611-302-00
3	92 mm	611-303-00
4	137 mm	611-304-00
5	182 mm	611-305-00
6	226 mm	611-306-00

## Oval head screws M 5 x 12

- for apra handle and bow-type handle
- Set = 100 pieces

Front panel	Size	Order no.
d = 2,5 mm	M 5 x 12	630-097
d = 4 mm	M 5 x 16	630-098

## Bow-type handle



Height H = 38 mm

### Material:

steel, chrome plated

U	Spacing of holes e	Order no.
2	72 mm	610-002
3	92 mm	610-003
4	137 mm	610-004
5	182 mm	610-005
6	226 mm	610-006

## Decorative washers

- for bow-type handle only
- Set = 100 pieces

chromated	black
610-092	610-094



### 3 Side panel

- with mounting grid for various assembly possibilities, for example chassis panel

**Material:**  
sheet steel 1.5 mm  
**Finish:**  
zinc-coated

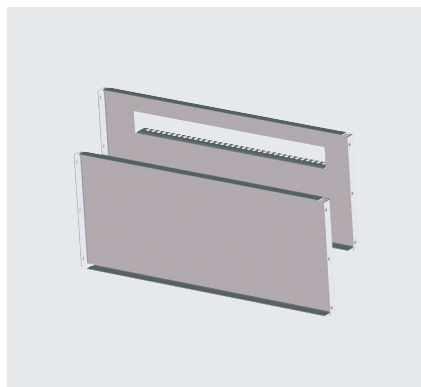


Install. height U	D mm	Order no.
2	260	205-526-22
3		205-526-32
4		205-526-42
5		205-526-52
6		205-526-62
2		360
3	205-536-32	
4	205-536-42	
5	205-536-52	
6	205-536-62	
2	460	
3		205-546-32
4		205-546-42
5		205-546-52
6		205-546-62
2		560
3	205-556-32	
4	205-556-42	
5	205-556-52	
6	205-556-62	

### 4 Rear panel

- can also be installed horizontally as a shelf
- available: closed or with cable clamping
- can be customised to your needs

**Material:**  
sheet steel 1.5 mm  
**Finish:**  
zinc-coated

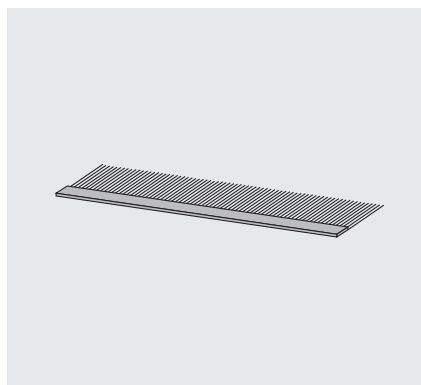


Install. height U	Feature	Order no.
2	closed	205-056-02
3		205-056-03
4		205-056-04
5		205-056-05
6		205-056-06
4		with cable clamping
6	205-056-16	

### Brush seal

- suitable for rear panel with cable clamping [4]

**Material:**  
PA 6, black



Order no.
671-040-10

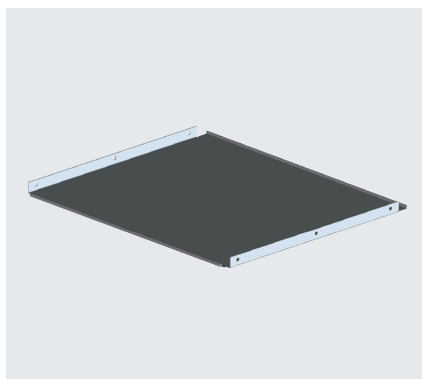




### 5 Chassis plate

- can be installed at different heights
- can be customised to your needs
- assembly material included

