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

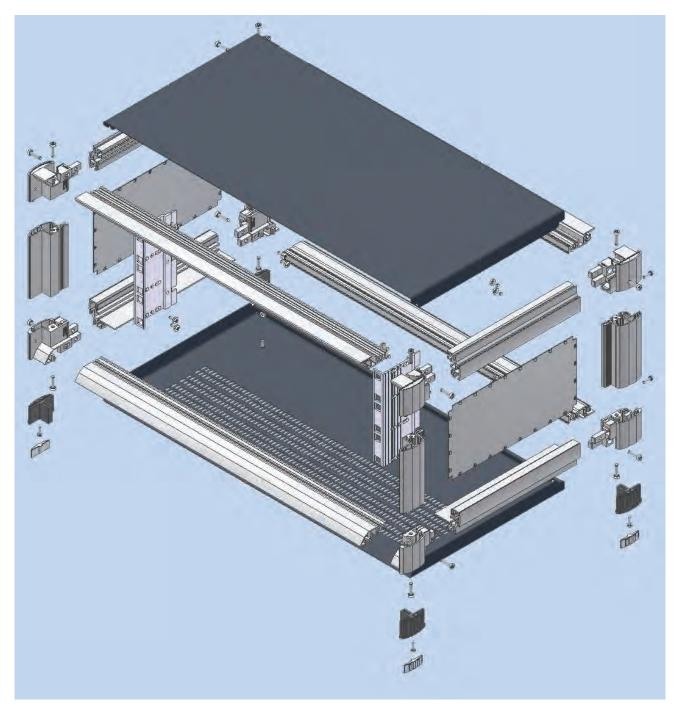
- √ Easy construction
- √ Service friendly
- √ Variable dimensions
- √ Can be RFI-shielded



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.

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 connectors: die-cast zinc		
ivialeriais	feet:	ABS	
	other parts:	0.8 mm galvanized sheet steel	
Finish	painted dar standard for painted ligh	rear wall and cover panels: k gray (RALDS 5500) casing and side walls: t gray (RALDS 7000)	
	feet:	dark gray	

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.

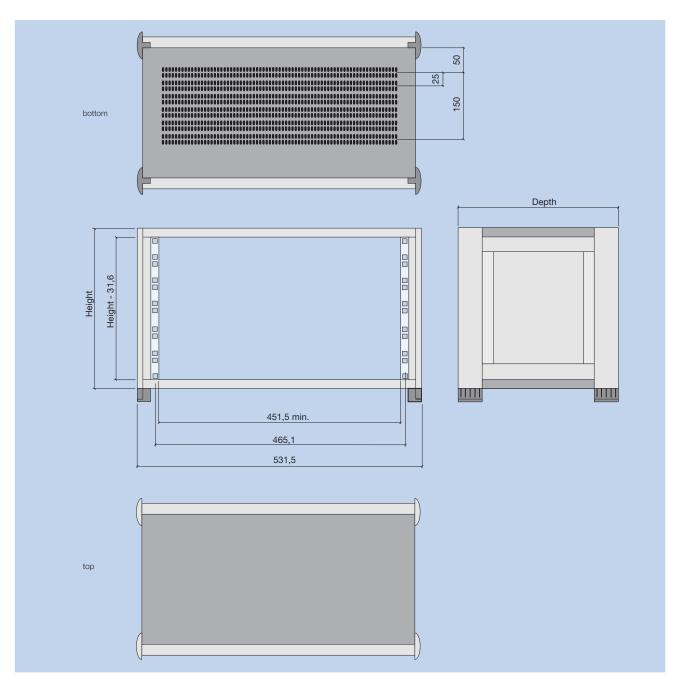


2. Functional front For higher protection

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

			InterMeZo Housing
A		Housing	pieces
Height 120 - 700 mm		Dimension	height: 3 U
		Design	design front rear front rear functional front rear
The man lade and m	idth 120 - gents	Color casing	g, side wall RAL DS 7000 RAL_
W in	idth 120 - 600 mm mm increments	Color rear wa	all, panels RAL DS 5500
		Louvers in	bottom paneltop panelrear panel
Front	Casing doorPlexiglass doorFront panel	anodized	□ RAL
19" unit support	☐ front	rear	
Protection class	□ IP		
RFI-shielding			
Accessories	Rear panelSide barsMounting material for s	☐ Wheels☐ Subplate subrack and fron	e Carry handles nt panels kit pieces
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

