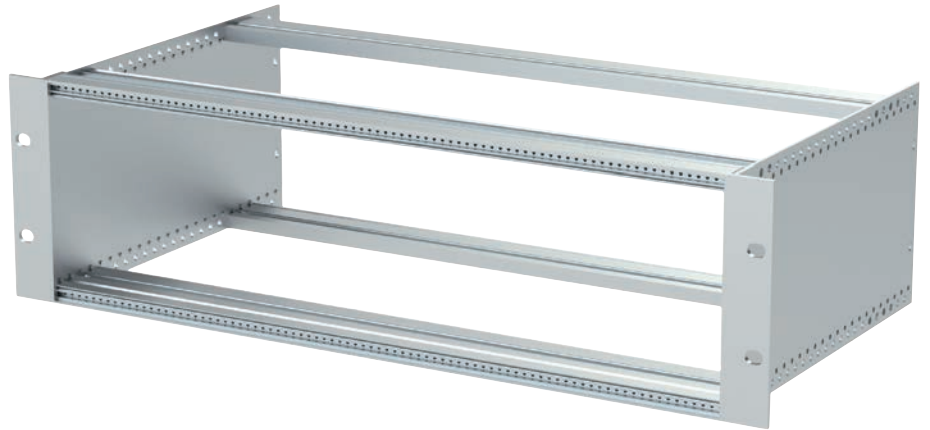


#01

POLYRACKTECH-GROUP

FUTURE

// Product information



//02 19" SUBRACKS FUTURE

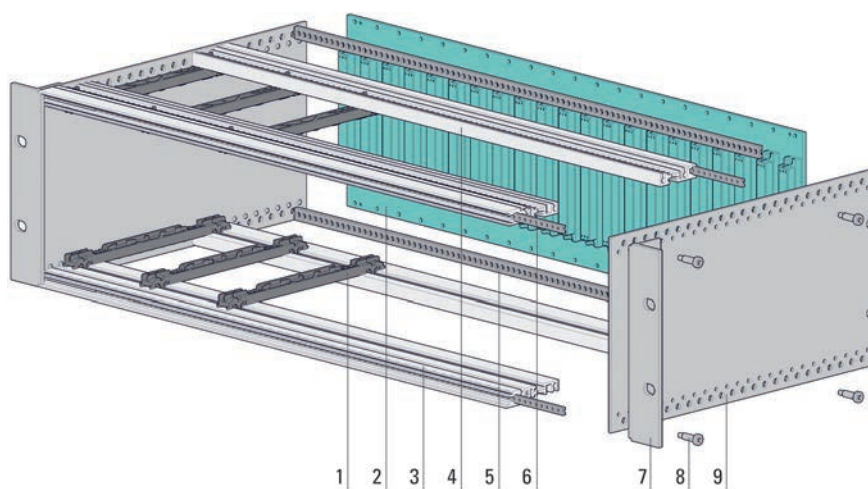
// General Information

// Application

19" subracks from POLYRACK for mounting plug-in units which typically have single or double Eurocard dimensions. The flexibility of the series enables optimum individual configuration.

// Configuration example

The drawing shows a typical configuration of a 19" subrack (basic unit B).



- 1 Card guide*
- 2 Backplane*
- 3 Front rail (optional for IEEE application)
- 4 Rear rail
- 5 Isolating strip*
- 6 Threaded inserts*
- 7 19" Mounting bracket (version depending on shielding concept)
- 8 Assembly components
- 9 Side plate

All parts which are marked with * are not included in the scope of delivery of the basic unit and must be ordered separately.

