# Housings Desktop Housings

### InterMeZo Housing

- √ Design front
- √ Functional front
- √ Variable in three dimensions
- √ Can be RFI-shielded
- √ Mechanical protection up to IP 54



### InterCase Desktop Housing

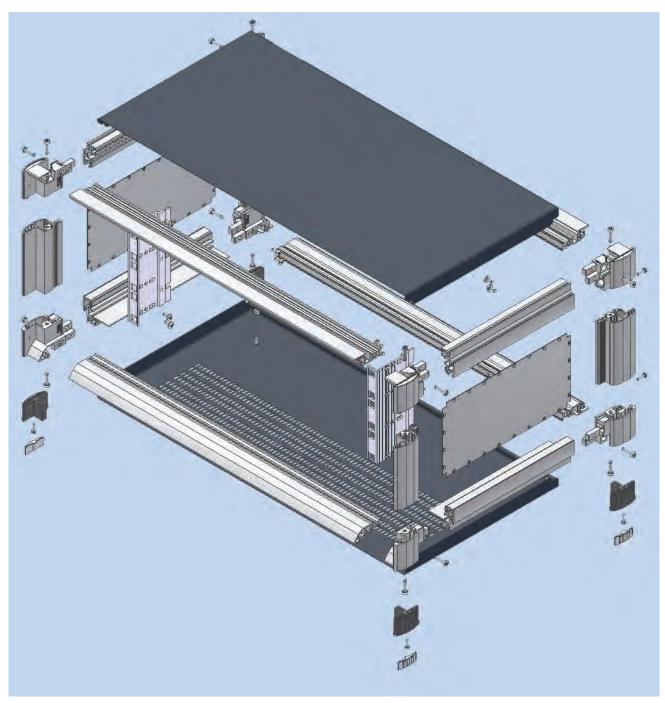
- √ Easy construction
- √ Service friendly
- √ Variable dimensions
- √ Can be RFI-shielded



### InterLock Housing

- √ Covering of subracks
- √ Easy mounting without screws





### Requirements

A modern housing exible in its applications, with a modular design, can be RFI-shielded and ventilated, in an attractive design and at a reasonable price: InterMeZo

### Construction

### 1. Housing frame

The InterMeZo housing is based on a framework construction consisting of profiles and corner connectors. This flexible design also enables fast and cost-effective assembly of individual housing sizes.

### 2. Easy to access

For quick access to the installed electronics the cover plates are pressed into profiled grooves and secured with two screws.

### 3. RFI shielding

The side walls are pressed into profile grooves; contact elements ensure RFI-shielded bonding.

To achieve effective protection of the housing against dust and water the cover panels, the rear wall and the door can all be fitted with seals.

Please state RFI requirement when ordering.

### 4. Mechanical sealing

To achieve effective protection of the housing against dust and water the cover panels, the rear wall and the door can all be fitted with seals.

### 5. Recessed grips

Grips for easy transportation are formed by the recessed mounting of the side walls.

### 6. Equipment supports

Subracks can be installed variably as the housing depth permits.

### 7. Chassis panels

The depth profiles are provided with grooves in which chassis panels or similar can be fitted at any depth with the aid of spring nuts.

### Summary

The InterMeZo housing from Intermas is a modular and cost-effective housing solution for high-quality industrial electronics in a visually attractive design, developed for the highest possible flexibilty and simplest possible assembly, with expansion capabilities for more demanding needs, compliant with stringent EMI/ESD protection specifications, and with extensice configuration options to fulfil application-specific requirements.

### Technical data

	casing:	aluminum profiles				
Materials	corner connec	corner connectors: die-cast zinc				
	feet:	ABS				
	other parts:	0.8 mm galvanized sheet steel				
Finish	painted dark	ear wall and cover panels: (gray (RALDS 5500) casing and side walls:				
		gray (RALDS 7000)				
	feet:	dark grav				

### **Versions**

The *InterMeZo housings* are available to assembly 19"- or metric subracks. Alternatively, any dimensions for variable applications are possible.

For all versions the possibility exists to choose between the following types.



### 1. Design front

This version has been constructed in terms of a harmonic front design for use with a wide range of applications.

