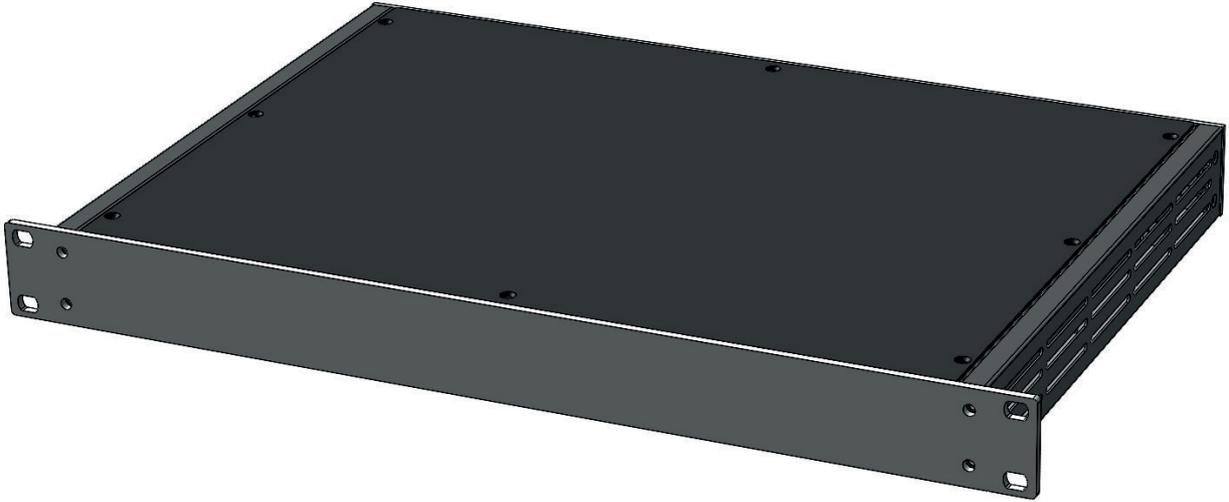


# NRG 19" ENCLOSURE SYSTEM



## No heat problems!

...because the ventilation holes are at the SIDE of the enclosure, where they should be

## More space for your stuff!

These enclosures have the most possible height and width for 19" enclosures available on the market.

## It's save!

Universal Ground Lugs at the rear part of the side panel... or just turn the side panel by 180° if you need them at the front.

## It's conductive!

The side panels and the top/bottom panels do have conductive areas to give the best shielding possible.

## It's variable!

You can stack the side parts on top of each other to get any needed enclosure height. (2x 3U side panels will make a 6U enclosure)

## It's flexible!

Fix pcbs to mounting bars without drilling holes yourselfs, use the slots at the sidepanels to fix transformers or psu pcbs.

## It's quality!

Designed and manufactured in germany. Heavy duty powder coating, thread inserts

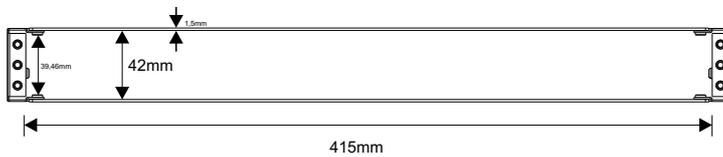
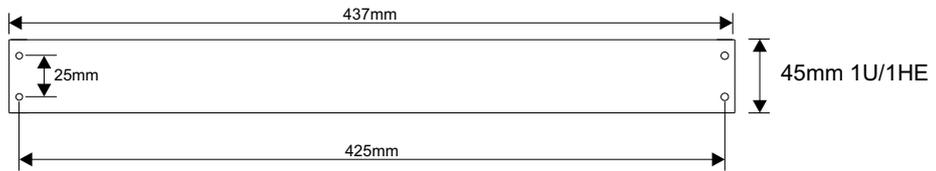
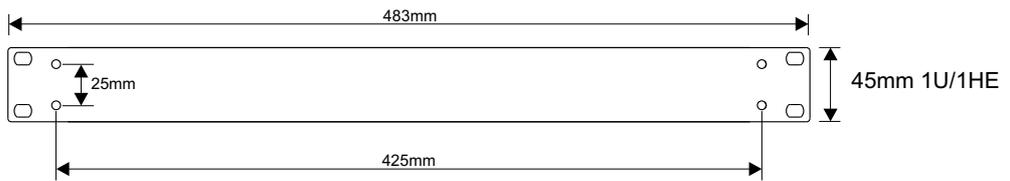
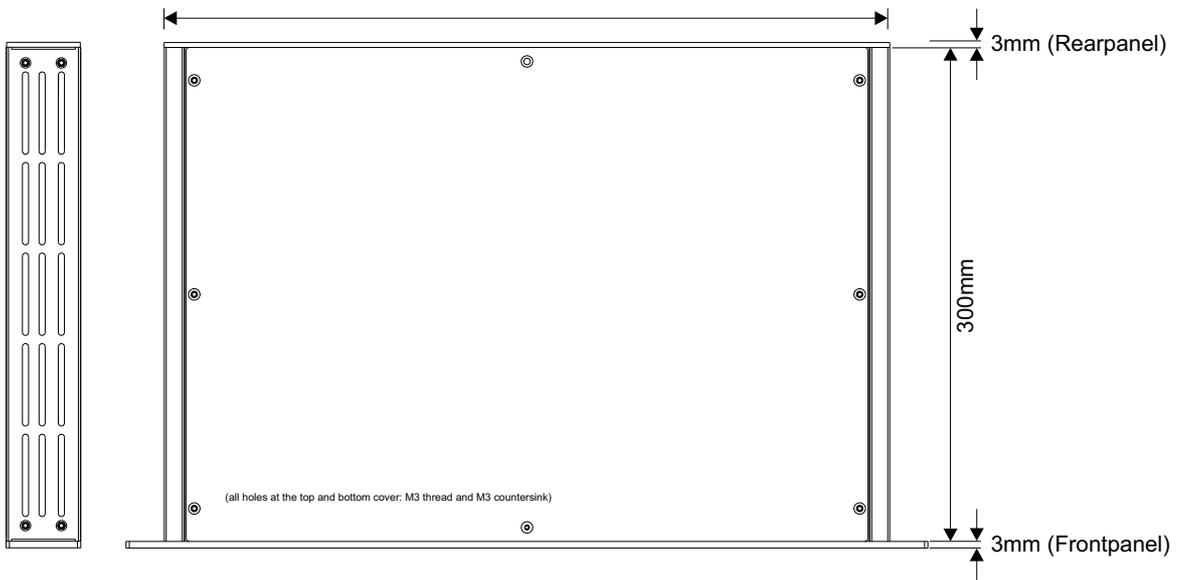
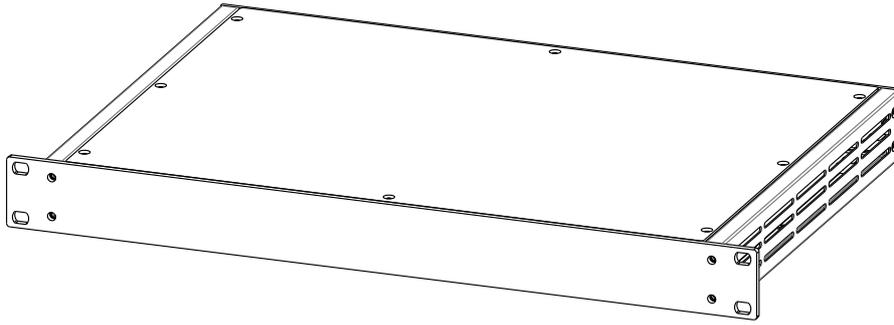
## Custamizable!

