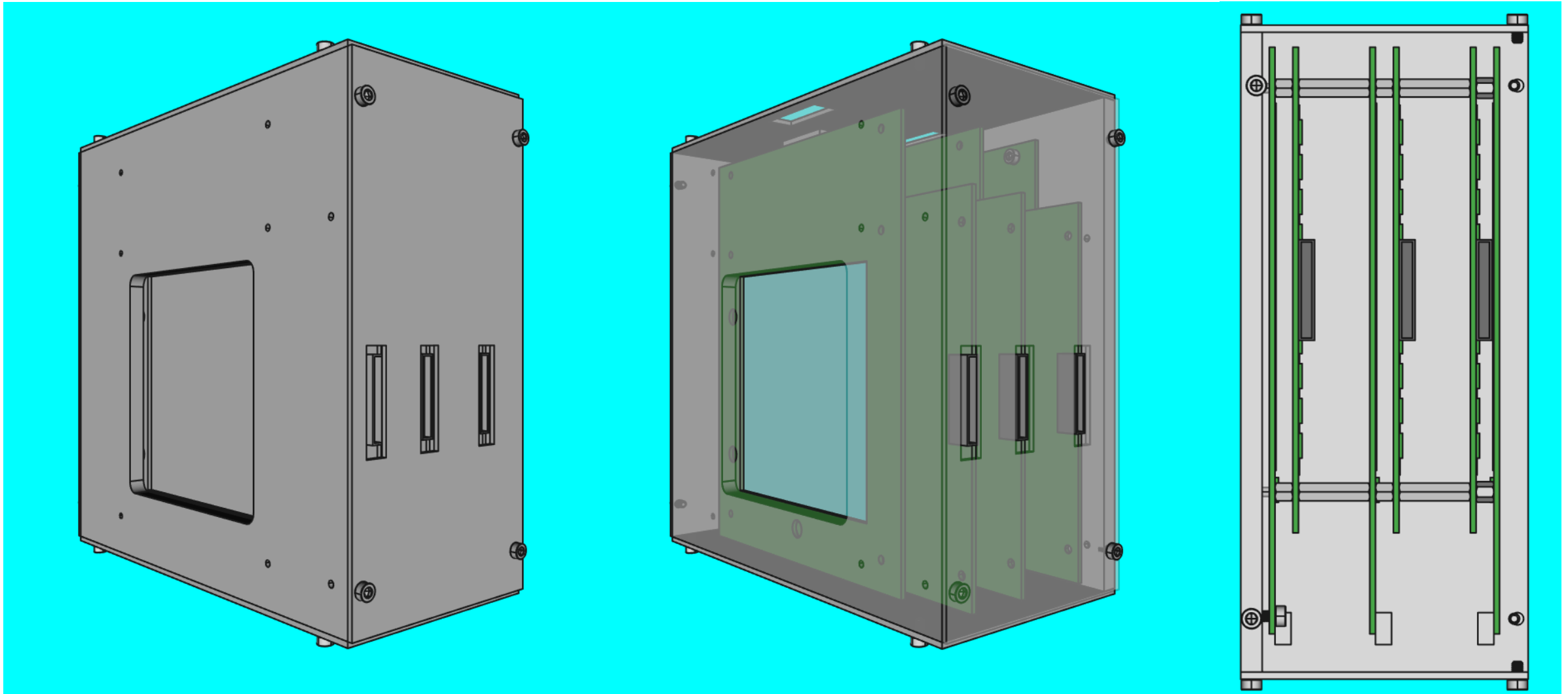


MSD mechanics status

Gianluigi Silvestre

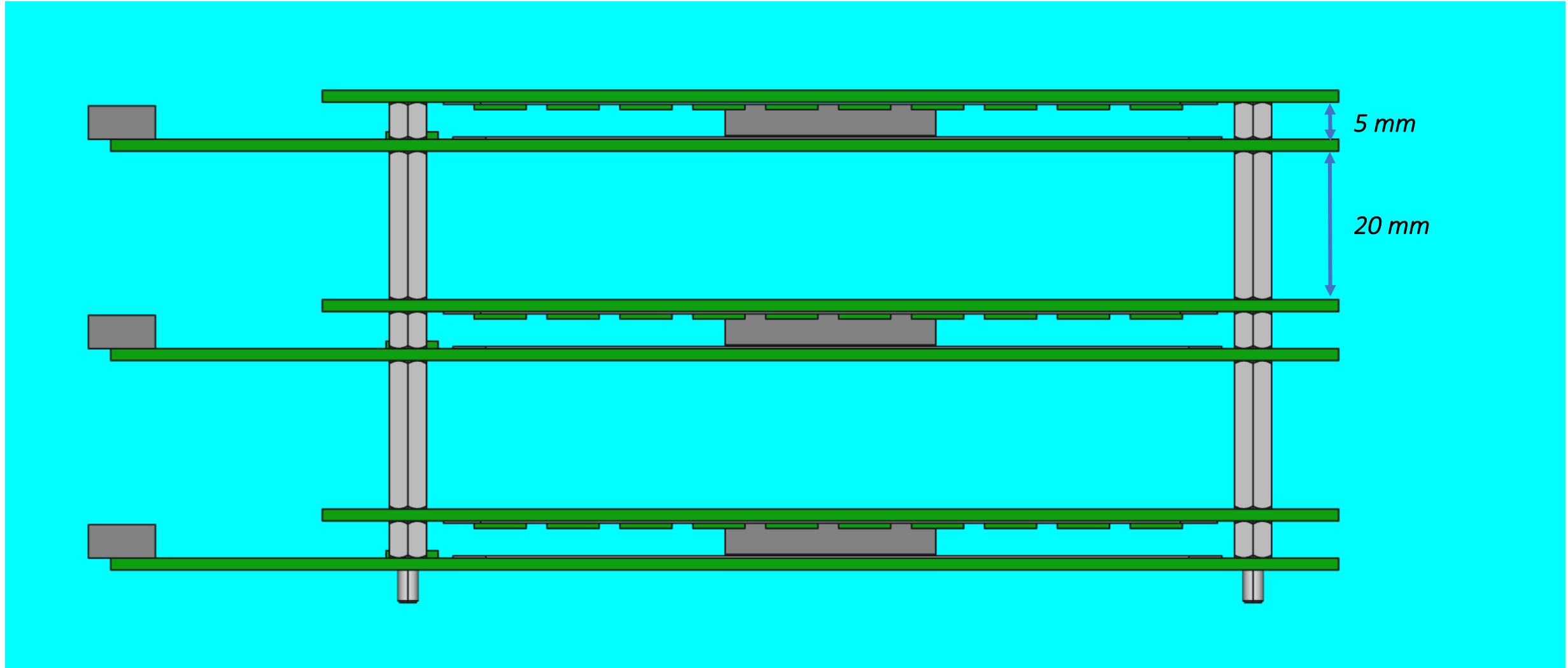
07/06/2023

New MSD box (W.I.P.)



Single box solution for a smaller footprint (needed to place the MSD near the magnet exit window)