Basic units

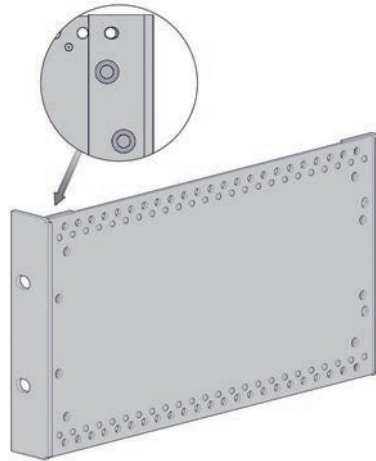
The basic units of the Future series differ in their shielding concept and in their vibration resistance.

An IEEE 1101.1/IEEE 1101.10 compatible version is also available as a basic unit. Additional configurations can be created by selecting the appropriate single components.

Features of the basic units

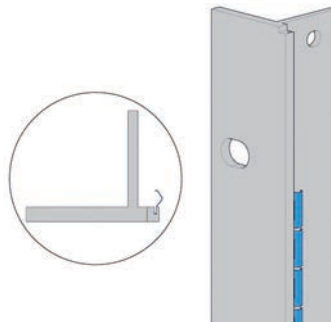
Vibration resistant

Side plate/mounting bracket and corner bracket are tox joined, horizontal rails are secured with two screws on either side.



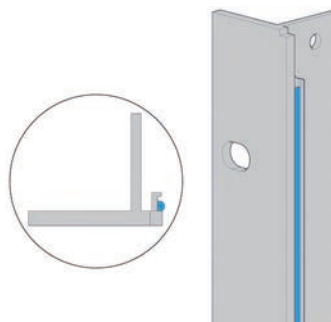
"EMC spring" shielding concept

Mounting bracket with groove for mounting EMC springs



"EMC fabric" shielding concept

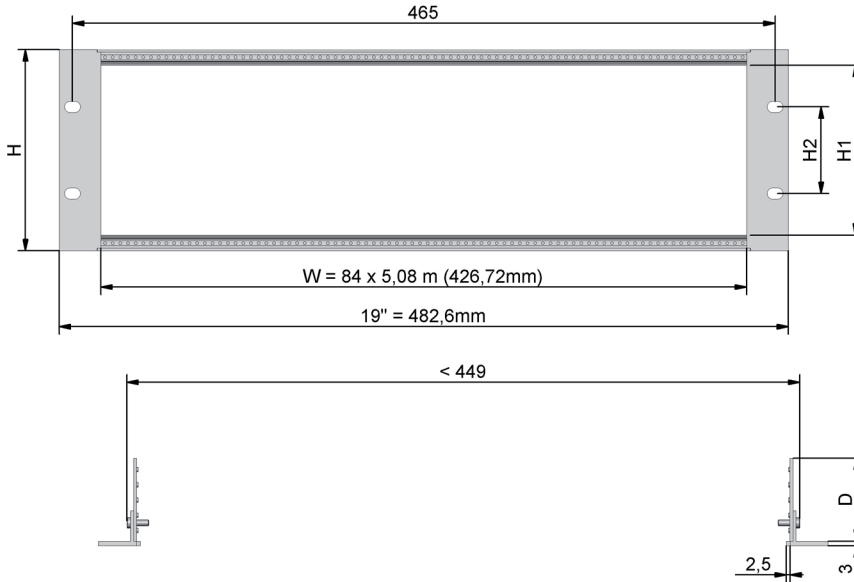
Mounting brackets with bar for mounting self adhesive EMC fabric D shape