You can get holes, countersinks, threads, text at any position on the front, rear, top and bottom panels.

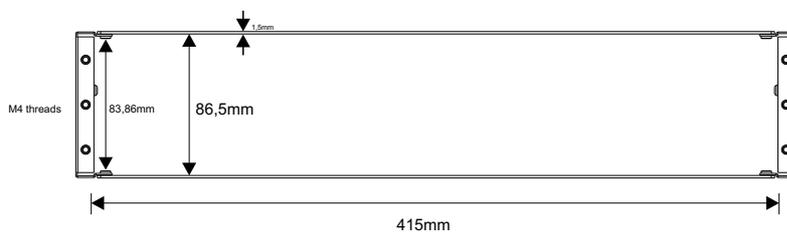
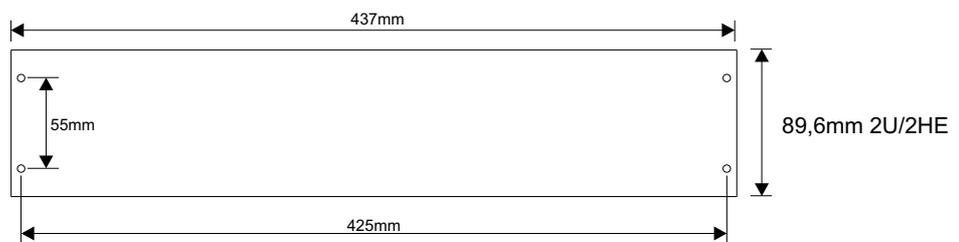
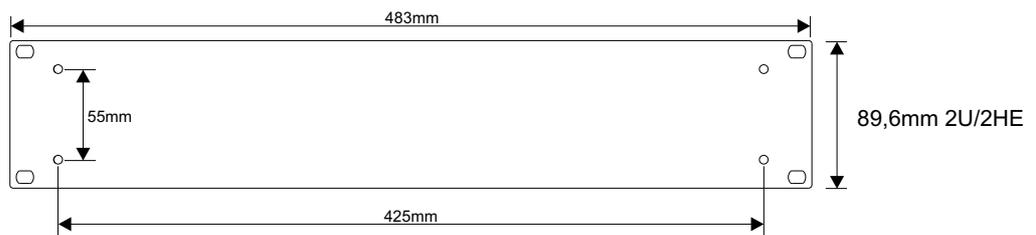
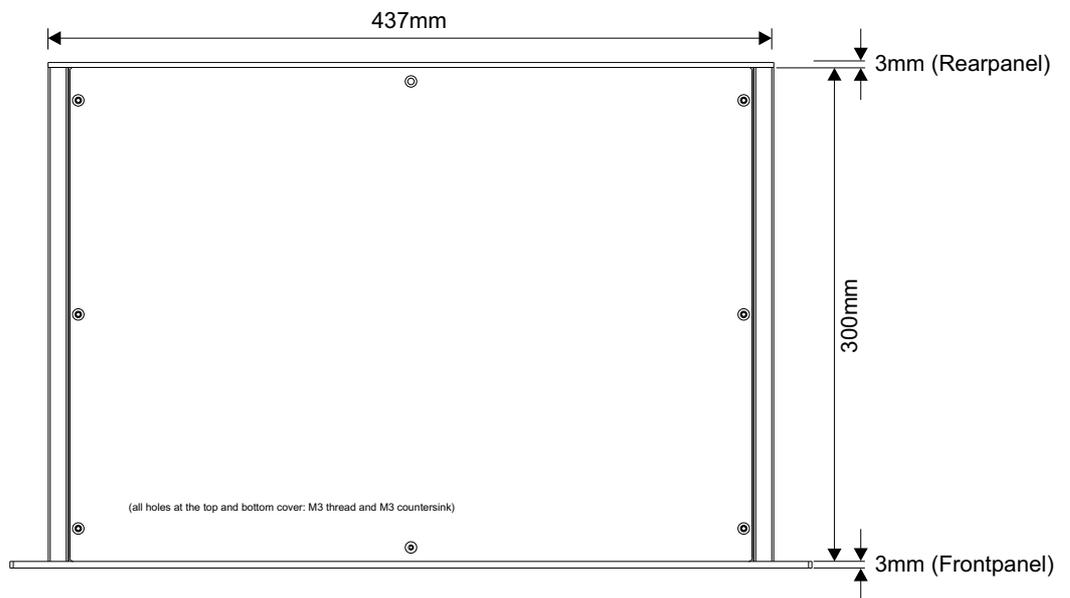
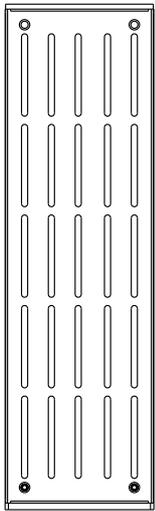
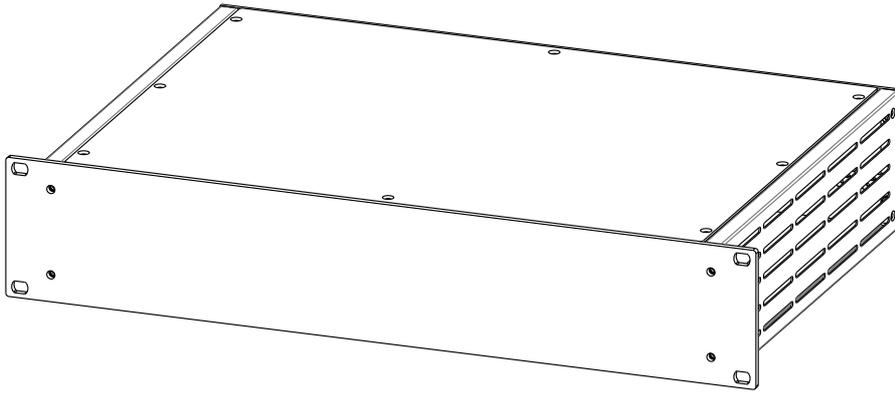
## Options, options, options!