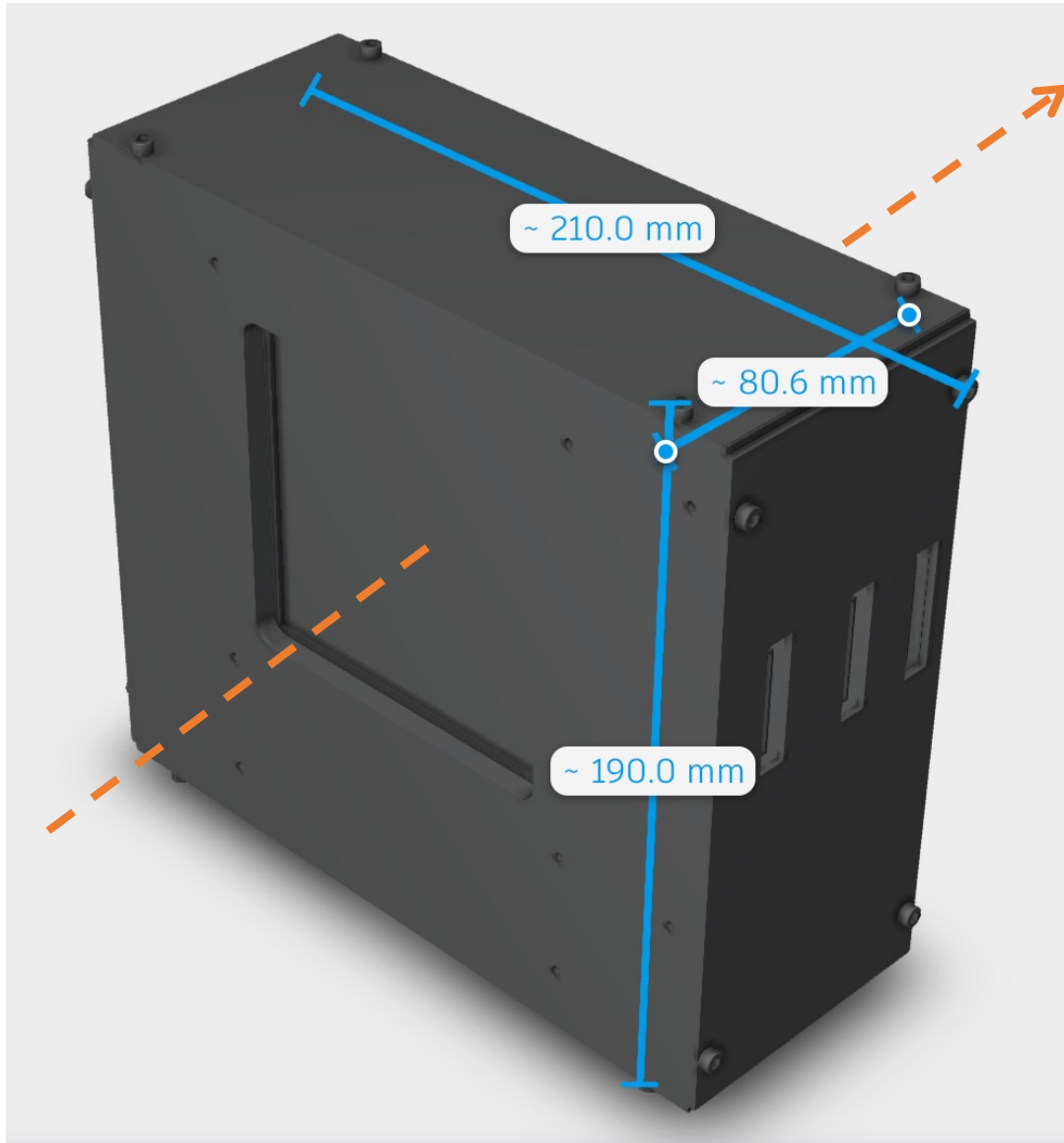
New MSD box



XY pairs mounted with spacers (smaller distance between detectors of a pair possible wrt previous solution)