//02 19" SUBRACKS

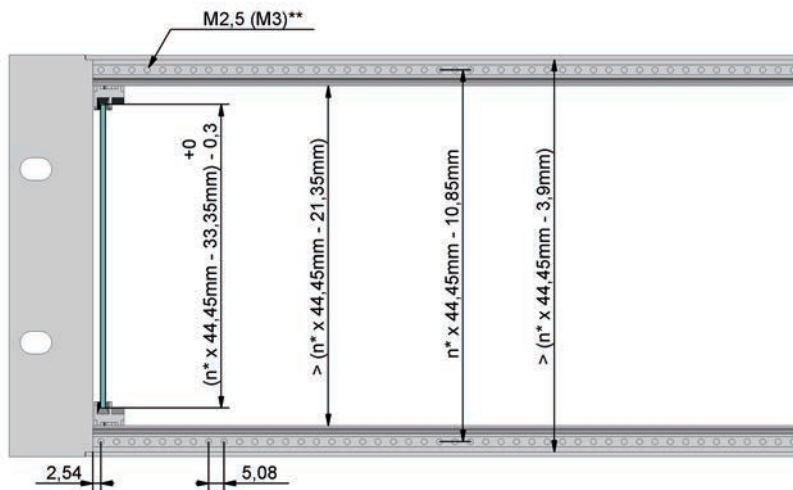
FUTURE

// General Information



Mounting dimensions (mm)

	H	H1	H2
1 U	= 43.6	≤ 23.1	= 31.7
2 U	= 88.1	≤ 67.5	= 76.2
3 U	= 132.5	≤ 112.0	= 57.1
4 U	= 177.0	≤ 156.45	= 101.6
6 U	= 265.9	≤ 245.35	= 190.5

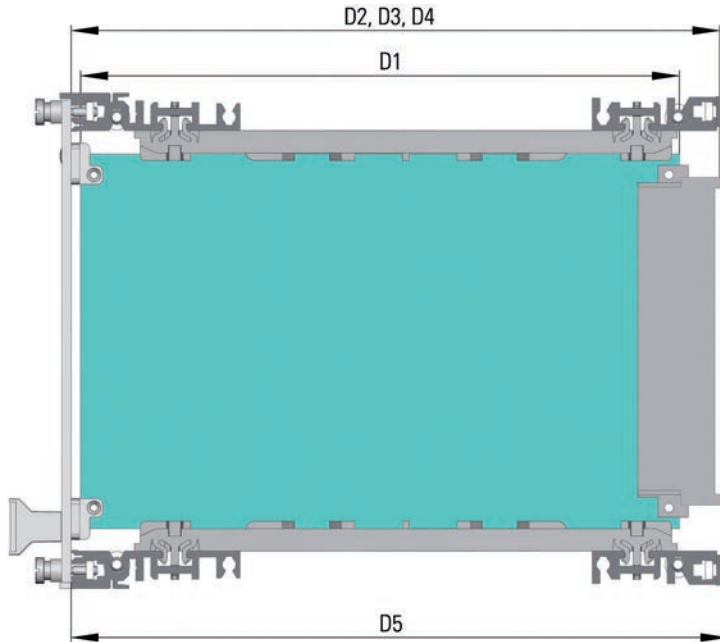


* (U)

** Mounting holes for front panels

//02 19" SUBRACKS FUTURE

// General Information



Dimensions for plug-in modules (mm)

D1*	D2 ± 0.4**	D3 ± 0.4***	D4 ± 0.4****
80.00	89.93	91.93	91.74
100.00	109.93	111.93	111.74
160.00	169.93	171.93	171.74
220.00	229.93	231.93	231.74
280.00	289.93	291.93	291.74

