

Z-Deck

Motorised, manual and fixed platforms for electrophysiology



Z-Deck

Motorised, manual and fixed platforms for electrophysiology

Prior Scientific's Z-Deck range offers a high quality, height adjustable platform designed specifically for upright microscopes widely used in electrophysiology and neuroscience, including the Nikon FN1/Ni, the Olympus BX51WI and BX61WI, and the Zeiss Axio Examiner microscopes.

The Z-Deck offers an exceptionally stable platform, compatible with most commercially available vibration isolation tables, ensuring that the experimental area is as smooth and vibration free as possible. With a large top plate, an extensive surface area is available giving the user the ability to undertake an extensive range of tasks and enough space to set up even the most complex experiments, which may involve environmentally controlled chambers, micromanipulators and other instruments. Furthermore, the breadboard pattern of the top surface (6 mm holes on 25mm centres) is ideal for accurately and quickly mounting equipment.

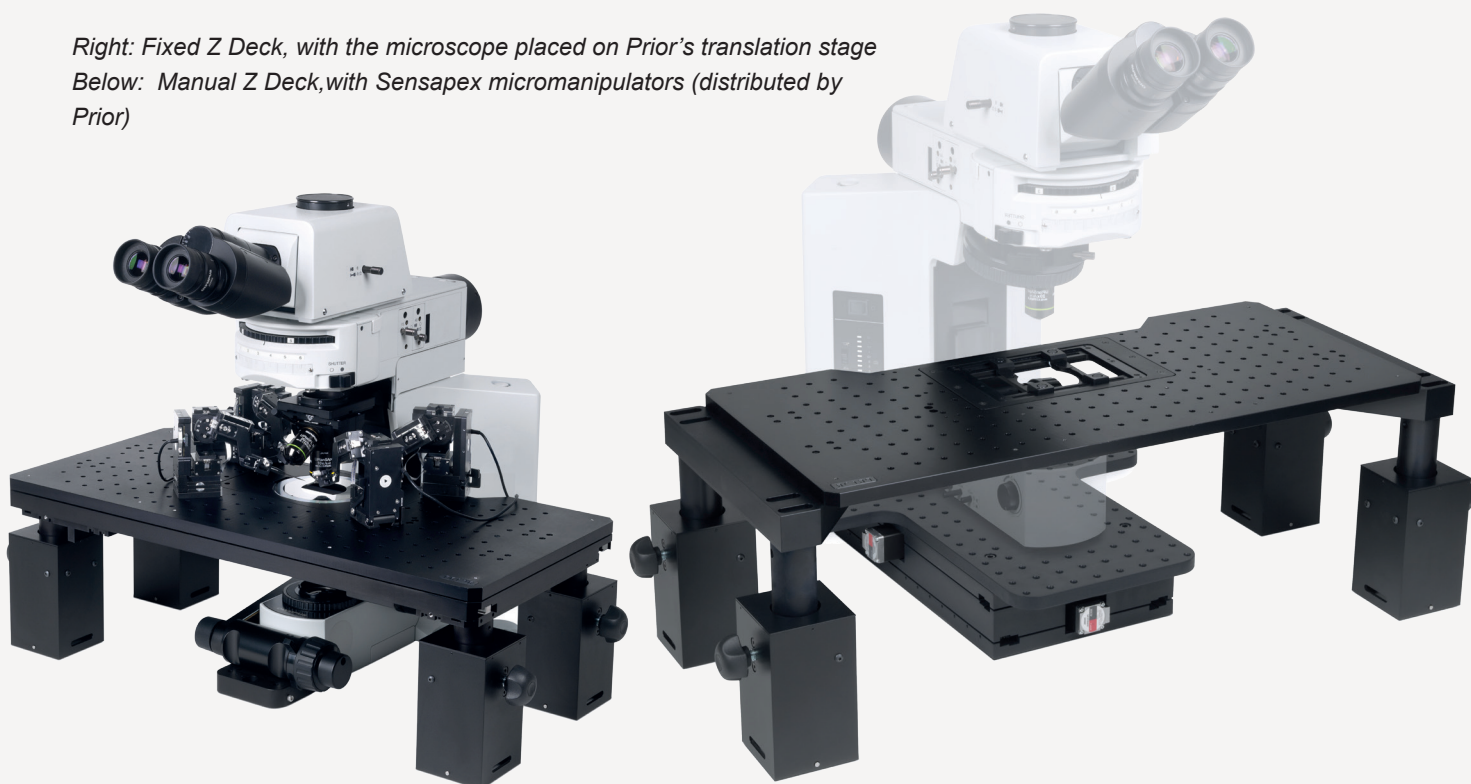
The Z-Deck is equipped with pneumatic piston towers which allow almost effortless lowering and raising of the Z-Deck, without the use of tools. The Z-Deck is well suited for observation of both thin sample and whole animal imaging, and can switch between the imaging heights within seconds. In addition, the Z-Deck is fully compatible with Prior's extensive range of inserts, including the NanoScanZ, allowing exceptionally fine movement in the Z-Axis. The deck is designed to allow Köhler illumination at a range of imaging heights.