nom. height	height [mm]	width [mm]	depth [mm]	design- front order no. 409.	functional- front order no. 409.
3	165.60	531.50	300	166 208	-
3	165.60	531.50	400	166 209	166 217
4	210.05	531.50	400	166 210	-
6	298.95	531.50	400	166 211	166 218
6	298.95	531.50	500	166 212	-
7	343.40	531.50	400	166 213	-
9	432.30	531.50	400	166 214	166 219
9	432.30	531.50	500	166 215	-
12	565.65	531.50	500	166 216	166 220

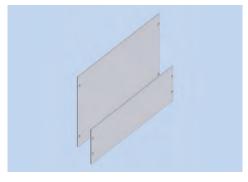
Delivery:

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

Delivery:

The housing is delivered assembled and painted.

InterMeZo Housing Accessories



19" Front Panels

Material: aluminum 3 mm thick

Finish: anodized

Ordering details for 19" front panels

nom. height	order no.
[U]	409.
3	086 513
4	086 514
6	086 516
7	086 517
9	086 519
12	086 522



19" Casing Door

Kit consists of:

1 casing door with plexiglass pane

1 lock

2 hinges

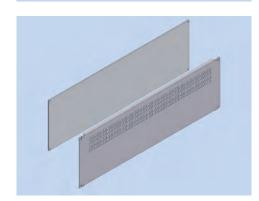
Installation hardware

Delivery:

As complete assembled casing door.

Ordering details for 19" casing door

nom. height	order no.
[U]	409.
3	110 452
4	110 453
6	110 454
7	110 455
9	110 456
12	110 457



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.

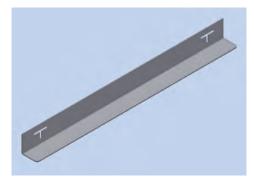
109 984 109 985 109 986 109 987 109 988 110 392 with louvers order no. **409.**

Accessories

Taptite screw M4x10

Minimum order quantity 100 pieces

order-no.: 409. 110 395



Slide Bars

Kit consists of: 2 slide bars Installation hardware

Material:

1.5 mm galvanized sheet steel

Finish:

passivated

Ordering details kit			
	for housing- depth [mm]	order no. 409.	
slide bar	300	111 285	
slide bar	400	111 286	
slide bar	500	111 287	

InterMeZo Housing Accessories



RFI-Shielding

Material: stainless steel

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

nom. height order no. 409. 3 110 360 6 110 361 9 110 366 12 110 367

Ordering details RFI-shielding-kit for cover plates

depth order no. [mm] 409. 300 110 368 400 110 370 500 110 372



Unit Support

Kit consists of: 2 unit supports and Installation hardware

Ordering details for unit support kit

nom. height order no. [U] 409. 3 110 375 4 110 376 6 110 378 7 110 379 9 110 381 12 110 382



Mounting material for subracks and front panels in housing

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

order no.: 409. 074 387

Oval Head Screw M6 x 16 DIN 7985 steel, nickel plated

Minimum order quantity 10 pieces order no.: 409, 013 919

Cage Nut

steel, galvanized Minimum order quantity 10 pieces order no.: 409. 131 652



Castors

Kit consists of: 2 mounting angles 4 castors Installation hardware

Ordering details for castor kit

housingorder no. depth [mm] 409. 112 092 castors 300 300 castors 400 400 112 093 castors 500 500 112 094

Castors are not retrofit Please order with housing.