Handles, Brackets and mounting bars, ready made mono or stereo rearpanels, xlr's and iec connectors..

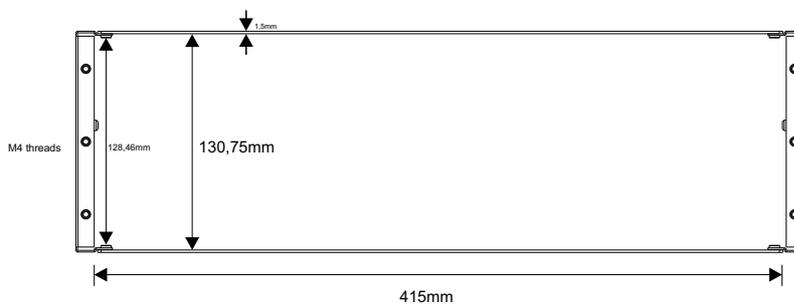
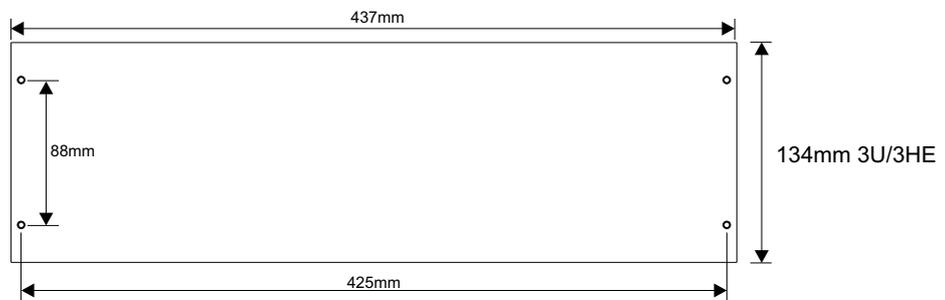
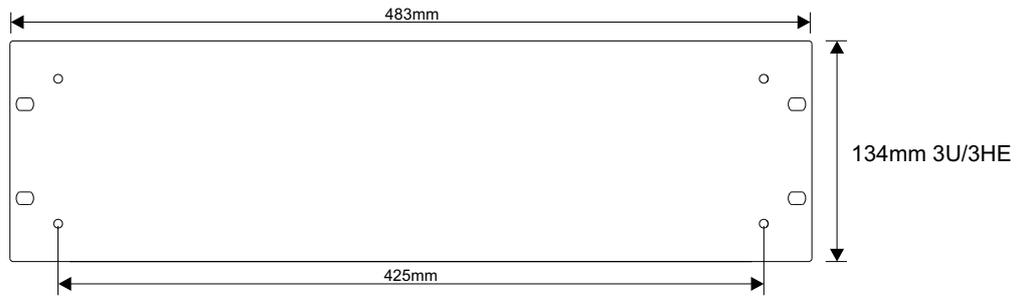
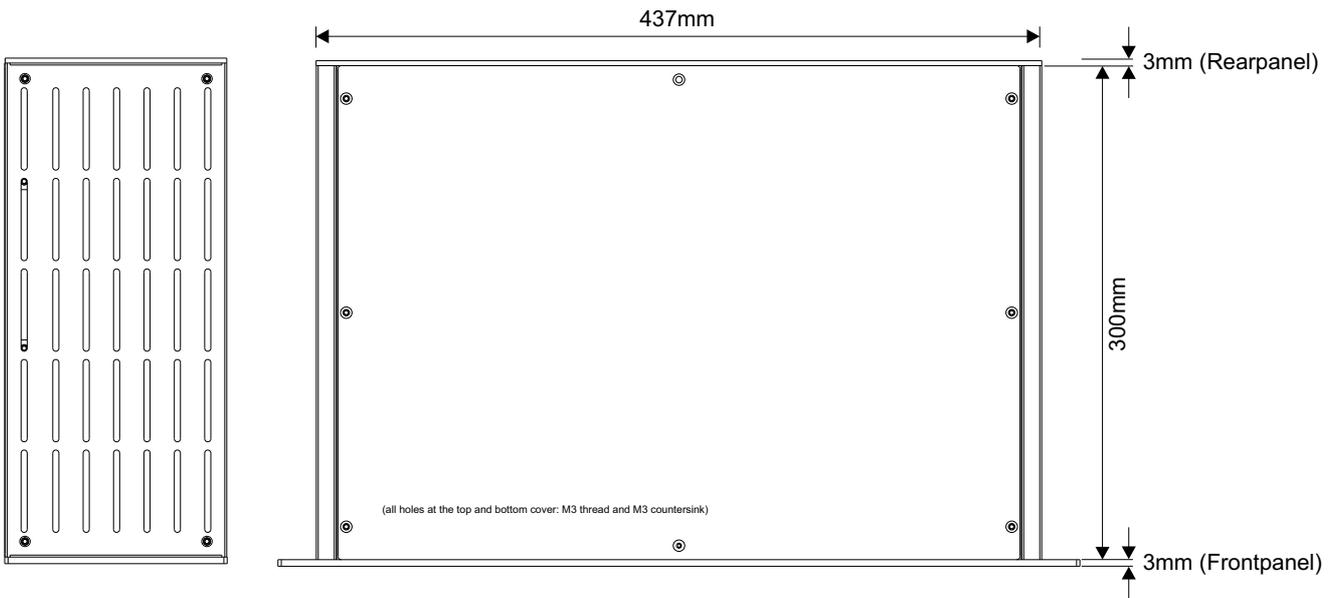
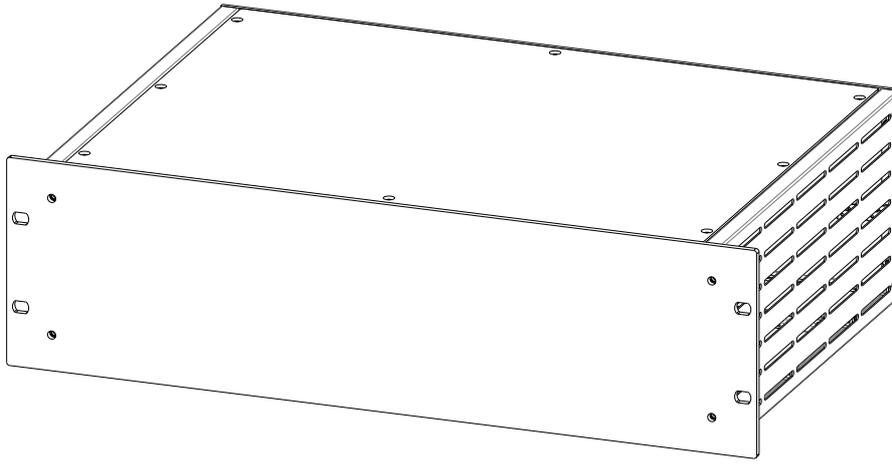
# 1U ENCLOSURE