Final distances TBD

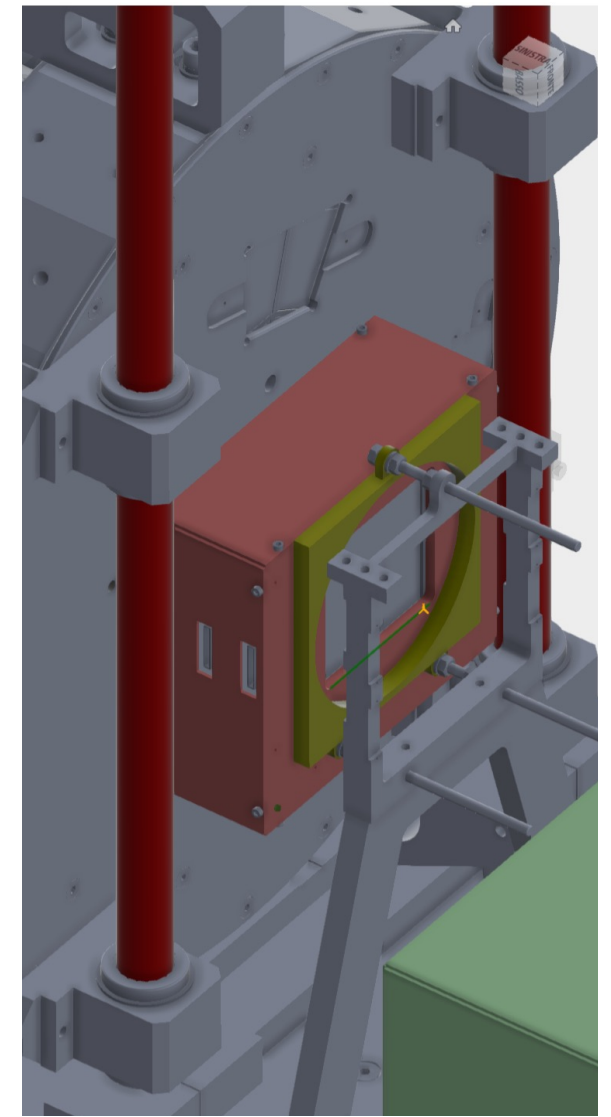
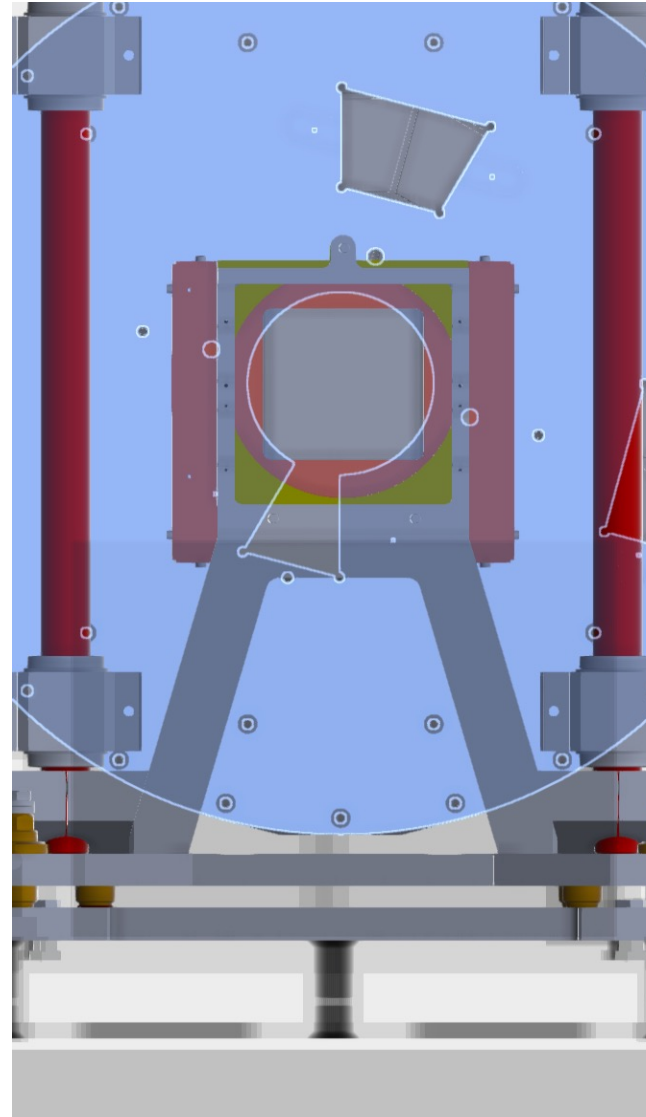
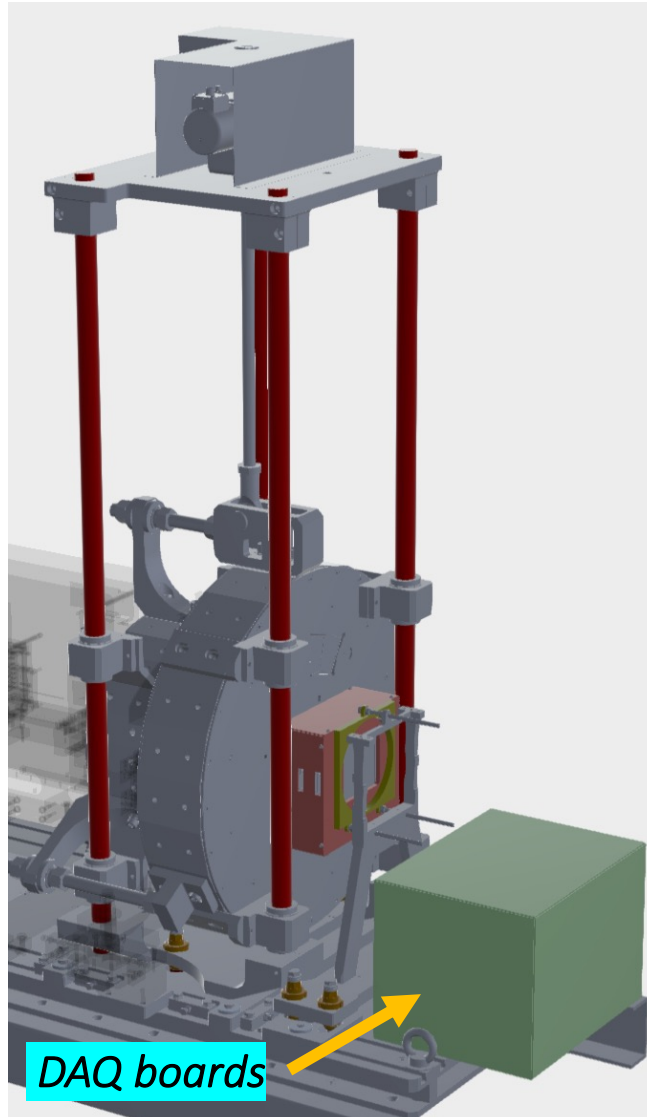
New MSD box