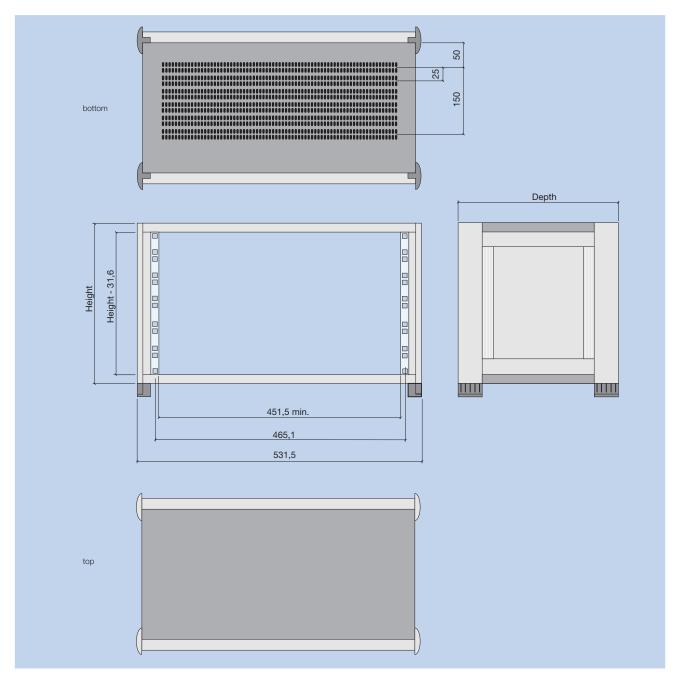


# **2. Functional front** For higher protection

For higher protection against dust and water as well as EMC shielding.

			InterMeZo	Hous	sing		
<b>A</b>		Housing	pieces				
Height 120 - 700 mm		Dimension	height: width: depth:  other: height: width: depth:	U	or	m	6 U 42 HP am
		Design	<ul><li>design fro</li><li>functional</li></ul>	front	front front		rear
THE MAN LEGIS OF THE PARTY OF T	idth 120 - sents	Color casing,	, side wall		RAL DS 7 RAL		
W	idth 120 - 600 mm mm increments	Color rear wa	all, panels		RAL DS 5		
		Louvers in			bottom p top panel rear pane		
Front	<ul><li>Casing door</li><li>Plexiglass door</li><li>Front panel</li></ul>	anodized			RAL		
19" unit support	☐ front	rear					
Protection class	□ IP					-	
RFI-shielding							
Accessories	<ul><li>Rear panel</li><li>Side bars</li><li>Mounting material for selections</li></ul>	□ Wheels □ Subplate ubrack and from		p	ieces		
Notes							

Please ask your local representative for your individual system configuration
You find your contact person on our homepage:
www.intermas-el.com



### Ordering details for assembled InterMeZo housings

stabiling details for assembled memoras from the							
				design-	functional-		
				front	front		
nom. height	height	width	depth	order no.	order no.		
[U]	[mm]	[mm]	[mm]	409	409		
3	165.60	531.50	300	166208	-		
3	165.60	531.50	400	166209	166217		
4	210.05	531.50	400	166210	-		
6	298.95	531.50	400	166211	166218		
6	298.95	531.50	500	166212	-		
7	343.40	531.50	400	166213	-		
9	432.30	531.50	400	166214	166219		
9	432.30	531.50	500	166215	-		
12	565.65	531.50	500	166216	166220		

### Delivery:

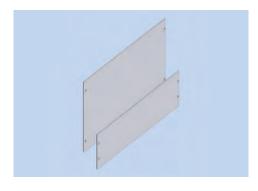
Housing frame with side panels, top closed, bottom panel with louvers 4 feet, 2 unit supports

### Delivery:

The housing is delivered assembled and painted.

Please state RFI requirement when ordering.

### InterMeZo Housing **Accessories**



### 19" Front Panels

Material: aluminum 3 mm thick

Finish: anodized

### Ordering details for 19" front panels nom. height order no. 409 [U]

3 086513 4 086514 6 086516 086517 7 086519 9 086522 12



### 19" Casing Door

Kit consists of:

1 casing door with plexiglass pane

1 lock

2 hinges

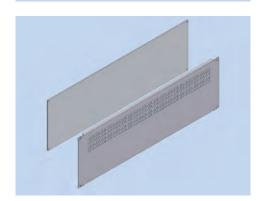
Installation hardware

### Delivery:

As complete assembled casing door.