**Material:**  
sheet steel 1.5 mm  
**Finish:**  
zinc-coated

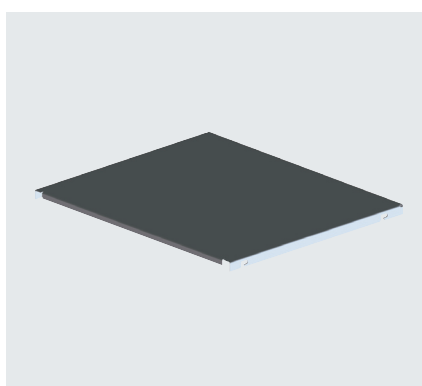


D mm	Feature	Order no.
260	ventilated	205-526-35
360		205-536-35
460		205-546-35
560		205-556-35
260	not ventilated	205-526-33
360		205-536-33
460		205-546-33
560		205-556-33

### 6 Cover plate

- ventilated/not ventilated

**Material:**  
sheet steel 1.0 mm  
**Finish:**  
zinc-coated



D mm	Feature	Order no.
260	ventilated	205-526-36
360		205-536-36
460		205-546-36
560		205-556-36
260	not ventilated	205-526-34
360		205-536-34
460		205-546-34
560		205-556-34

### Screw set "Uni 205"

- includes all screws necessary for assembling an entire universal plug-in unit

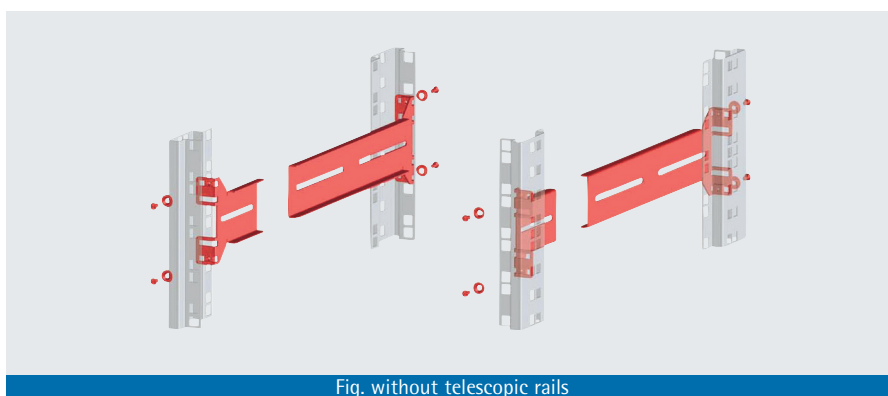
### Delivery

Pc.	Description
4	Oval-head screw M 5 x 12
4	Oval-head screw M 5 x 16
14	Oval-head screw M 4 x 8

Order no.
630-405

### 7 Telescopic rail set

- with aprafix assembly system
- high-quality telescopic rails
- ideal for installation in 600 to 800mm-deep cabinets with rear 19" mounting
- includes 2 telescopic rails and assembly material
- can be locked when pulled out
- detachable

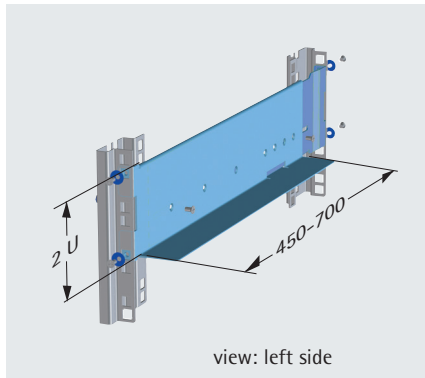


D mm	Description	Feature	Load capacity	Order no.
260	Type 0204	Partial extension (cost-effective)	51-59 kg	680-077-00
360	Type 0204			680-077-00
460	Type 0204			680-078-00
560	Type 0204			680-079-00
260	Type 3307	100% extension <b>(not suitable for 2 U 19" plug-in units)</b>	64-66 kg	680-075-00
360	Type 3307			680-075-00
460	Type 3307			680-075-00
560	Type 3307			680-076-00



## 205 • 19" universal plug-in unit

### 8 Sliding rail set, depth-adjustable



- with patented 19" assembly system aprafix
- ideal for installation in 600 mm to 800 mm deep cabinets
- including assembly material
- pulls out from 450 mm to 700 mm

**Material:**

sheet steel 1.5 mm

**Finish:**

zinc-coated

**Load capacity:**

60 kg

Order no.

