

# eM6-640-3000

The eMove eM6-640-3000 is a six degrees of freedom electric motion system with an actuator stroke of 640mm, designed for use in simulation systems. The static weight of the payload is supported by 3 external pneumatic cylinders.

Typical applications are flight simulators and vehicle simulators for (racing) cars, trucks, buses, military vehicles, railway vehicles, etc. Other applications are entertainment, research and development platforms and test beds.



## System performance

	Excursions					Velocity		Acceleration	
	Single DOF	non-single DOF							
Surge	-0.48	0.60	-0.64	0.63	m	0.8	m/s	6.3	m/s <sup>2</sup>
Sway	-0.50	0.50	-0.66	0.66	m	0.8	m/s	6.3	m/s <sup>2</sup>
Heave	-0.41	0.41	-0.41	0.41	m	0.6	m/s	9.0	m/s <sup>2</sup>
Roll	-23.8	23.8	-29.2	29.2	deg	35	deg/s	200	deg/s <sup>2</sup>
Pitch	-23.7	26.0	-28.2	32.9	deg	35	deg/s	200	deg/s <sup>2</sup>
Yaw	-25.4	25.4	-28.7	28.7	deg	40	deg/s	400	deg/s <sup>2</sup>

Performance reference point with respect to MPC (x,y,z): 100mm, 0mm, 0mm

## Payload specification

Gross Moving Load	3000	kg (payload including upper frame of 350kg)
CoG height above MPC(*)	1000	mm
Moments of Inertia	lxx	5000 kg m <sup>2</sup>
	lyy	5000 kg m <sup>2</sup>
	lzz	5000 kg m <sup>2</sup>

CoG: Center of Gravity – MPC: Moving Platform Centroid

## Main dimensions

Total width	2.867	m
Total length	2.825	m
Settled height (floor to top of platform)	1.267	m
System weight	2000	kg

## Power requirements

Mains power	3-phase 380-480 VAC +/- 10%, 50/60 Hz
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