*Dimensions in the plane
perpendicular to the beam axis: $\approx 190 \text{ mm} \times 210 \text{ mm}$
(basically the smallest footprint possible)*

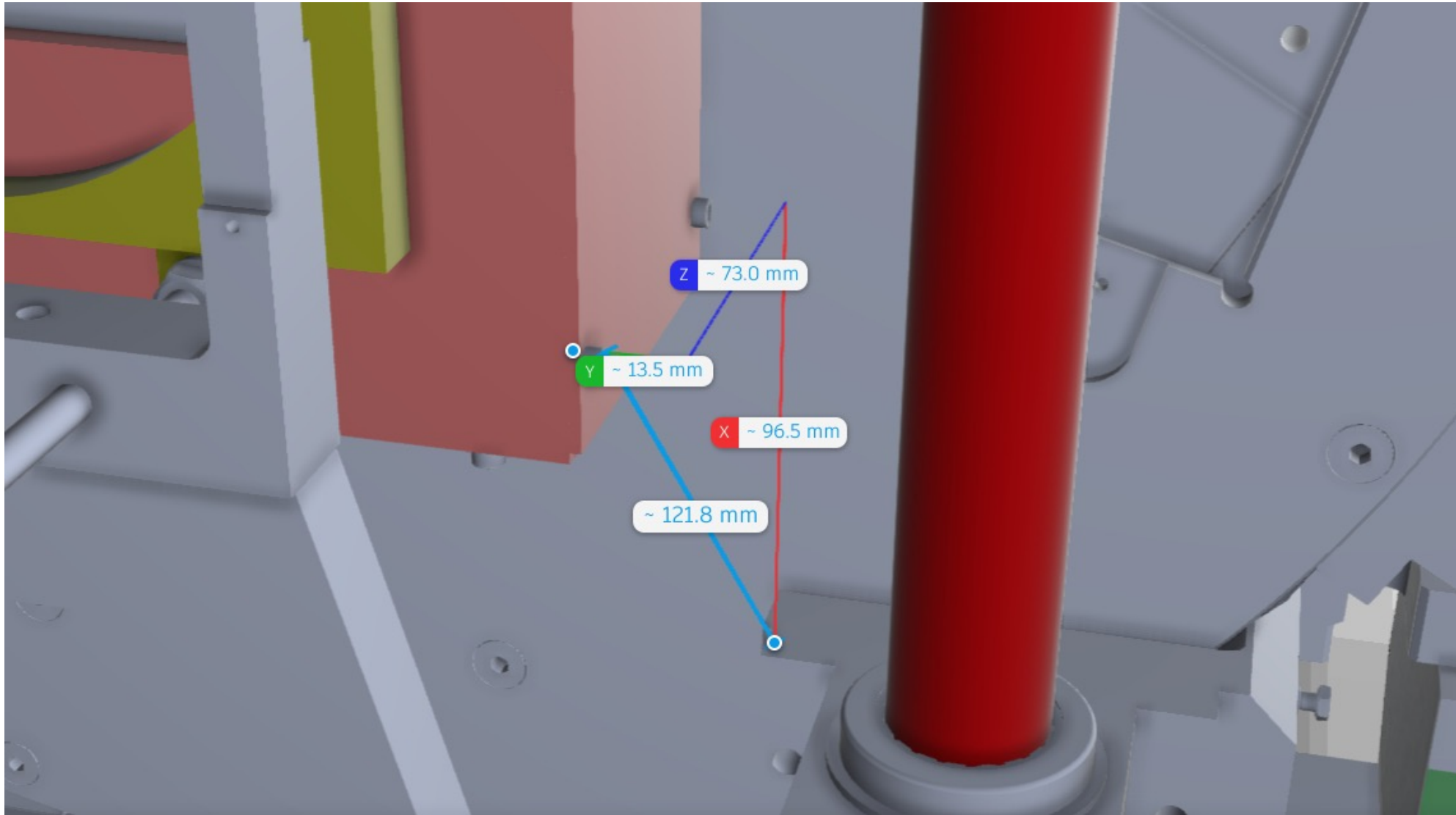
*Along the beam axis: $\approx 81 \text{ mm}$
(might change, see previous slide)*