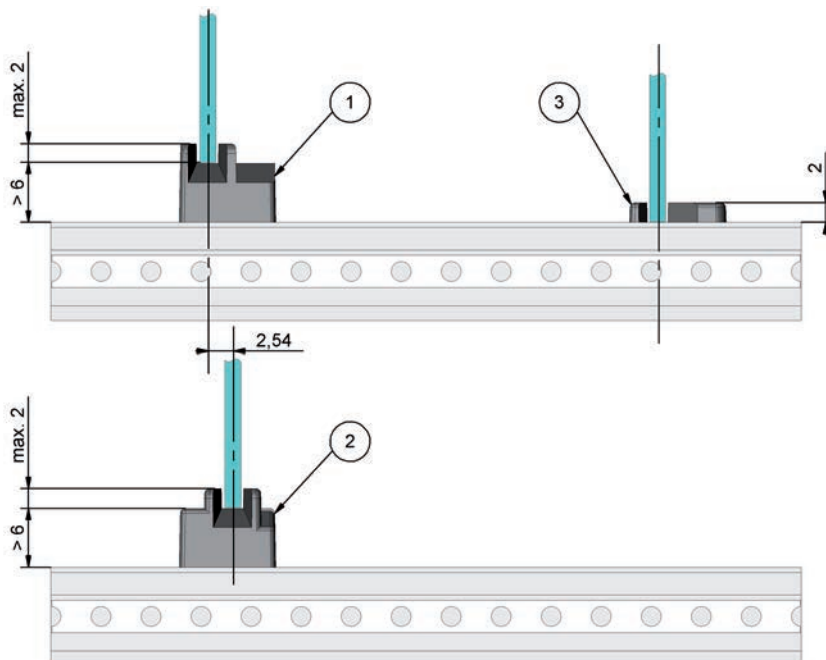
* Board depth

** Plug-in depth for connector IEC 60603-2, Type B, C, D and IEC 61076-4-113

*** Plug-in depth for connector IEC 60603-2, Type F, G, H

**** Plug-in depth for connector IEC 61076-4-101

$$D5 = D1 + 15.5 \text{ mm}$$



Card guides – front view

1 Card guide standard

2 Card guide 2.54 mm recessed

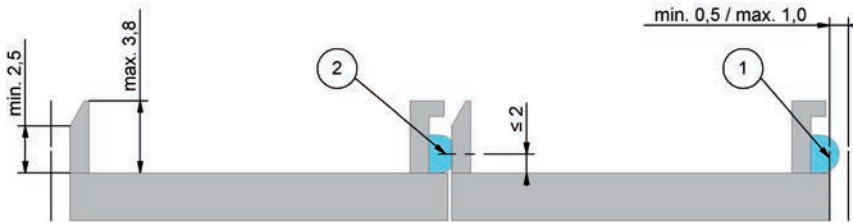
3 Card guide 4.4" (111.7 mm)

Slot width 2 mm or 2.4 mm, respectively

//02 19" SUBRACKS

FUTURE

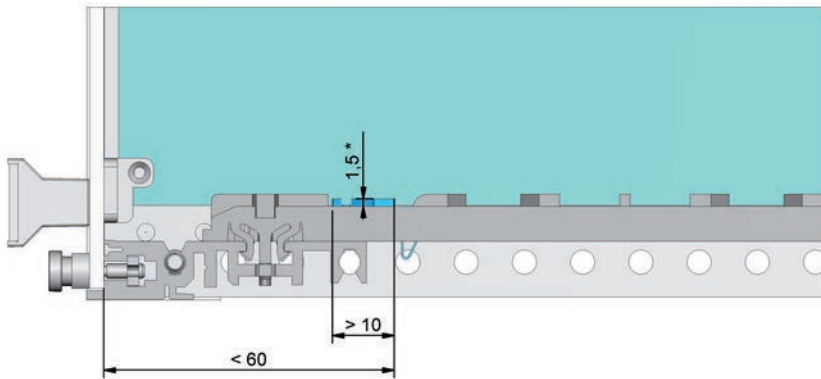
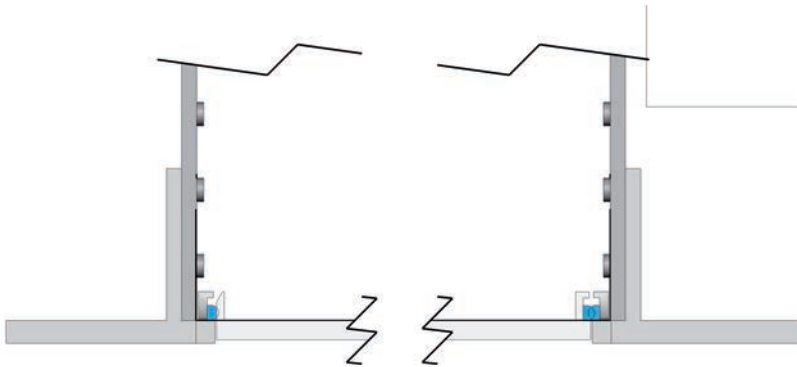
// General Information



Shielding concept EMC Fabric – front panel
Standards for contact points (contact surface) are specified in IEEE 1101.10.