### Ordering details for 19" casing door

nom. height	order no.
[U]	409
3	110452
4	110453
6	110454
7	110455
9	110456
12	110457



### Rear Panel, closed

### Material:

aluminum 2.5 mm thick

### Finish:

front side anodized, rear side conductive

### Rear Panel with Louvers

### Material:

steel 0.8 mm thick

### Finish:

front side RAL DS 5500, rear side conductive

### Ordering details rear panel

nom. [U]	height
3	
4	
6	
7	
9	
12	

closed order no. 409

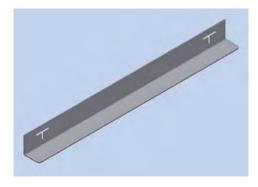
with louvers order no. 409

### Accessories

### Taptite screw M4x10

Minimum order quantity 100 pieces

order-no.: 409110395



### Slide Bars

Kit consists of: 2 slide bars Installation hardware

Material:

1.5 mm galvanized sheet steel

Finish:

passivated

### Ordering details kit



### InterMeZo Housing Accessories



### **RFI-Shielding**

Material: stainless steel

Standard housings are not retrofittable. Please state when ordering.

### Ordering details RFI-shielding-kit for rear/front panel

nom. height order no. 409 [U] 3 110360 6 110361 9 110366 12 110367

### Ordering details RFI-shielding-kit for cover plates

depth order no. [mm] 409 300 110368 400 110370 500 110372



### Unit Support

Kit consists of: 2 unit supports and Installation hardware

### Ordering details for unit support kit

nom. height order no. [U] 409 3 110375 4 110376 6 110378 7 110379 9 110381 12 110382



### Mounting material for subracks and front panels in housing

Screw Locking M6 Color: black Material: POM Minimum order quantity 10 pieces

order no.: 409074387

### **Oval Head Screw** M6 x 16 DIN 7985

steel, nickel plated Minimum order quantity 10 pieces

order no.: 409013919

### Cage Nut

steel, galvanized Minimum order quantity 10 pieces

order no.: 409131652



### Castors

Kit consists of: 2 mounting angles 4 castors Installation hardware

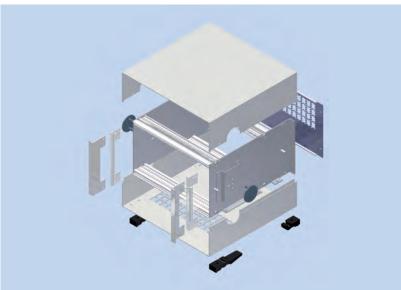
### Ordering details for castor kit

housingorder no. depth [mm] 409 castors 300 300 112092 castors 400 400 112093 castors 500 500 112094

Castors are not retrofittable. Please order with housing.

### InterCase Desktop Housing





### Description

The special design features of the *Inter-Case* desktop housing:

- ✓ A desktop housing with a simple design for standardized plug-in units and individual assemblies.
- The easy to access design allows all covering parts to be removed at any time.
- √ The bottom cover and the rear panel are provided with louvers.
- √ The side plates include perforations for attaching profile rails at different board depths.
- √ Can be RFI-shielded.

### **Technical Data**

Material	Aluminum feet: plastic
Finish	side plates: blank side panels and rear panel: painted feet: black

### Delivery:

2 top/bottom panels

2 side plates

2 side panels

4 pr ont/rear 1 pr ear middle (only for 6 U)

1 rear panel

2 covers

2 mounting angles

4 threaded strips (6 for 6 U)

1 foot kit

(1 carrying handle) Installation hardware

### Ordering details InterCase desktop housing

ordering details with edge decition nearing						
nom. height	width [HP]	nom. depth	total depth [mm]	order no.	with carrying handle- order no. 409	
3	42	160	260	172610	172548	
3	42	220	320	172620	172621	
3	84	160	260	172630	172631	
3	84	220	320	172640	172641	
6	84	160	260	172650	172651	
6	84	220	320	172660	172661	

### InterLock Desktop Housing



Material: Polystyrene 6 mm thick

Color: black

### Delivery:

The InterLock desktop housing is delivered in single parts.

### Set consists of:

- 1 top-shell
- 1 bottom-shell

### Ordering details kit - InterLock desktop housing

nom. height	width [HP]	nom. depth [mm]	order no. <b>409</b>
3	42	220	168935
3	84	220	168936
6	84	220	168937

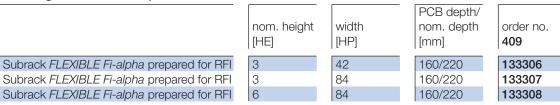
### Description

The InterLock desktop housing has been designed to cover subracks. Also System-Module can be dressed up.