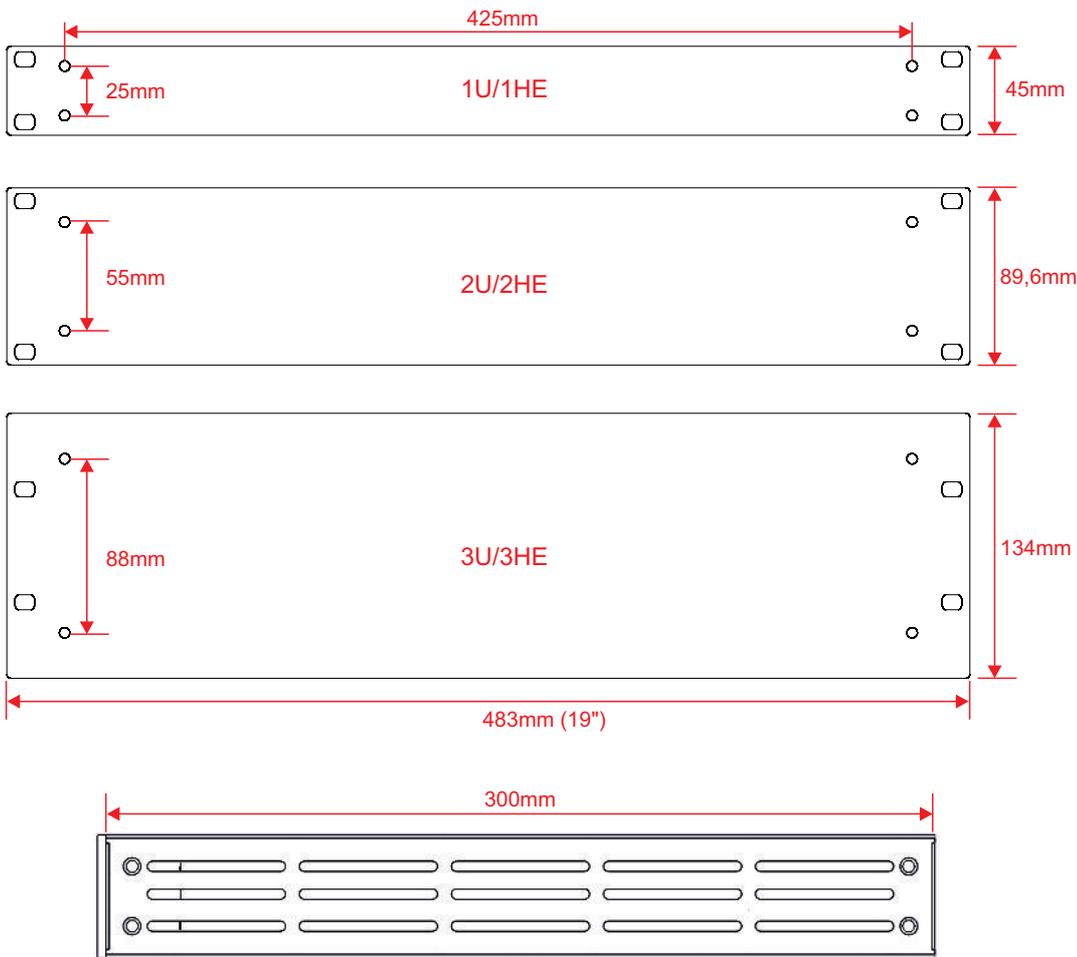
# 2U ENCLOSURE



# 3U ENCLOSURE

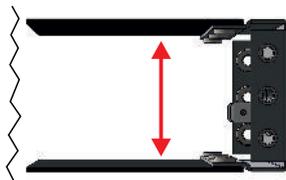


## Dimensions



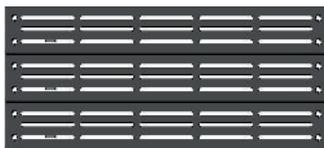
### 300mm enclosure depth

While other enclosure have a depth of 200-250mm the 300mm enclosure gives enough depth for pcb's, tubes and transformers



### Maximum of usable height

If you want to use big assembly parts like vu meters... this enclosure makes it possible without cutting the enclosure parts (like cutting the chamfered edges of the top/bottom cover)



### Stackable side panels

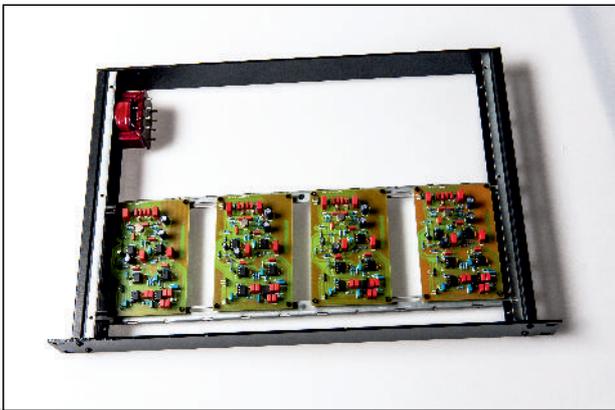
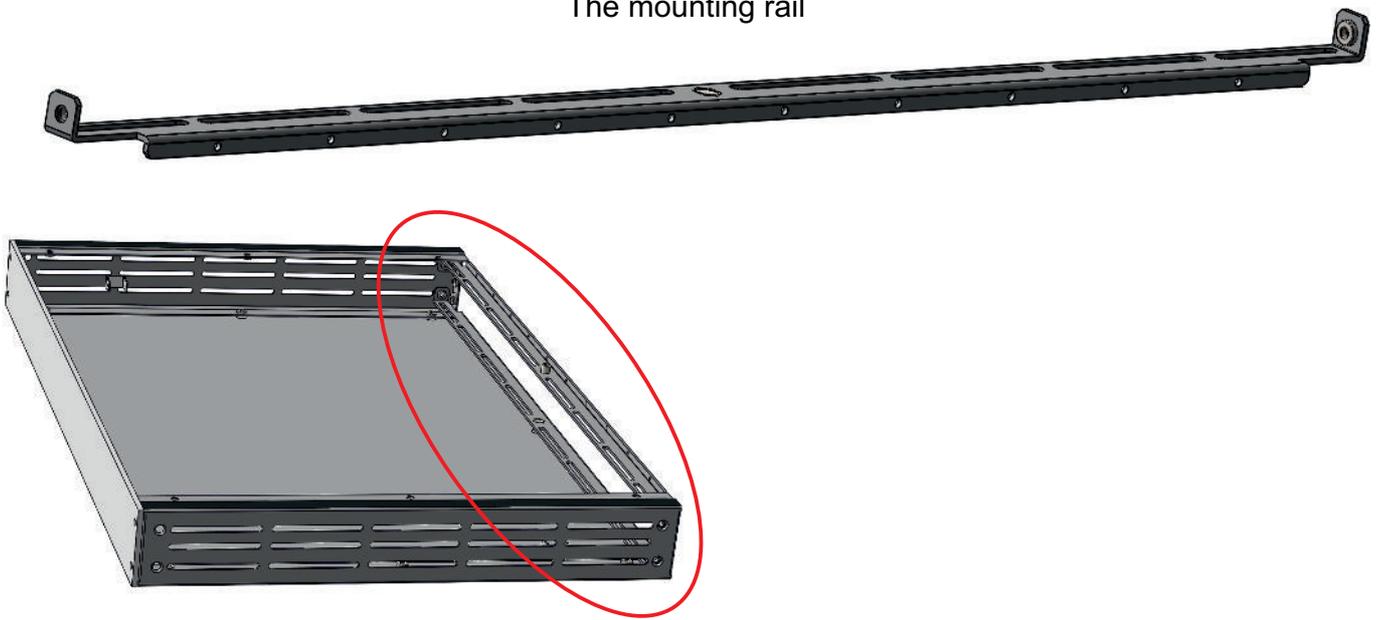
All side panels are stackable. You can make a 4U enclosure by using two 2U side panels.  
Or use two 1U side panels for a 2U enclosure, then you can use two 1U frontpanels which can be fixed to the enclosure seperately. (modular system)



### Welded Contact pins for earth/starground

Every side panel has a double ground connection for the protection earth and starground. 6,3mm Flat-plug.  
By flipping the side panels you can choose if you want to have the earth connection close to the front or close to the rearpanel.

## The mounting rail



The mounting rail can be placed at the top and bottom position of the front and/or rearpanel. Countersink-holes in the side panel will hold the mounting rails in place. You can also move the mounting rails to any desired position.

Just fix the pcbs on the mounting rails with distance bolts or screws.