The diagram shows extracts from the IEEE 1101.10 specification in relation to EMC fabric

- 1 Not compressed EMC Fabric
- 2 Compressed EMC Fabric



ESD contact area

The electrostatic discharge is via a contact clip, which is clipped into the front of the guide rail. To ensure proper functioning, the ESD clip must have contact with the grounded section of the subrack as well as the conductive section of the board.

*ESD contact area

// Manufacturing tolerances

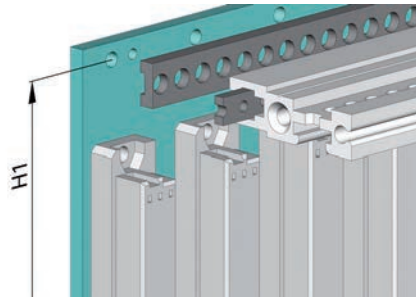
In general, parts tolerances are subject to the POLYRACK factory specifications, with the following exceptions:

Extrusions comply with
DIN EN 12020-1

Punched parts comply with
DIN ISO 6930-1/6930-2 and DIN 6932

// Basic units

There is a choice of four different basic units, depending on the application:



Basic unit B

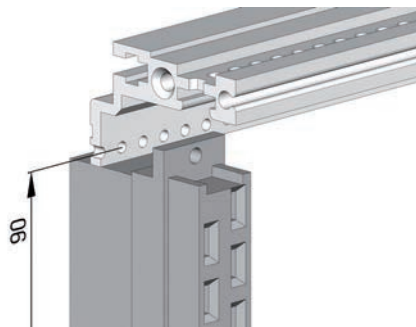
For indirect mounting of backplanes using an isolating strip or for Z-rail

The dimensions for mounting the backplane are calculated as follows:

$$H1 = n \times U - 10.85 \text{ mm}$$

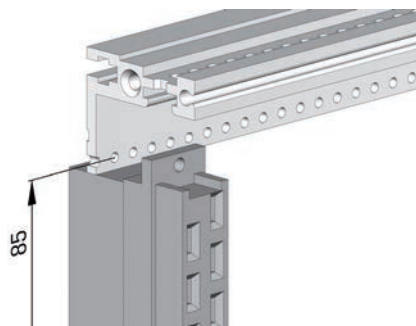
Calculation example for 3 U:

$$H1 = 3 \times 44.45 \text{ mm} - 10.85 \text{ mm} = 122.5 \text{ mm}$$



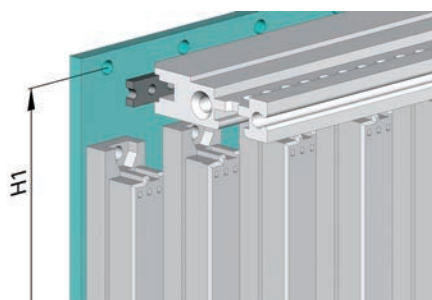
Basic unit C

With integrated Z-rail for connectors according to IEC 60603-2



Basic unit D

With integrated Z-rail for connectors according to IEC 60603-1



Basic unit E

For direct mounting of backplanes without isolating strips or for perforated rails. Rail width + 3 mm in comparison to basic unit

The dimensions for mounting the backplane are calculated as follows:

$$H1 = n \times U - 10.85 \text{ mm}$$

Calculation example for 3 U:

$$H1 = 3 \times 44.45 \text{ mm} - 10.85 \text{ mm} = 122.5 \text{ mm}$$