The special design features of the *InterLock* desktop housina:

- The covering elements are formed from recyclable polystyrene plate-material warmly and the joints are welded together by means of a chlorine carbon solution coldly.
- Material strength of 4 to 10 mm can be processed according to demand of the device.
- Easy assembly or disassembly of the case shells. Both case shells are locked by a clamp groove without screws.
- The case is upgradeable by feet and handles.
- However, on account of an economic manufacturing technology special dimensions or special colors can be also already realised for small quantities at a reasonable price.
- Extensive range of accessories is available.

### Ordering details for compatible subrack kits





### Accessories InterLock Foot kit:

2 feet without tip-up

2 feet with tip-up

4 lens head screws with nut

Material: PPE+HIPS Color: black

Foot kit

order-no.: 409133305

### Accessories other housings Foot kit:

2 feet without tip-up

2 feet with tip-up

4 self-tapping screws

Material: PPE+HIPS Color: black

Foot kit

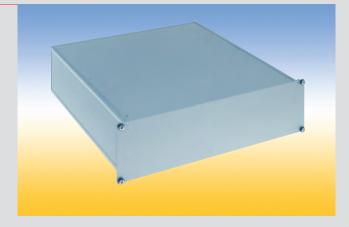
order-no.: 409059640

# Housings

# Housings for small form factors

### DiVar Housing

- √ 19" rack mounted for customized housing
- ✓ Unrestricted configuration and installation
- √ Cover plates removable



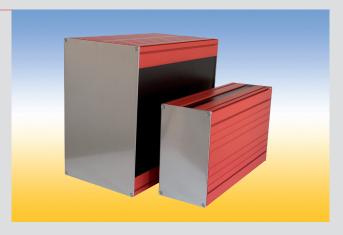
### InterShell Housing

- √ Customized adjustments
- ✓ Quick and uncomplicated installation
- √ Individual color design

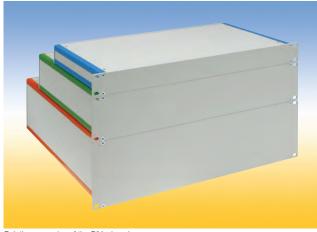


### InterShell IP Housing

- ✓ Custom specific adjustments
- ✓ Quick and uncomplicated installation
- √ Protection class up to IP 65



### DiVar Housing



Painting examples of the DiVar housing

### **Technical Data**

Material

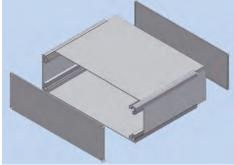
aluminum

Finish

profiles: blank cover plates, front panel and side plates: front: anodized, rear: conductive

# Delivery The DiVar housing is delivered unassembled as individual parts or as

a kit



DiVar housing as individual housing

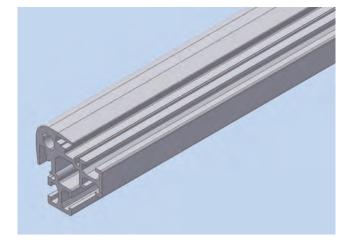
### Description

The special design features of the DiVar housing:

- √ It consists of profiles into which aluminum, sheet steel, stainless steel or plastic panels with a thickness of 1.5 to 2.5 mm are inserted and, if desired, secured with screws. A wall panel at the rear and a panel at the front are screwed to the profiles.
- √ The flexible design allows variable configuration of the housing geometry in all three axes, this allowing adaptation of the housing to customer-specific requirements.
- √ Different surfaces can be selected for an individual appearance.
- √ The proven RFI contact spring concept ensures optimum RFI shielding.
- √ Rails with threaded holes can be pressed into the profile grooves, for example to screw in PCBs or mounting plates.
- √ The extensive range of Intermas accessories allows unrestricted configuration and installation of both standardized and non-standard components.