New MSD box (+ support)



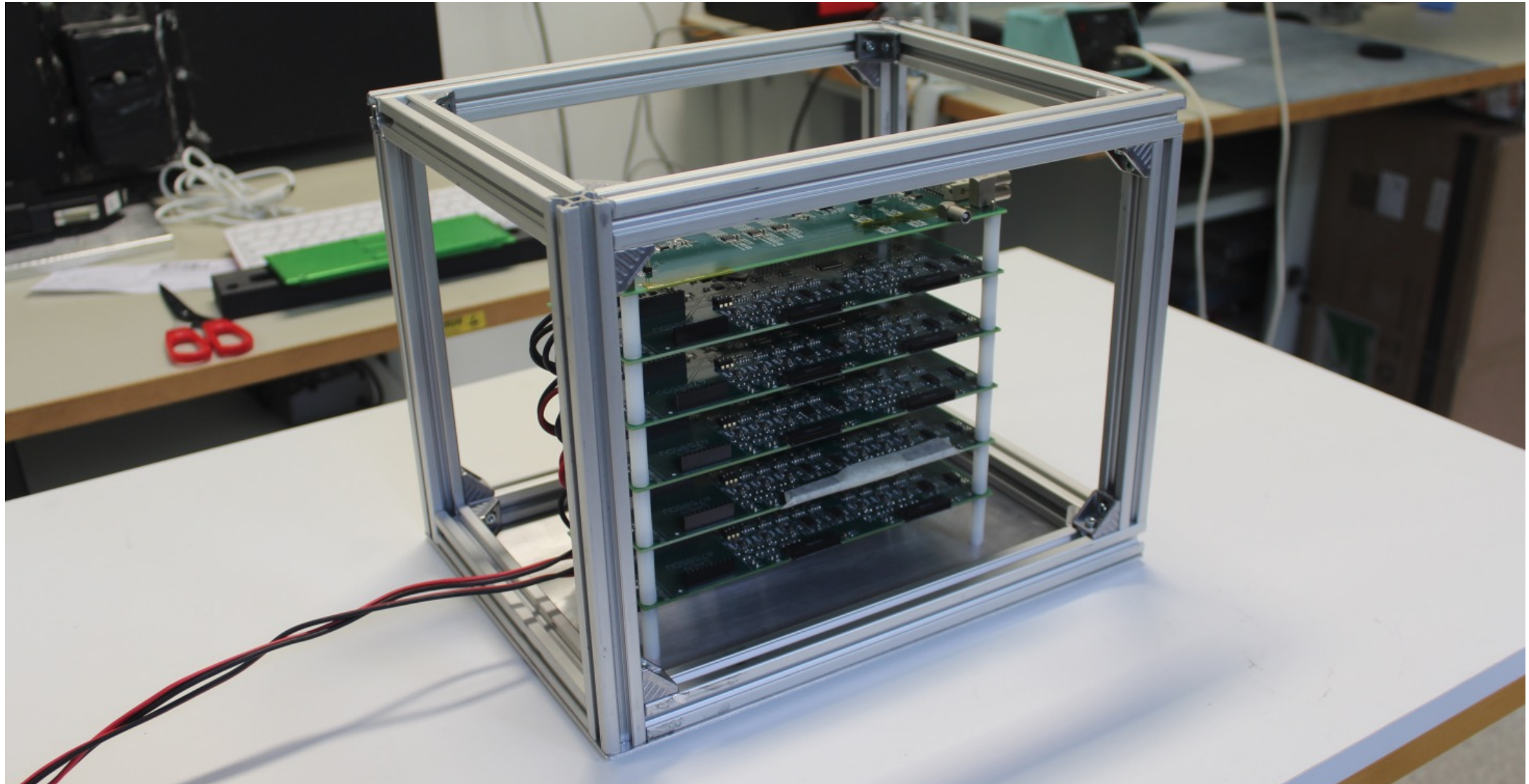
Single box with support. DAQ boards box position TBD