To meet the differing requirements of scientists we produce a variety of Z-Decks. For those wanting exceptionally precise movements in the X and Y axes the motorized Z-Deck with sub-micron resolution and Prior's patented IST technology provides unmatched accuracy and repeatability. Adding 50 nm linear encoders to the Z-Deck stage increases stage precision and provides the closed loop feedback required for high magnification imaging applications. The ProScan® III controls the Z-Deck stage and other Prior equipment and can be easily integrated into most imaging software.

If electrical noise will be an issue, the power to the motors of the motorised Z-Deck can be switched off after movement. Alternatively, the stage can be finely controlled in its XY movement without the presence of any electrical motors, whilst otherwise retaining all the advantages of the conventional Z-Deck. If the user does not require XY movement from the stage at all, the Fixed Z Deck offers a robust, stable, and rapidly height adjustable platform.

Right: Fixed Z Deck, with the microscope placed on Prior's translation stage

Below: Manual Z Deck, with Sensapex micromanipulators (distributed by Prior)



Z-Deck

Motorised, manual and fixed platforms for electrophysiology

Specifications (motorised Z-Deck)

Specification	Description
Z-Deck Travel	57 mm
Vibration table compatibility	1/4-20 or 6 mm
XY Travel	65 x 65 mm
XY resolution	20 nm
XY speed	15mm/sec
Spacers provided	Four pillar spacers