The big advantage:

You just have to remove the top and bottom cover to get full access to the top and the bottom of the pcb. Then you could solder the pcb from the bottom or do measurings from the top of the pcbs WITHOUT removing the front or rearpanel... or the need to disassemble potentiometer or xlrs.

If you fix the mounting rail at the front or rear position in the enclosure the welded bolt in the mointing rail will additionally fix the top/bottom cover.

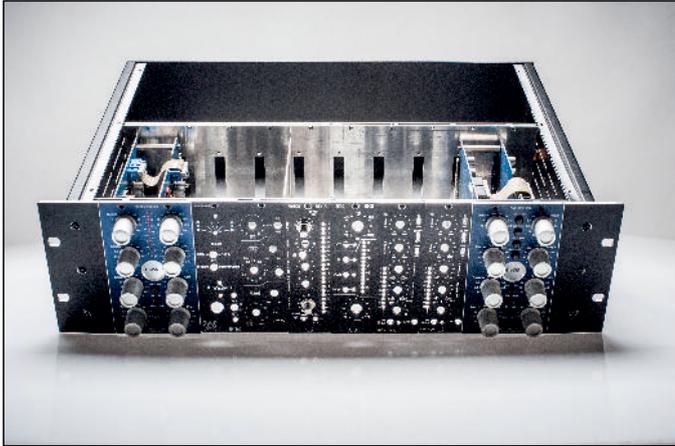
Because of the multipurpose ventilation holes in the side panels the mounting rails can be moved to the desired position.

You could easily add a „second frontpanel“ at the inside of the enclosure. So you can fix potentiometers, transformers or tubes at the inside of the enclosure. That makes it possible to use tubes in a 1U enclosure. (by fixing the tube sockets 90° angled to the second frontpanel.





## The mounting rail for API/51X



You can make an API500/51X rack out of an 3U enclosure, when using the mounting rails.

The mounting rails already have holes at the right positions to fix API500/51X modules.

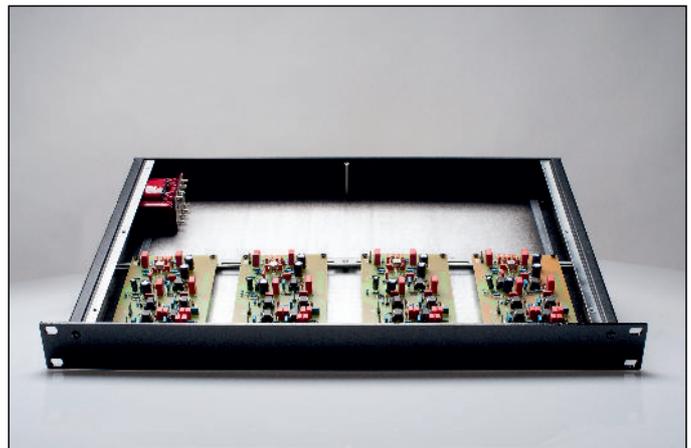
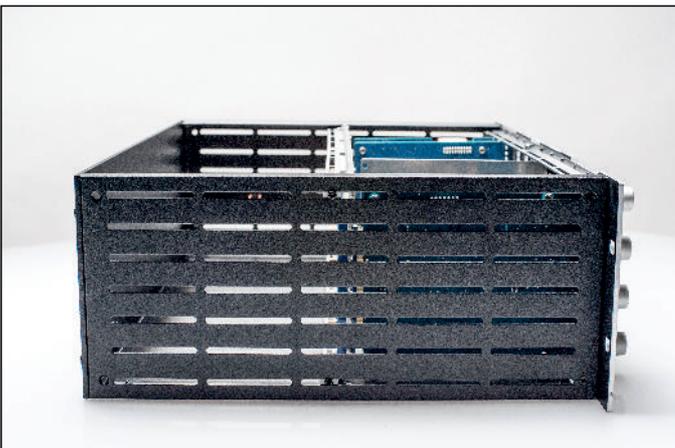
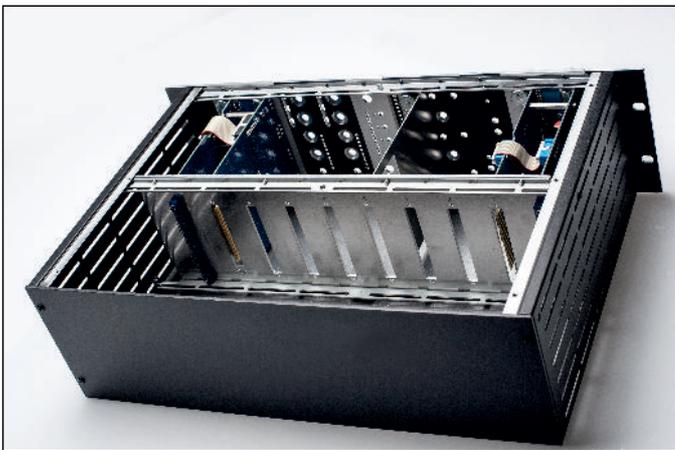
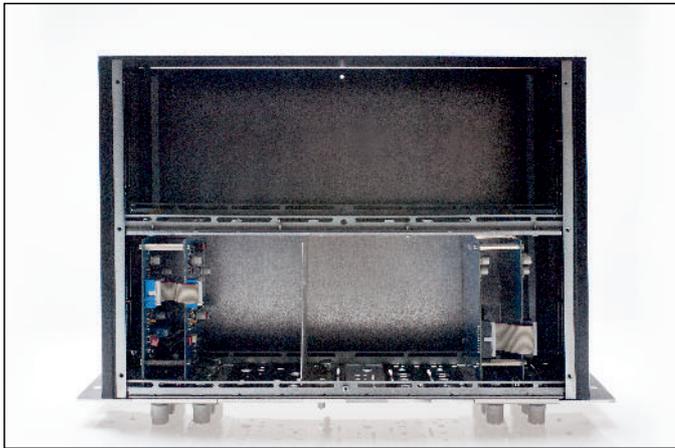
Either self-tapping-screws can be used to fix the modules, or you order the mounting rails with M3 threads.