205-200-00

### M5 screw set (50-fold)



- required for installing 19" components in cabinets or enclosures
- 50 screws, M5 x 12
- 50 captive nuts, M4-8
- 50 rosettes for screw M5, flattened

Order no.

630-991

### Front panel fixing (50-fold)



- no cage nuts required
- to mount lightweight 19" components such as dummy or front panels
- clamping range (front panel + grid): 4 – 6 mm
- consisting of:
  - 50 lens head screws M 5 x 12
  - 50 washers for screws M 5, flattened

Order no.

630-991-10



### 19" top hat rail support 3 U

- for a recessed mounting of top hat rail enclosures at 19" levels of cabinets, racks or enclosures
- standard fitted with top hat rail TS 35 (width 425 mm)
- perfect to mount our top hat rail enclosures apraRail
- integrated cable guarding and strain-relief by cable clip bar

**Material:**

sheet steel 1.5 mm

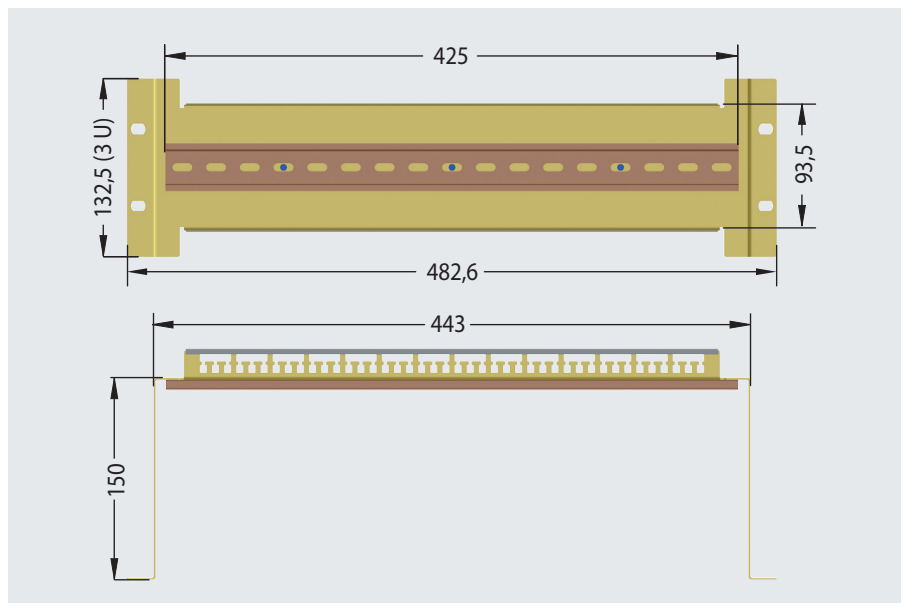
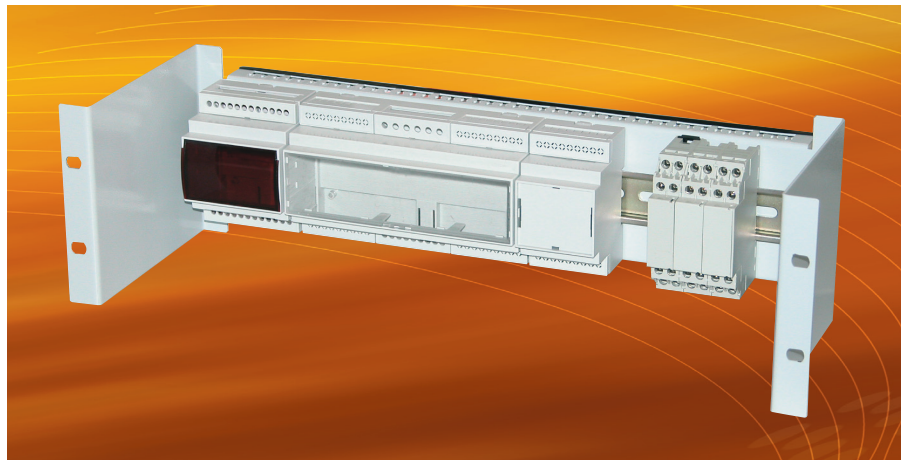
**Finish:**

galvanised resp.