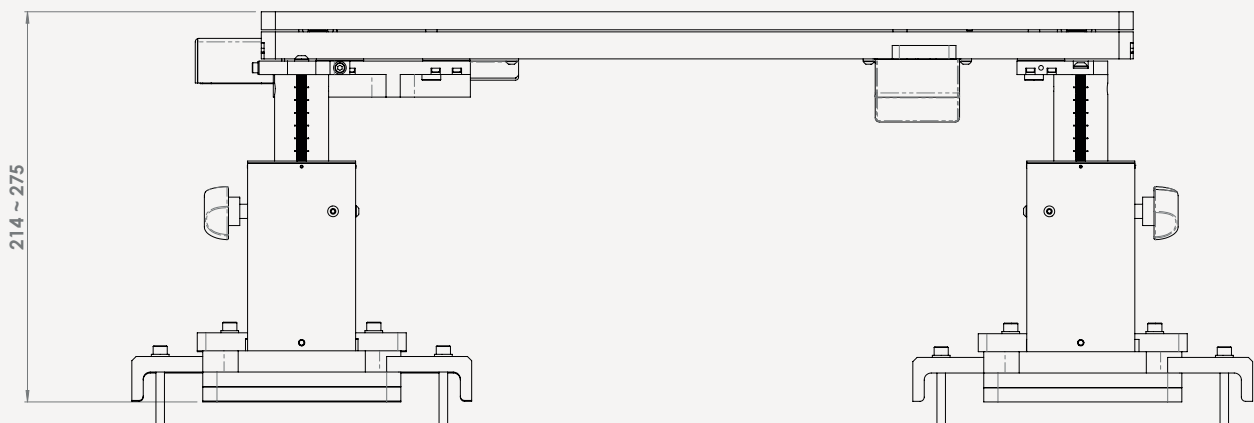
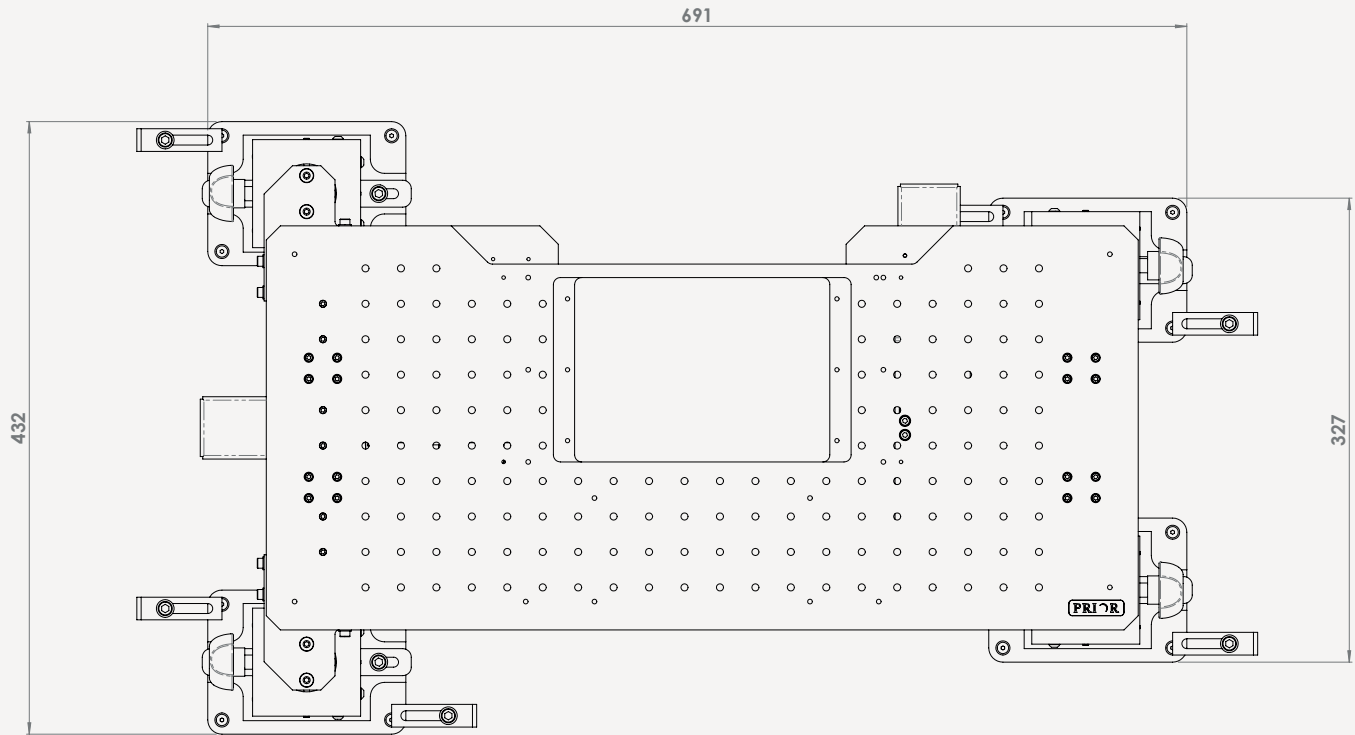
Ordering Information

Code	Description
ZDZ12MP	Motorised Z-Deck for Zeiss Axio Examiner with 1 mm ball screw pitch
ZDZ12ME	Motorised Encoded Z-Deck for Zeiss Axio Examiner with 1 mm ball screw pitch
ZDN12MP	Motorised Z-Deck for Nikon FN1 and Ni with 1 mm ball screw pitch
ZDN12 ME	Motorised Encoded Z-Deck for Nikon FN1 and Ni with 1 mm ball screw pitch
ZDP12MP	Motorised Z-Deck for Olympus 51WI/Olympus 61WI with 1 mm balls screw pitch
ZDP12ME	Motorised Encoded Z-Deck for Olympus BX51WI/Olympus BX61WI with 1 mm ball screw pitch
ZDL12MP	Motorised Z-Deck for Leica with 1 mm ball screw pitch
ZDL12ME	Motorised Encoded Z-Deck for Leica with 1 mm ball screw pitch
ZDZ12MK	Manual Z-Deck for Zeiss Axio Examiner
ZDN12MK	Manual Z-Deck for Nikon FN1 and Ni
ZDP12MK	Manual Z-Deck for Olympus BX51WI/BX61WI
ZDL12MK	Manual Z-Deck for Leica
ZDZ12MF	Fixed Z-Deck for Zeiss Axio Examiner
ZDN12MF	Fixed Z-Deck for Nikon FN1 and Ni
ZDP12MF	Fixed Z-Deck for Olympus BX51WI/BX61WI
ZDL12MF	Fixed Z-Deck for Leica
HZ201	Adapter insert plate allowing any standard insert plate to be attached
HZ202	Solid insert plate
HZ203	Nikon 108 mm ring insert plate
HZ204	Olympus 110 mm ring insert plate
HZ306	Magnetic stainless steel top plates