You can also make the threads yourself if you want to.

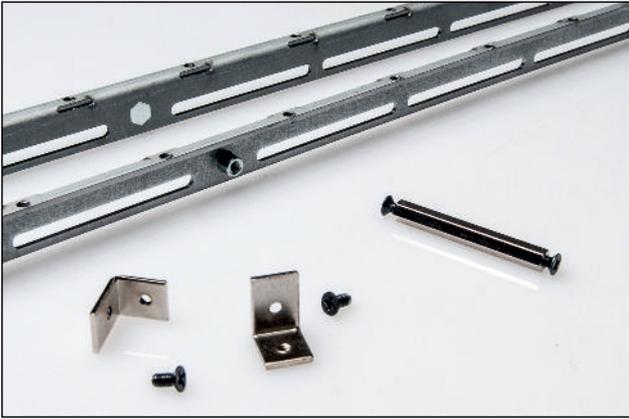
The cheapest solution to make an API500/51X rack is to solder wires between the edge card connectors.

Alternatively you can order a 3mm aluminum panel where you can fix the edge card connectors to.

There is enough space at the inside of the enclosure for an internal psu.



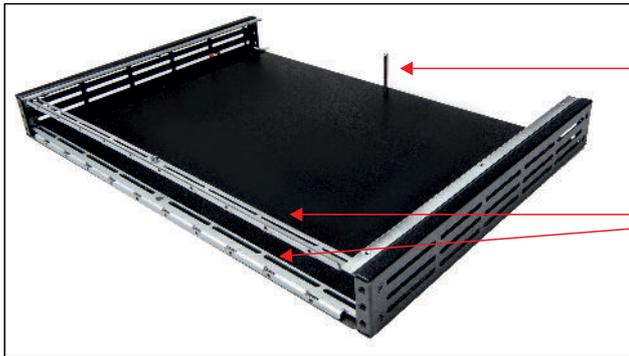
## Stabilisation



There are several ideas to improve the stabilisation of the top and bottom cover.

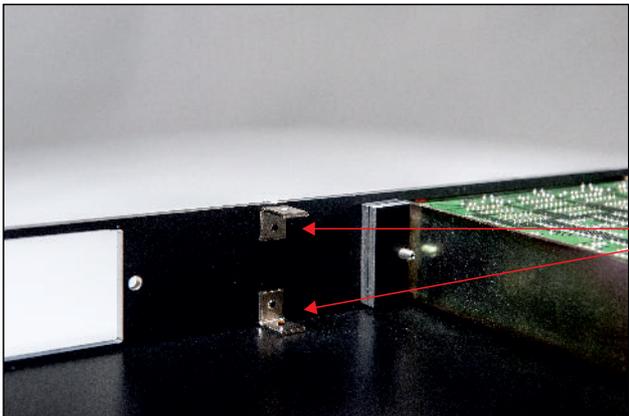
If you use the mounting rails there are already threaded nuts in the mounting rails.

You can also use 90° brackets, distance bolts, or small aluminum parts which will extend into the frontpanel. For the last option the front or rearpanel needs a plane surface at the rearside of the panel.