RAL 7035 light grey

**Delivery:**

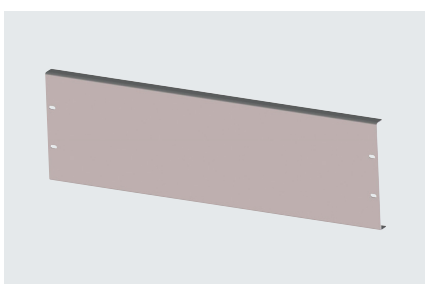
not assembled, with mounting material



Finish	Order no.
galvanised	205-420-00
RAL 7035	205-420-10

Other top hat rail types, installation widths, heights or depths available on request!

### Cover (protection against contact)



for 19" top hat rail support 3 U

Finish	Order no.
galvanised	205-420-20
RAL 7035	205-420-25

### DIN rail fixing clamp (set)

- quick, safe and sturdy fixing of small enclosures, pc boards and components to rails and support rails (TS35)
- can be easily fixed from inside or outside to the rear panel

**Material:** PA6 GF 30, black, flammability rating acc. to UL 94 V-0



Description	Order no. (1 Set = 10 pieces)
45 mm wide with through-bore hole	442-311-20
45 mm wide with threaded inserts	442-311-25
18 mm wide with through-bore hole	442-311-30
18 mm wide with threaded inserts	442-311-35



### 19" flat module, 1-3 U

- EMC-compatible basic construction
- economic sheet metal design
- sturdy construction
- customised treatment possible
- design panels on request
- 19" installation dimensions acc. to IEC 60297-3-100
- 2 versions and 3 heights available

This 19" flat module features high rigidity, modularity, large internal dimensions as well as a cost-efficient sheet metal design. The modules may be versatilely used in the fields of telecommunication, networking, industry or audio and video. Its excellent EMC compatible basic construction allows for a reliable EMC shielding of more than 50 dB in the range of 40 to 900 MHz. Another important feature is the user-friendly easy to install locking top cover.

On request the flat modules may be retrofitted with design cover panels from metal, plastics or even from wood. Of course, individual machining like silk screening, digital printing, cut-outs, foil keypads, plexiglas inserts, etc. are possible.

**Application:**

universal use in tight spaces in telecommunications, network technology, broadcast and more