The housing can be supplied in 4 versions:

- 1. Customized housing
- 2. 19" rack mounted
- 3. Desktop housing with a keyboard area
- 4. Desktop housing with a continuous slanting surface



### Multifunctional Profile DiVar

Material: aluminum Finish: blank

Length: 1000 mm

order no.: **409121808** 

Accessories

RFI-spring F3 Length: 399.64 mm

order no.: 409111774



### DiVar Housing as rack mounted version

### Delivery

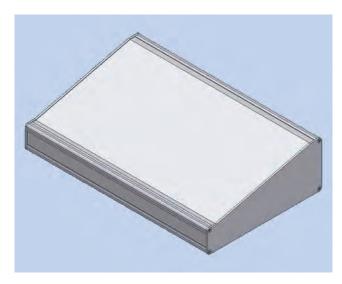
- 4 profiles
- 4 cover plates
- 1 19" front panel
- 1 rear panel

Assembly hardware

### Ordering details

### DiVar housing as rack mounted version

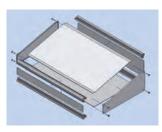
nom. height	width   [HP]	depth [mm]	order no. 409
1	84	250	122356
2	84	350	122357
3	84	450	122358



### DiVar Desktop Housing

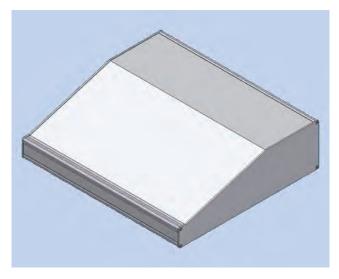
### Delivery

- 4 profiles
- 4 cover plates
- 2 side plates
- Assembly hardware



# Ordering details DiVar desktop housing

Divar des	Ktop nousing		
height	width	depth	order no
[mm]	[mm]	[mm]	409
50/100	400	250	122359

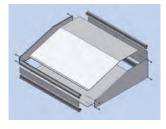


### DiVar Desktop Housing with keyboard area

### Delivery

- 4 profiles
- 4 cover plates
- 2 side plates

Assembly hardware



### Ordering details

DiVar desktop housing with keyboard area

height width depth order no.					
height [mm]	[mm]	[mm]	409		
50/120	450	250/150	122360		
30/120	430	250/150	122300		

# DiVar Housing Examples



DiVar housing as covered subrack 3 U - 84 HP - 160 mm depth



DiVar housing as covered cassette 3 U - 8 HP - 160 mm depth



DiVar housing for instrumentation

Please ask your local representative for your individual configuration.

You find your contact person on our homepage: www.intermas-el.com

### InterShell Housing



Painting examples of the InterShell

Material: Aluminium

Surface: top-shell and bottom-shell

RAL 9006 white aluminum front panel RAL 9005 - black

### Set consists of:

- 1 top-shell
- 1 bottom-shell
- 2 front panels
- 4 countersunk screw

### Delivery:

The *InterShell* housing will be delivered fully assembled and painted.

### Description

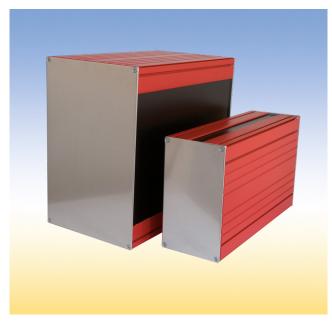
The aluminium housing *InterShell* allows individual customer requirements in the context of Small Form Factors and has the following characteristics:

- √ Flexible design in all three axes.
- Quick and simple assembly due to its simple setting.
- √ Adapted for packing small electronic units like
  - euroboards in 100 x 160 (mm)
  - customer-specific requirements
  - mITX boards.
- √ Protection classes up to IP 40.
- √ EMC-compatible.
- A wide range of surfaces allows individual colour design.
- Additional imprints according to customers requirements are available.
- Expandable with adhesive mounting feet.

### Order details InterShell housing

Usage	height [mm]	width [mm]	depth [mm]	order no. <b>409</b>
Euroboard 100 x 160 [mm]	40	106,6	168,2	138020
Universal	60	150	170	138021
mITX board, fastening points included	50	190	190	138022

Accessories	order no. 409
housing foot 12,7 x 12,7 x 3,1[mm] PU, black	137981
housing foot 12,7 x 12,7 x 5,8[mm] PU, black	137982



Painting examples of the InterShell IP

# B) D) E) Position of the notches and sealings

### Delivery:

The housings are delivered unassembled as kits. They are packed - depending on quantity - either as kits or same parts packed together.

Upon request, the housings can also be delivered completely assembled and wired according to your requirements.

### Description

The *InterShell IP* - perfect heavy duty housing. For euroboard cards and customised electronic applications.

