

# MP3D-M8020 3-DoF Motion Platform

## High performance · Robust · Versatile

- Compact 3-DoF motion base for mounting medium payloads (recommended 750kg max)
- High performance and load capacity in a compact form
- Configurable for multi-user purposes
- Easily adapted with customised habitation



*3-DoF platform, showing semi-transparent standard deck*

Powered by 3 ACM-20 crank actuators, the motion base is built to deliver powerful performance and minimum maintenance in a compact form

- Fully ball-raced crank & ball screw actuator mechanism (no plain bearings)
- High powered BLDC motors utilising high speed closed loop FO control system



ACTUATE MOTION

Delta Kinetic motion platforms utilise Actuate Motion, a modern motion software interface which natively supports many commercial titles. Its SDK has dedicated plugins for Unity and Unreal Engine 4 and UDP access for other programmes, allowing integration with almost any software.

# Key data

**Degrees of freedom** 3 (pitch, roll & heave)  
**Payload** 750 kg (Max. recommended)

## Dimensions (mm, excluding superstructure, with standard deck)

Footprint	Deck dimensions	Deck height at rest	Weight
990 (l) x 1140 (w)	1410 (l) x 740 (w)	275	69 Kg (motion base, 49 Kg)

## Motion

	Heave	Pitch	Roll
Range	200 mm	+19.2°, -19.8°	+/-16.8°
Speed	750 mm/s	146 °/s	126 °/s
Force/torque	1536 Kgf	4021 Nm	3482 Nm
Resolution	0.0023 mm	0.00046°	0.00039°

**Power requirements** (UK) 220VAC, 50Hz, 13A single phase

**Control interface** USB or RS485 connection to host PC

**Safety features** Normally closed failsafe emergency stop loop for multiple e-stop buttons. Stop and hold position on loop break. Fall arrest on power failure.

*\*\* Figures are approximate only. Actual figures will depend on configuration & usage conditions.*

## A multi-purpose motion platform for applications including land, sea & air vehicle training

The 3-DoF platform can be easily adapted to provide specialised training simulators for a range of land, sea & air vehicles.



3-DoF platform with seat and fighter control habitation

We can design space optimised habitation to replicate many cabin environments and vehicle controls, to enable trainees to undergo fully immersive VR vehicle training.



3-DoF Driver Training Simulator