**Material:**

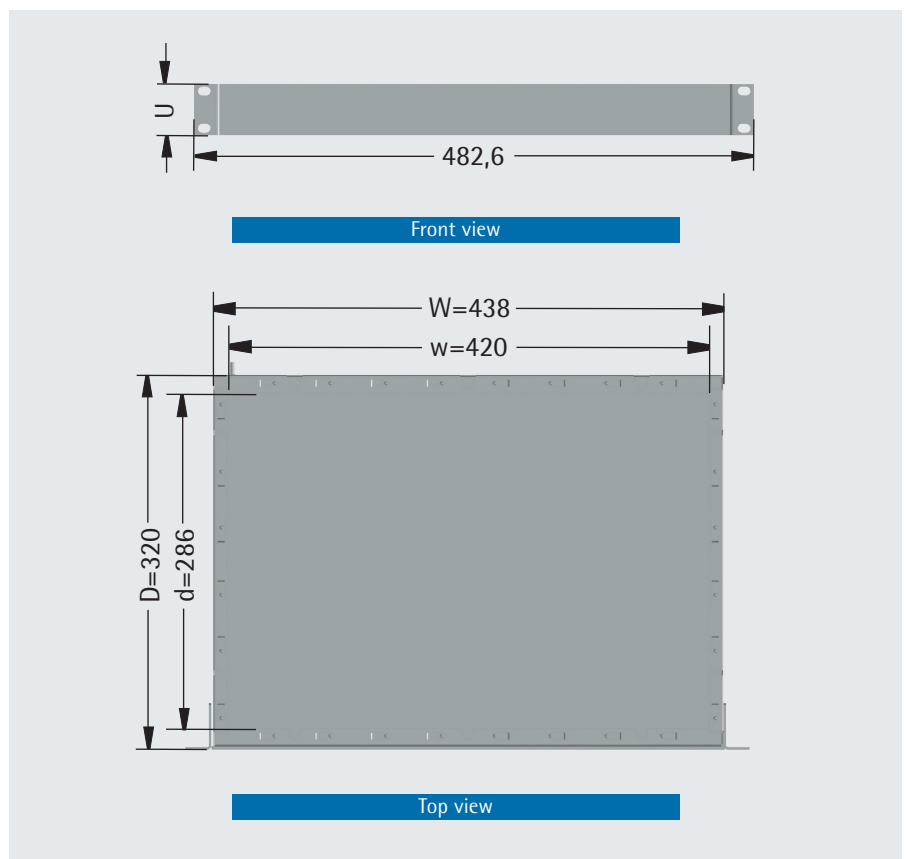
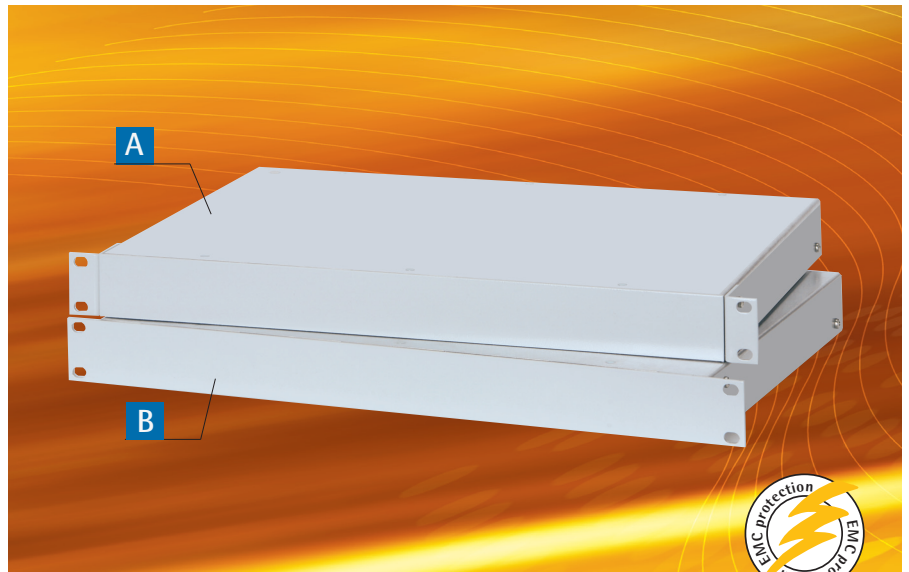
front panel: aluminium 3.0 mm  
chassis/top panel: sheet steel 1.0 mm

**Finish:**

front panel/bracket (optional): RAL 7035 light grey  
chassis/top panel: zinc-coated

**Delivery:**

not assembled



### Delivery

Item	Pc.	Description
1	1	Enclosure chassis
2	1	Enclosure cover
3	1	Front panel
4	(2)	Front brackets (only type A)
5		Assembly material

U	D mm	Description	Order no.
1	320	Type A: with removable 19" front brackets	269-201-00
		Type B: with continuous 19" front panel	269-201-10
2		Type A: with removable 19" front brackets	269-202-00
		Type B: with continuous 19" front panel	269-202-10
3		Type A: with removable 19" front brackets	269-203-00
		Type B: with continuous 19" front panel	269-203-10