Z-Deck

Motorised, manual and fixed platforms for electrophysiology

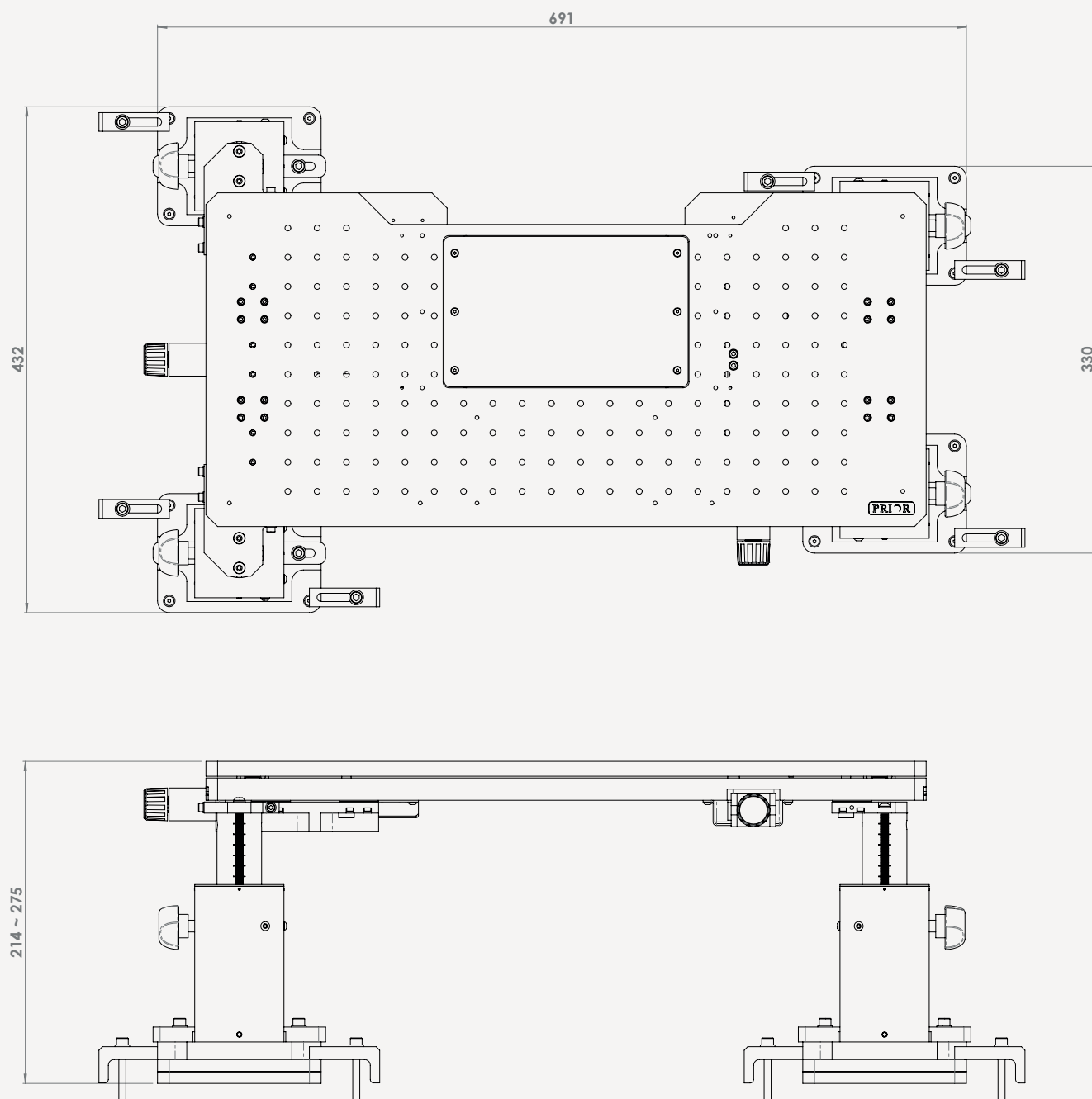
Motorised Z-Deck



Z-Deck

Motorised, manual and fixed platforms for electrophysiology

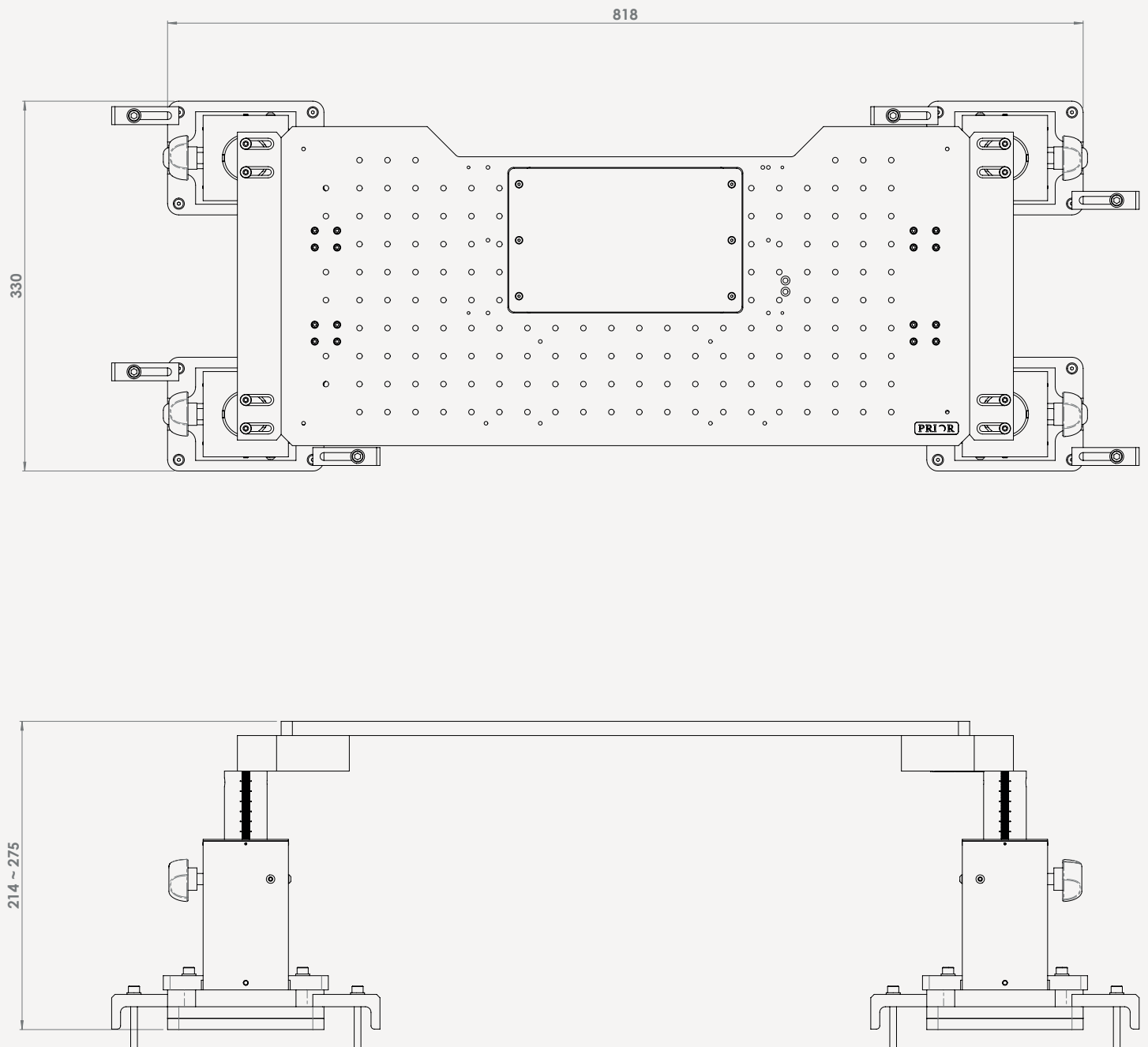
Manual Z-Deck



Z-Deck

Motorised, manual and fixed platforms for electrophysiology

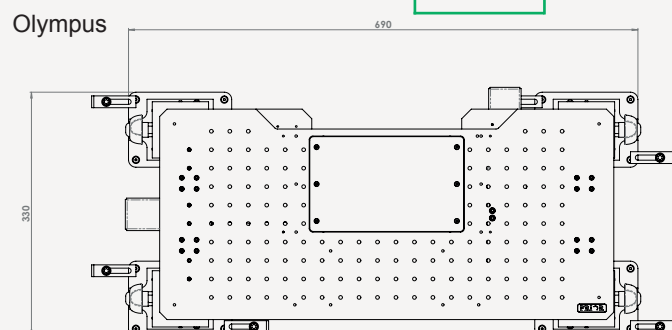
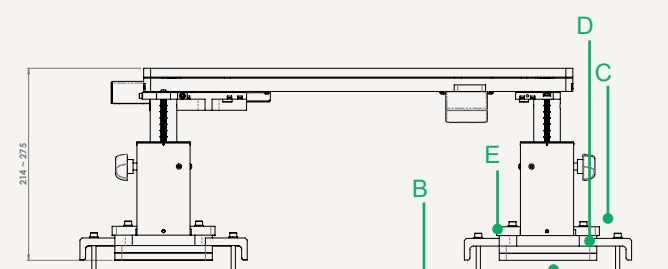