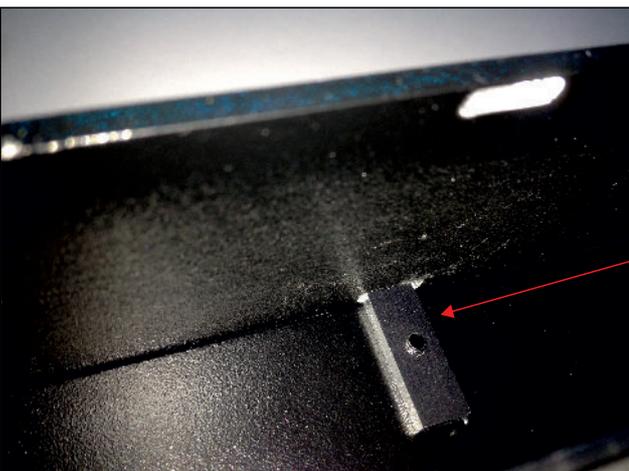


distance bolt

mounting rails

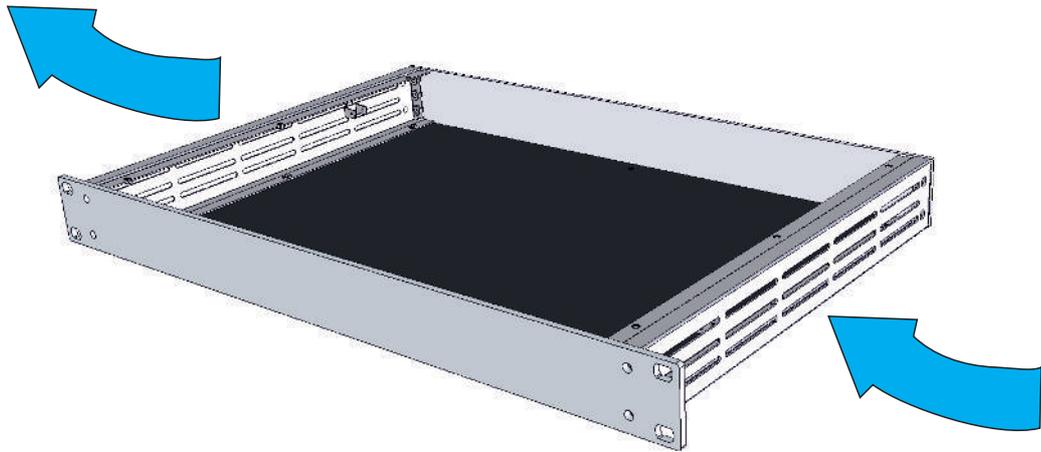


90° brackets



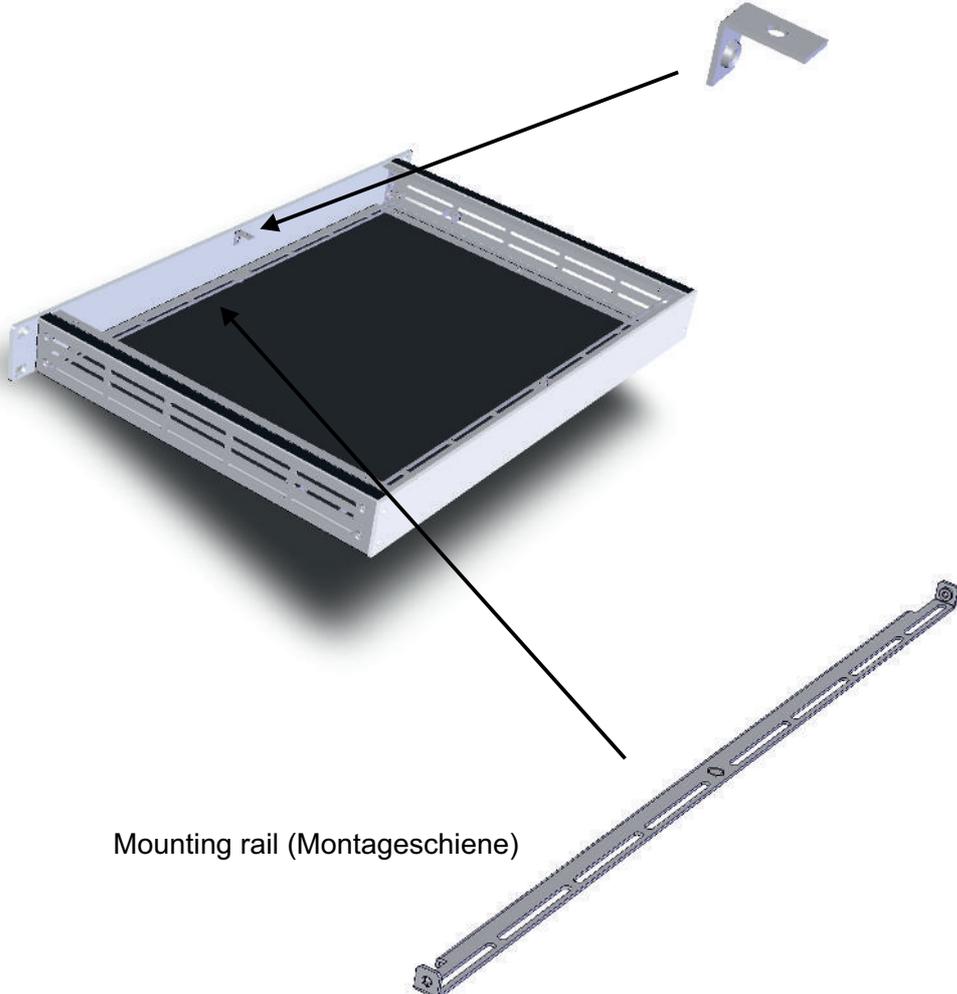
aluminum parts which extend into the rearside of the panel

AIR FLOW THROUGH VENTILATED SIDE PARTS



OPTIONAL STABILISATION WITH 90° BRACKETS OR MOUNTING RAILS

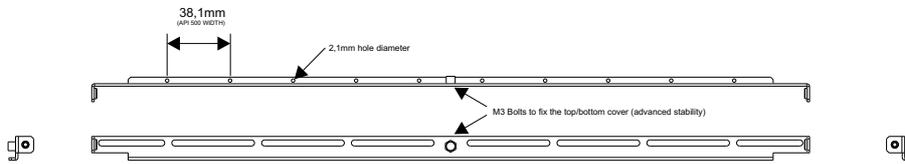
90° Bracket (90° Winkel)



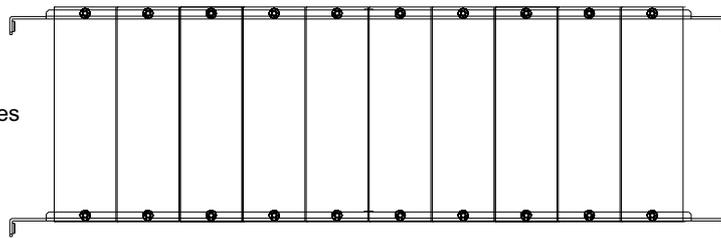
Mounting rail (Montageschiene)

# OPTIONAL COMPONENTS

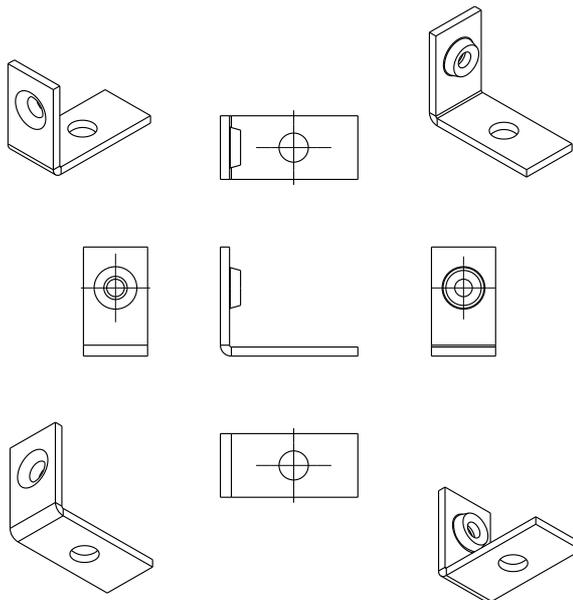
Optional Mounting Rail (to fix pcs or parts at the inside of the enclosure)



10x API500 Modules



Optional 90° Brackets (to fix the frontpanel or rearpanel with the top and bottom cover)



# EXAMPLES