Carry Handles

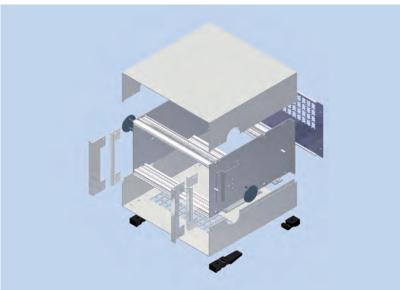
Kit consists of: 2 handles Installation hardware

Color: RAL DS 7000

order no.: 409. 112 507

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.
- √ The comprehensive range of Intermas subrack accessories allows individual
- √ 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

0.009 0.0		acc accittop nea	cg		
nom. height	width [HP]	nom. depth	total depth [mm]	order no. 409.	with carrying handle- order no. 409.
3	42	160	260	172 610	172 548
3	42	220	320	172 620	172 621
3	84	160	260	172 630	172 631
3	84	220	320	172 640	172 641
6	84	160	260	172 650	172 651
6	84	220	320	172 660	172 661

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. 409.
3	42	220	168 935
3	84	220	168 936
6	84	220	168 937

Description

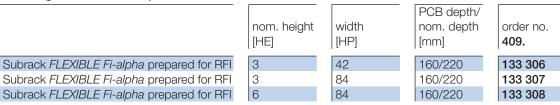
The *InterLock* desktop housing has been designed to cover subracks. Also System-Module can be dressed up.

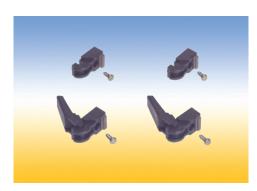
The special design features of the *InterLock* desktop housing:

- √ 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

Matarial

Material: Ultramid Color: black

Foot kit

order-no.: 409. 133 305

Accessories other housings Foot kit:

- 2 feet without tip-up
- 2 feet with tip-up
- 4 self-tapping screws

Material: Ultramid Color: black

Foot kit

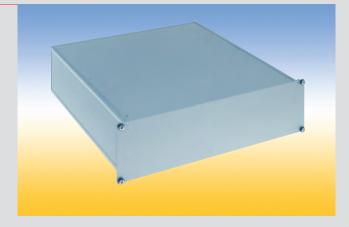
order-no.: **409. 059 640**

Housings

Housings for small form factors

DiVar Housing

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



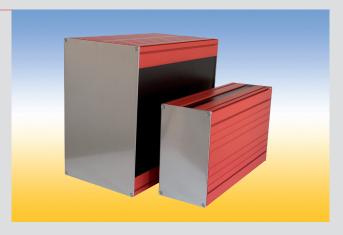
InterShell Housing

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

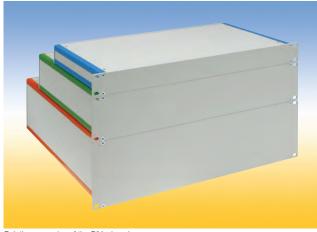


InterShell IP Housing

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



DiVar Housing



Painting examples of the DiVar housing

Technical Data

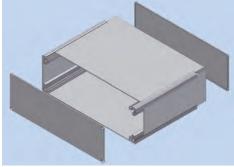
Material

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

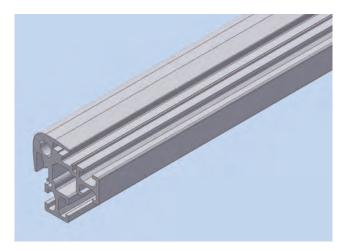
Description

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.: 409. 121 808

Accessories

RFI-spring F3 Length: 399.64 mm

order no.: 409. 111 774



DiVar Housing as rack mounted version

Delivery

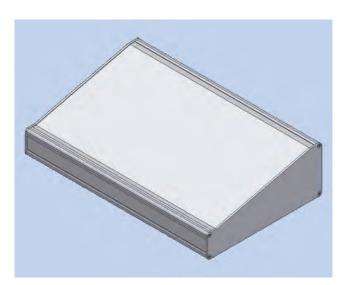
- 4 profiles
- 4 cover plates
- 1 19" front panel
- 1 rear panel