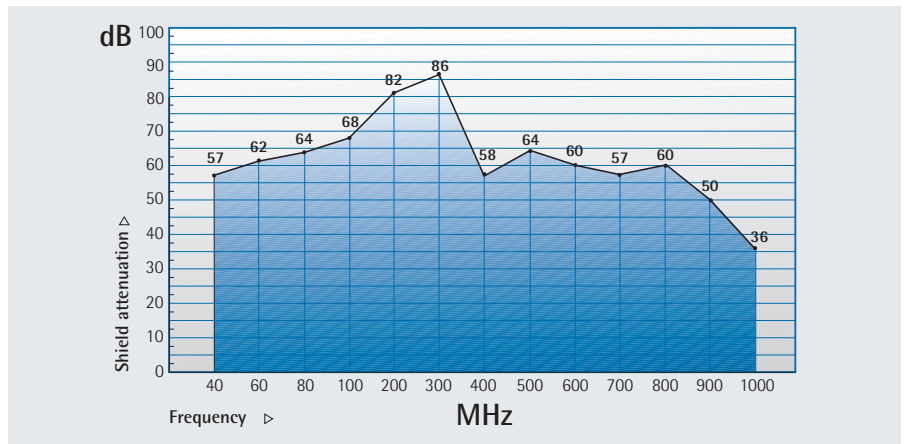


### Shielding effectiveness

Average values, calculated from measurement results of an independent institution.

#### Testing specifications:

The shielding effectiveness of the empty plug-in unit was measured according to VG 95373 part 15 in a frequency range of 40 to 1000 MHz.



## Customised 19" plug-in systems



### 19" flat modules 1 U

- for use as tuner or effects unit for music purposes



## 202 • 19" drawers

### 19" drawers

- extractable
- optionally available with lock
- 19" installation dimensions acc. to IEC 60297-3-100

#### Application:

for secure storage of documents in 19" cabinets or enclosures

#### Material:

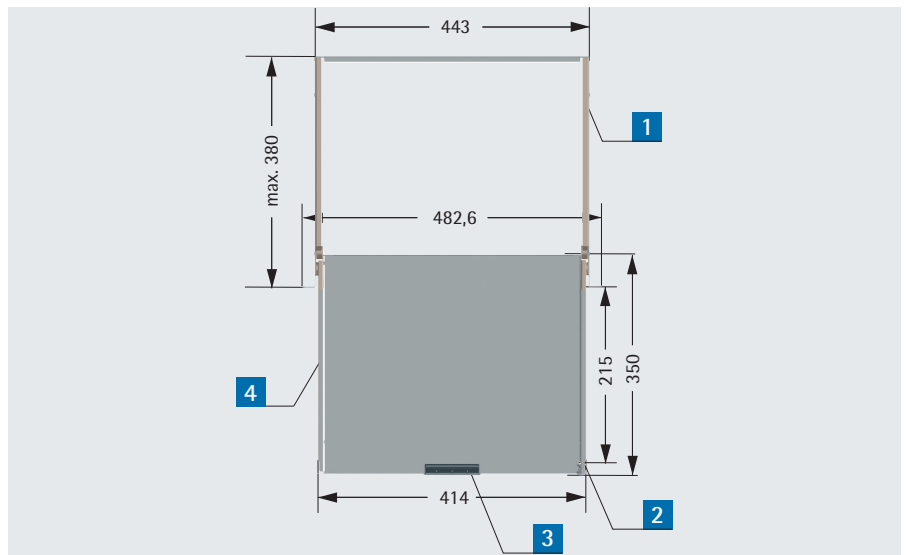
frame: sheet steel 1.5 mm  
drawer: sheet steel 1.0 mm

#### Finish:

RAL 7035 light grey

#### Delivery:

assembled



#### Delivery

Item	Pc.	Description
1	1	Installation frame
2	1	Drawer with front panel
3	1	Recess handle, black
4	1 pair	Sliding rails
5		Assembly material

U	Description	Order no.
1	without lock	202-219-50
2		202-219-53
3		202-219-56
1	with lock	202-219-60
2		202-219-63
3		202-219-66