Due to its robustness and tightness up to IP65 it is particularly suitable for mobile applications in the outdoor area as well as desk housing for for measuring and test equipment. It is also possible to use the interior for subrack 3HE 42TE.

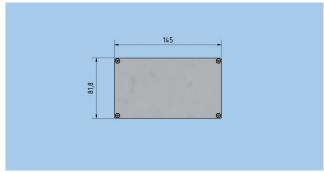
The small housing *InterShell IP* stands out due to its particular constructive features:

- √ The notches outside of the profile can be used for threaded strips (pos. 1-4) or for fittings like clip-angle or stock mounting.
- √ The notches internal the profile (5x, pos. A-E) are used for threaded strips and for additional parts like card guides.
- √ Alternative surface treatments, e.g. colorless passivation or varnishing of all visible surfaces are possible.
- √ Front panel and rear panel are made of 3mm metal sheed. On request, cut-outs for connectors as well as individual printing are possible.
- √ Sidewall, front and back panel are made of bright sea water resistant aluminum. Surface treatments are also possible.
- √ Front and rear panel are each fitted with 4 countersunk screws.
- ✓ A sealing (ø2mm) can be inserted between the profile and the plugged-in side panel to protect against extraneous particles and splashed water.
- √ The use of high-quality silicone sealings provides an optimal protection against foreign particles and moisture.
- ✓ Optionally, two conductive variants of sealings are available in order to obtain an optimal EMC-shielding
- Silicone filled with particles of nickel-plated graphite
- Fluorosilicone filled with conductive particles of silver-plated aluminum
- √ Feet-kit is available as an option and can be ordered separately.

### **Technical Data**

Dimensions	Small housing W 145 mm, H 81,8 mm basic Small housing for subrack 3 U-42 HP, W 234,3 mm, H 145 mm
Usable depth	150, 200, 250 mm (inner dimensions)
Materials	Screws: stainless steel, Assembled and threaded strips: steel or stainless steel profile and side panel: aluminium
Surface	Aluminium parts: blank or colorless passivated Steel parts: galvanized and colourless passivated
Protection class	IP 65 with sealing, otherwise IP43
Temprature range	-35 °C to +80 °C with sealing, otherwise -55 °C to +160 °C
Protective earthing	After assembly all metal parts have an electrically conductive interconnection acc. to VDE 100/12.65, § 6 Nb.

### Dimension



Housing InterShell IP basic

# 234,3

Housing InterShell IP for subrack 3 U 42 HP

### Version 1 Housing *InterShell IP* basic

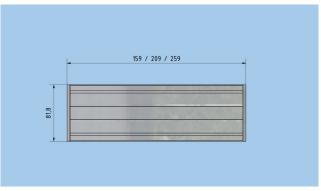
Dimension front panel/rear panel

Width 145 mm Height 81,8 mm

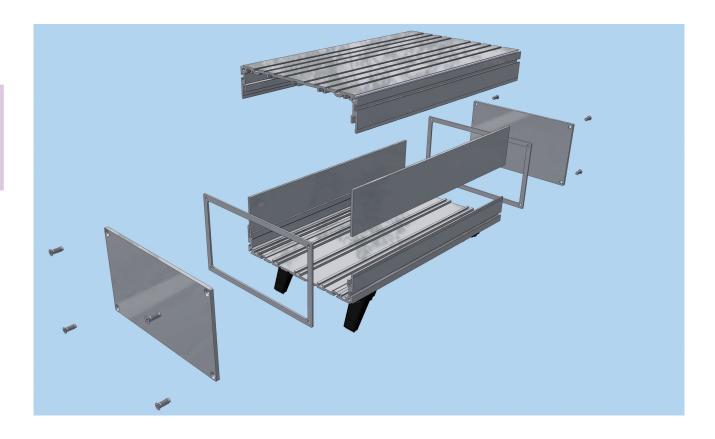
### Version 2 Housing *InterShell IP* for subrack 3 U-42 HP

Dimension front panel/rear panel

Width 234,3 mm Height 145 mm



Housing InterShell IP basic



### Version 1 Small housing *InterShell IP* basic

### Ordering details

	Order-no. 409
Depth dimensions 250 mm	180910
Depth dimensions 200 mm	180965
Depth dimensions 150 mm	180967