New MSD box (+ support)



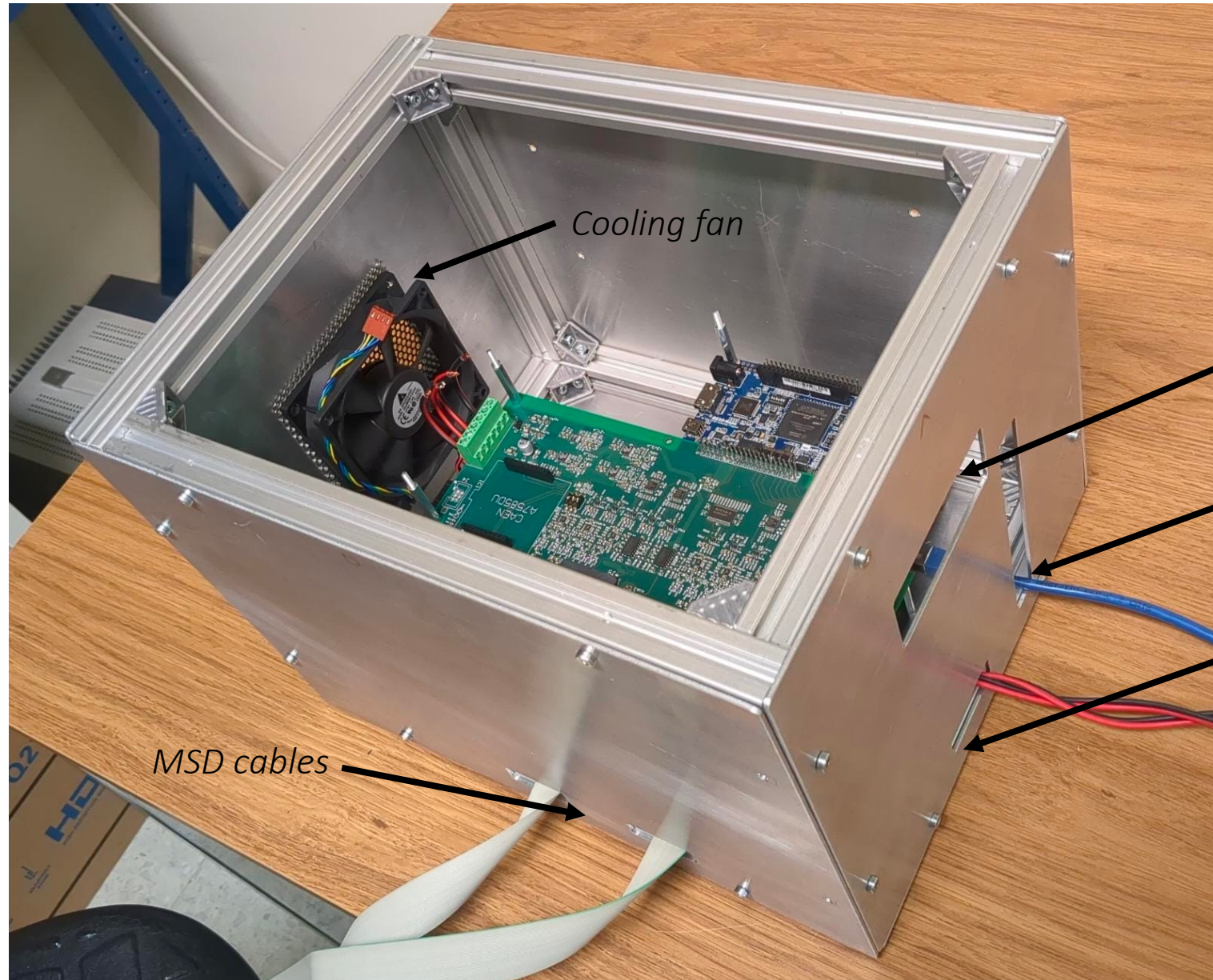
Minimum distance between MSD box and magnets structure: 13.5 mm