Assembly hardware

Ordering details

DiVar housing as rack mounted version

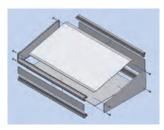
nom. height	width [HP]	depth [mm]	order no. 409.
1	84	250	122 356
2	84	350	122 357
3	84	450	122 358



DiVar Desktop Housing

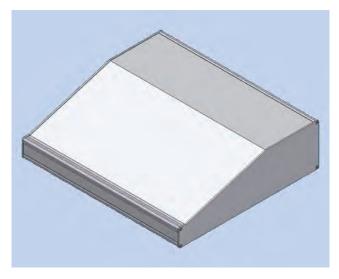
Delivery

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



Ordering details DiVar desktop housing

Divar desktop nousing				
height	width	depth	order no.	
[mm]	[mm]	[mm]	409.	
50/100	400	250	122 359	

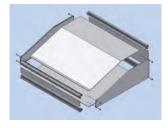


DiVar Desktop Housing with keyboard area

Delivery

- 4 profiles
- 4 cover plates
- 2 side plates

Assembly hardware



Ordering details

DiVar desktop housing with keyboard area

bivar desktop nedsing with keybodia died				
height	width	depth	order no.	
[mm]	[mm]	[mm]	409.	
50/120	450	250/150	122 360	

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

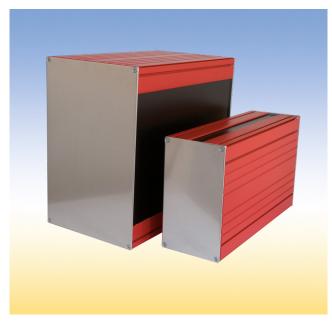
The aluminium housing *InterShell* allows individual customer requirements in the context of Small Form Factors and has the following characteristics:

- √ 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. 409.
Euroboard 100 x 160 [mm]	40	106,6	168,2	138 020
Universal	60	150	170	138 021
mITX board, fastening points included	50	190	190	138 022

Accessories	order no. 409.
housing foot 12,7 x 12,7 x 3,1[mm] PU, black	137 981
housing foot 12,7 x 12,7 x 5,8[mm] PU, black	137 982



Painting examples of the InterShell IP

Distion 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.

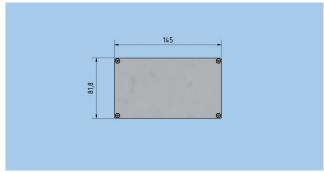
The small housing *InterShell IP* stands out due to its particular constructive features:

- √ 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 chromated
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

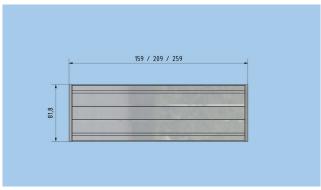
Dimension front panel/rear panel

Width 145 mm Height 81,8 mm

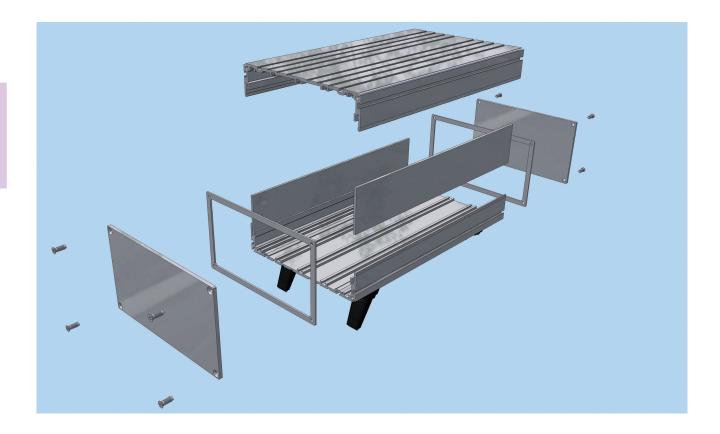
Version 2 Housing *InterShell IP* for subrack 3 U-42 HP

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

<u> </u>	
	Order-no. 409.
Depth dimensions 250 mm	180 910
Depth dimensions 200 mm	180 965
Depth dimensions 150 mm	180 967

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.