### Scope of delivery

	pieces per kit 250 mm	pieces per kit 200 mm	pieces per kit 150 mm
Half-shell I = 250 mm	2	-	-
Half-shell I = 200 mm	-	2	-
Half-shell I = 150 mm	-	-	2
Countersunk screw M 4 x 10	8	8	8
Cellular rubber Ø 2 mm	1 m	0,8 m	0,6 m
Side panel I = 250 mm	2	-	-
Side panel I = 200 mm	-	2	
Side panel I = 150 mm	-	-	2
Front panel / back panel	2	2	2
Sealing for housing	2	2	2

### Version 2 Housing *InterShell IP* subrack 3 HE-42 TE

### Ordering details for kits

Depth dimensions 250 mm
Depth dimensions 200 mm
Depth dimensions 150 mm
Depth dimensions 150 mm

### Scope of delivery

	quantity in kit 250 mm	quantity in kit 200 mm	quantity in kit 150 mm
Half-shell I = 250 mm	2	-	-
Half-shell I = 200 mm	-	2	-
Half-shell I = 150 mm	-	-	2
Countersunk screw M 4 x 10	8	8	8
Cellular rubber Ø 2 mm	1 m	0,8 m	0,6 m
Roof panel/floor panel I = 250 mm	2	-	-
Roof panel/floor panel I = 200 mm	-	2	
Roof panel/floor panel I = 150 mm	-	-	2
Front panel/back panel 3 U 19"	2	2	2
Sealing for housing 3 U 42 HP	2	2	2

The silicon sealings are included in the basic kit. Sealings made of conductive material must be ordered separately.

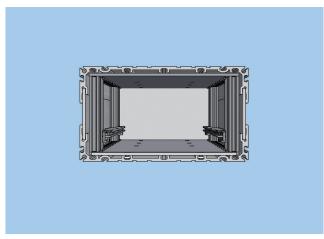
### Sealings

### Ordering details conductive sealing

Ordering details conductive sealing	Fluorosilicone filled with conductive particles of silver-plated aluminum. order-no.	Silicone filled with particles of nickel-plated graphite. order-no.
Version 1 Housing InterShell IP basic	180913*	180914*
Version 2 Housing <i>InterShell IP</i> subrack 3 HE-42 TE	180918*	180919*

<sup>\*</sup>Remark! Two seals are required per enclosure!

# Housing *InterShell IP*Kit to install 19 inch standard parts

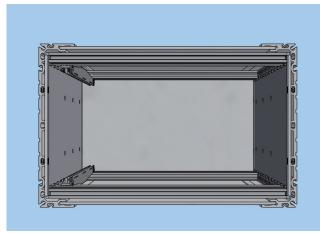


Housing InterShell IP basic

# Assembly kit 19 inch standard parts Housing *InterShell IP*

### Scope of delivery

	quantity in kit
side panel 3 U - 220	2
profile rail U 2 13 HP	4
countersunk screw M 4 x 10	8
stop bar	2
threaded strip M 2,5 x 12 HP	4
countersunk screw M 2,5 x 6	4
square nuts M 2,5	4



Housing InterShell IP for subrack 3 U 42 HP

### Assembly kit 19 inch standard parts Housing *InterShell IP for* subrack 3 U-42 HP

### Scope of delivery

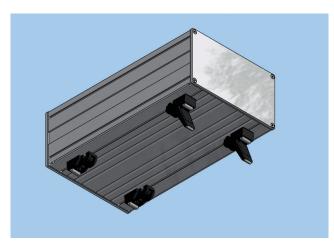
Scope of delivery	
	quantity in kit
side panel 3 U - 220	2
profile rail U 2 13 HP	4
countersunk screw M 4 x 10	8
stop bar	2
threaded strip M 2,5 x 42 HP	4
countersunk screw M 2,5 x 6	4
square nuts M 2,5	4

### Ordering details kits

	order-no. 409
Assembly kit 19 inch standard parts basic InterShell IP	180978
Assembly kit 19 inch standard parts InterShell IP for subrack 3 U-42 HP	180979

Both kits are only suitable for housing depths of 250 mm.

# Housing InterShell IP Accessories



Both kits are suitable for housing depths of 250/200/150 mm



- 4 Feet without put-up hinge
- 2 put-up hinge with rubber
- 4 head screw M 3 x 8
- 4 washer A 3.2
- 4 square nut M 3

Material: ultramid Color: black

Ordering details for kit

order no. 409
Alternative: a kit with 4 adhesive feet is available.