New DAQ boards box



*W x L x H: 320 mm x 250 mm x 240 mm (side panels missing from the photo)
Similar footprint to the previous one: spare boards already mounted on the stack (3 + 2 + Trigger Patch Panel)*

New DAQ boards box



Cooling fan

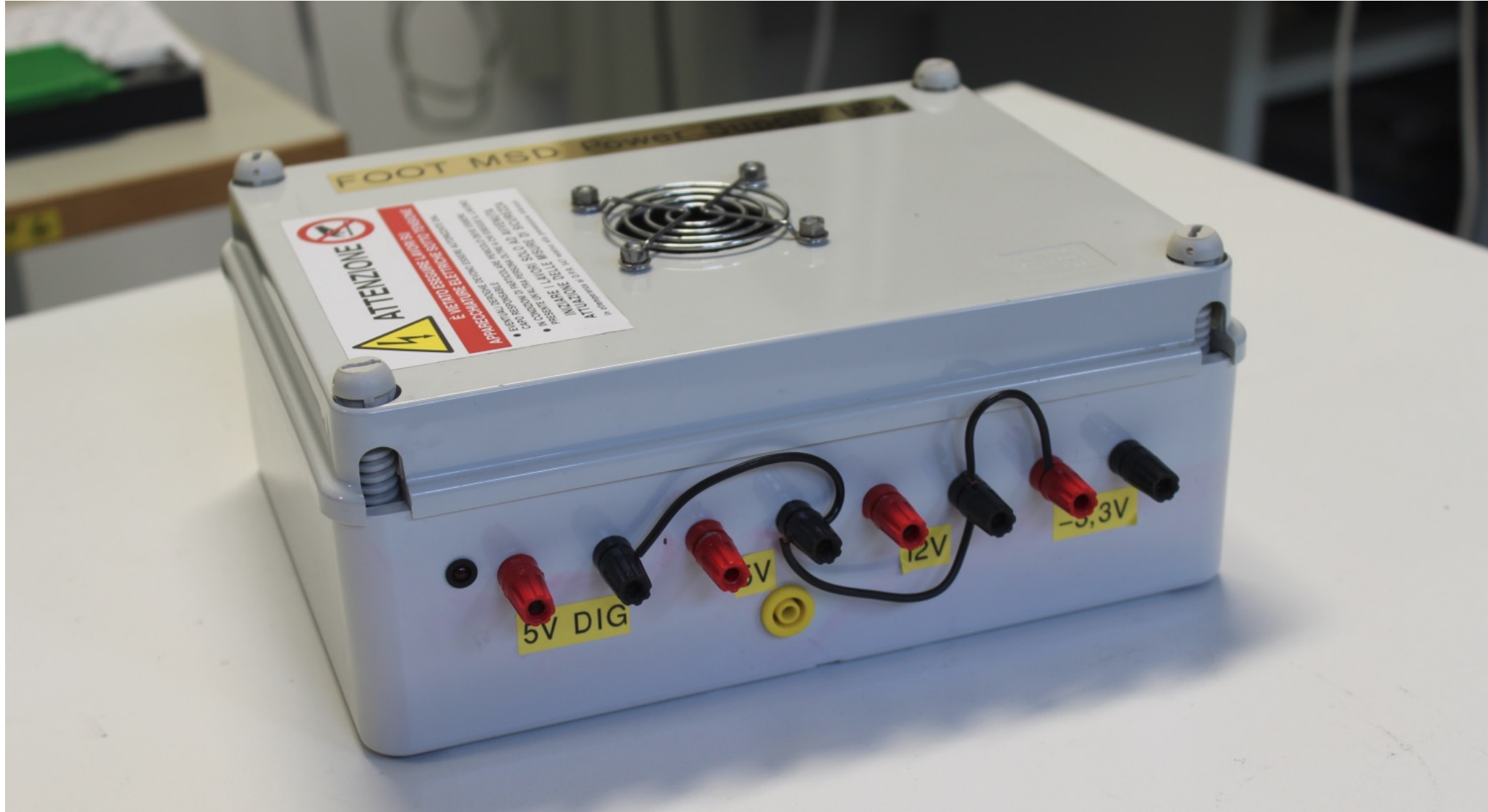
Trigger cable

ETH cables

PWR cables

MSD cables

New Power Supply



*W x L x H: 250 mm x 210 mm x 110 mm
Much smaller footprint than previously used bench power supply*