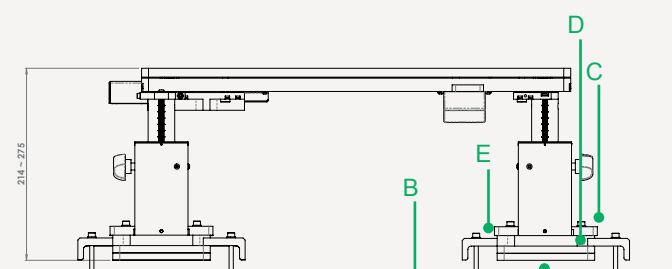
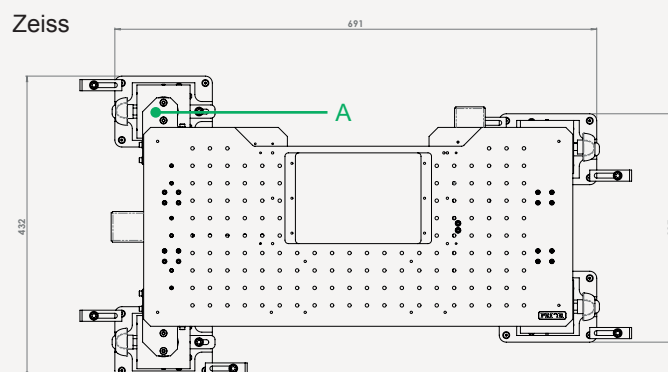
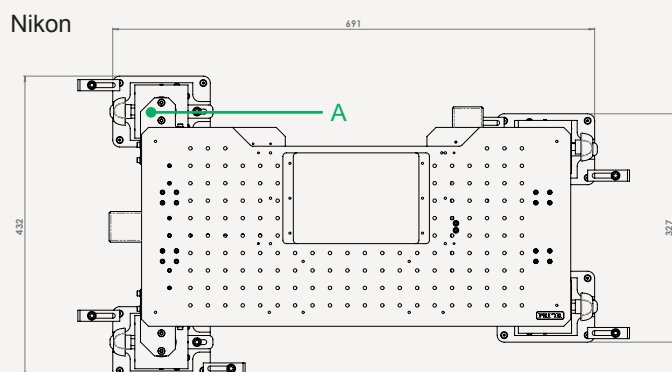
Fixed Z-Deck



Z-Deck

Motorised, manual and fixed platforms for electrophysiology

Adapters for Nikon, Zeiss and Olympus



Nikon:

- A - Mounting Adapter (HP1614) x 2
- B - Tower Spacing Pad (HP1447) x 4
- C - Pedestal Clamp (HP1263) x 8
- D - Spacer Pad (HP1284) x 4
- E - Mounting Clamps (HP1125) x 8

Zeiss:

- A - Mounting Adapter (HP1614) x 2
- B - Tower Spacing Pad (HP1447) x 4
- C - Pedestal Clamp (HP1263) x 8
- D - Spacer Pad (HP1284) x 4
- E - Mounting Clamps (HP1125) x 8

Olympus:

- A - Adapter Spacers (HP1678) x 2
- B - Pedestal Clamp (HP1263) x 8
- C - Condenser Extender (HP1285) x 1
- D - Spacer Pad (HP1284) x 4