





# Three Axis Motion Simulator Series

MODEL	TES-UIT-V_422-3	TES-UIT-V_433-3	TES-UIT-V_433-3-TG	TES-UIT-V_644-7	TES-UUT-V_644-7	TES-UUT-V_644-7-TG	TES-U00-V_642-5	TES-U00-V_642-5-TG	TES-UIT-V_855-7			
Specifications*												
Description	Three axis high speed motion simulator with 300 & 400mm module sizes.	Three axis motion simulator with 300 & 400mm module sizes.	Three axis motion simulator with 300 & 400mm module sizes and temperature chamber.	Three axis motion simulator with 400 & 600mm module sizes.	Three axis gimbal motion simulator with 400 & 600mm module sizes.	Three axis gimbal motion simulator with 400 & 600mm module sizes and temperature chamber.	Three axis motion simulator with 200, 400 & 600mm module sizes and an open inner axis frame.	Three axis motion simulator with 200, 400 & 600mm module sizes, an open inner axis and temperature chamber.	Three axis high dynamic gimbal motion simulator with 500 & 800mm module sizes.			
Nominal Load	5kg	20kg	20kg	30kg	30kg	30kg	40kg	20kg	30kg			
Tabletop Dimension	Ø300mm		Ø280mm	Ø660mm			400x400x400mm	400x400x300mm	Ø660mm			
Position Accuracy	Inner Axis ≤± 1 arcsec RSS or ≤± 3 arcsec PP Middle Axis ≤± 1 arcsec RSS or ≤± 3 arcsec PP Outer Axis ≤± 1 arcsec RSS or ≤± 3 arcsec PP											
Position Range	All Axis ±(0.00000 to 359.99999)deg unlimited rotation											
Rate Stability†	All Axis ≤1ppm											
Rate Range	Inner Axis ±(0.00001 to 10'000) deg/s			Middle Axis ±(0.00001 to 1'000) deg/s						Outer Axis ±(0.00001 to 1'000) deg/s		
Acceleration <sup>Δ</sup>	Inner Axis ≥ 10'000 deg/s <sup>2</sup>		Middle Axis ≥ 10'000 deg/s <sup>2</sup>			Outer Axis ≥ 1'200 deg/s <sup>2</sup>		≥ 5'000 deg/s <sup>2</sup>			≥ 10'000 deg/s <sup>2</sup>	
Wobble	Inner Axis ≤± 1 arcsec RSS or ≤± 3 arcsec PP Middle Axis ≤± 1 arcsec RSS or ≤± 3 arcsec PP Outer Axis ≤± 1 arcsec RSS or ≤± 3 arcsec PP											
Sliprings	2 x 5A (S) 240VDC 12 x 2A (S) 150VDC 12 x 2A (TP) 150VDC			4 x 10A (SS) 400VDC 24 x 2A (SS) 150VDC 30 x 2A (TSP) 150VDC								
Temperature Range	--	---	-60°C to 100°C	--	--	-55°C to 100°C	--	-40°C to 80°C	--			
Temperature Gradient†	--	--	--	Heat: ≥ 3°C/min Cool: ≤ -3°C/min		Heat: ≥ 3°C/min Cool: ≤ -3°C/min		Heat: ≥ 3°C/min Cool: ≤ -3°C/min				
Interface	Acuitas Control System (ACS)											
User Software Options	Acuitas Motion Studio (AMS) or Acuitas Device Interface (ADI), LabView Driver (optional)											
Model Options	- Custom slipring, - Custom tabletop, - Slow motion clamp, - Mechanical brake, - Stow lock, - On-site installation, - Customer acceptance test (CAT) at Acuitas, - ADI High speed licence -- - CO2 manifold											

\*All given specifications are maximum values

Δ These specifications are measured without payload

†Between **min+10%** and **max-10%** of temperature range (IEC 60068-3-5:2001)

+ Over a full rotation of 360 degree