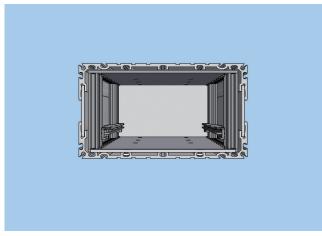
Sealings

Ordering details conductive sealing

Oracing actails conductive scaling		
	Fluorosilicone filled with conductive particles of silver-plated aluminum. order-no.	Silicone filled with particles of nickel-plated graphite. order-no. 409.
Version 1 Housing InterShell IP basic	180 913*	180 914*
Version 2 Housing InterShell IP subrack 3 HE-42 TE	180 918*	180 919*

^{*}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

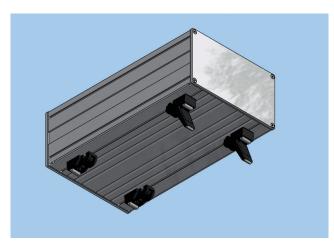
200/2001	
	quantity in kit
side panel 3 U - 220	2
profile rail U 2 13 HP	4
countersunk screw M 4 x 10	8
stop bar	2
threaded strip M 2,5 x 42 HP	4
countersunk screw M 2,5 x 6	4
square nuts M 2,5	4

Ordering details kits

	order-no. 409.
Assembly kit 19 inch standard parts basic InterShell IP	180 978
Assembly kit 19 inch standard parts InterShell IP for subrack 3 U-42 HP	180 979

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 black Color:

Ordering details for kit

order no. 409. 180 982

Alternative: a kit with 4 adhesive feet is available.

Ground mounting

Foot kit

Version 1: Kit for basic housing

- 2 mounting angle
- 4 head screw M 3 x 5
- 4 square nuts M 3

Version 2: Kit for 3U-42HP

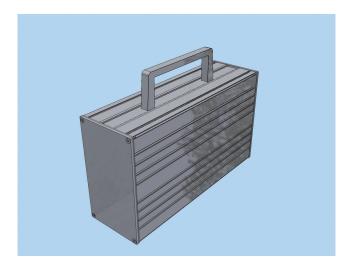
- 1 mounting angle right 3 U
- 1 mounting angle left 3 U
- 4 head screw M 3 x 5
- 4 square nut M 3

Material: aluminium Surface: blank Ordering details for kit

409.

ground mounting ground mounting 3 U 42 HP order no.

180 969 180 970



Handle

Scope of delivery

2 countersunk screw M 4 x 12

1 handle 3 U

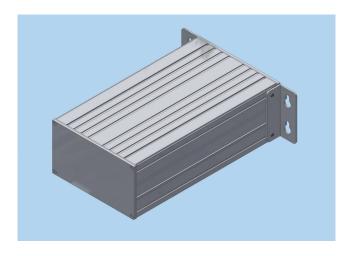
Material: aluminium Surface: anodized

Ordering details for kit

order-no. 409. handle kit 180 974

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

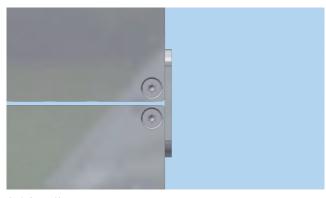
Version 2: Kit for 3 U-42 HP

- 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

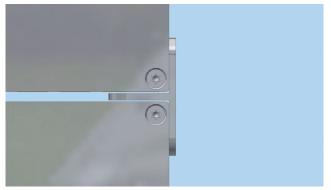
scope of delivery for kit

- 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. 409.

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

180 971

180 981

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



order no. 409.

Kit card cage 180 977



100,5

2,0

62,3

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

Technical changes and errors reserved.