Foot kit

### Version 1: Kit for basic housing

2 mounting angle

**Ground mounting** 

- 4 head screw M 3 x 5
- 4 square nuts M 3

### Version 2: Kit for 3U-42HP

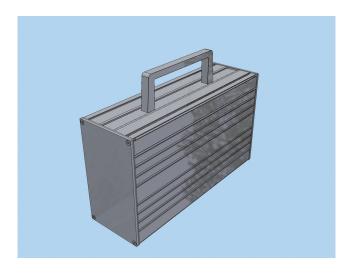
- 1 mounting angle right 3 U
- 1 mounting angle left 3 U
- 4 head screw M 3 x 5
- 4 square nut M 3

Material: aluminium
Surface: blank
Ordering details for kit

order no.

ground mounting ground mounting 3 U 42 HP 409 180969

180970



### Handle

### Scope of delivery

2 countersunk screw M 4 x 12

1 handle 3 U

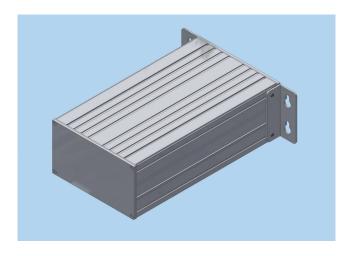
Material: aluminium Surface: anodized

### Ordering details for kit

order-no. 409 handle kit 180974

Kit only for *InterShell IP* basic version available. Other handles on request.

# Housing InterShell IP Accessories



### Wall mounting

### Version 1: Kit for basic housing

- 1 mounting angle right
- 1 mounting angle left
- 4 head screw M 3 x 5
- 4 square nut M3

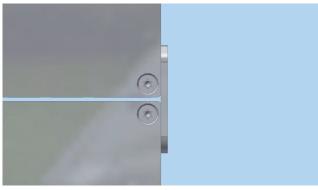
### Version 2: Kit for 3 U-42 HP

- 1 mounting angle right 3 U
- 1 mounting angle left 3 U
- 4 head screw M 3 x 4
- 4 square nut M 3

Material: aluminium Surface: blank

### Ordering details for kit

wall mounting kit wall mounting kit for 3 U 42 HP



Angle for stacking

# Stock mounting and stock mounting heavy version

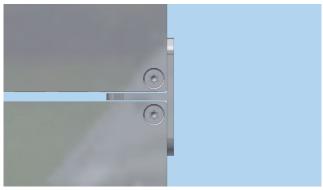
### scope of delivery for kit

- 2 mounting plate
- 8 head screw M 3 x 5
- 8 square nut M 3

### scope of delivery for kit heavy version

- 2 mounting plate heavy version
- 8 head screw M 3 x 5
- 8 square nut M 3

Material: aluminium Surface: blank



Angle for stacking - heavy version

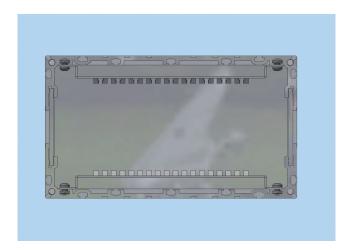
### Ordering details for kit

mounting angle mounting angle heavy order no. 180975

Both kits are suitable for housing depths of 250/200/150 mm

Both kits are only available for InterShell IP basic structure.

# Housing InterShell IP Accessories



### Card guide 2 U vertikal

### Scope of delivery - depth 250/200 mm

2 card guide vertikal 2 U für depth 250/200 mm

12 head screw M 3 x 4

12 square nut M 3

### Scope of delivery - depth 150 mm

2 card guide vertikal 2 U für depth 150 mm

12 head screw M 3 x 4

12 square nut M 3

Material: steel
Surface: galvanised

### Ordering details for kit

order no. 409

Kit card guide 2 U 250/200

180971

180981

Kit card guide 2 U 150 mm

# card cage (horizontal framing for circuit boards as Euro-card format)

### Scope of delivery horizontal

1 card cage komplett

6 head screw M 2,5 x 4

2 threaded strip M 2,5 x 39 TE anreihbar

Material: steel
Surface: galvanized

### Ordering details for kit

order no. 409

Kit card cage 180977

100,5

Kit only suitable for housing depths of 250 mm. Kit only available for *InterShell IP* basic construction.

Technical changes and errors reserved.