

# Two Axis Motion Simulator Series

MODEL

TES-S\_3-3

TES-S\_4-4

TES-IT-H\_33-3

TES-IT-H\_33-3-TG

TES-IT-H\_44-4

TES-IT-H\_44-4-TG

TES-UT-H\_44-7

TES-UT-H\_44-7-TM



## Specifications\*

|                                 |  |   |   |  |   |  |  |  |
|---------------------------------|--|---|---|--|---|--|--|--|
| <b>Description</b>              | Single axis motion simulator 300mm module size with manually operated tilt stand.  | Single axis motion simulator 400mm module size with manually operated tilt stand. | Two axis motion simulator with 300mm module size. | Two axis motion simulator with 300mm module size and gas cooled temperature chamber. | Two axis motion simulator with 400mm module size. | Two axis motion simulator with 400mm module size and gas cooled temperature chamber. | Two axis gimbal motion simulator with 400mm module size. | Two axis gimbal motion simulator with 400mm module size and mechanical cooled temperature chamber. |
| <b>Nominal Load</b>             | 20kg   | 40kg  | 20kg  | 20kg   | 40kg  | 40kg   | 60kg   | 60kg   |
| <b>Tabletop Dimension</b>       | Ø 300mm  | Ø 420 mm  | Ø 300 mm  | Ø 280 mm   | Ø 420 mm  | Ø 400 mm   | Ø 660 mm   | Ø 660 mm   |
| <b>Position Accuracy</b>        | Inner Axis $\leq \pm 1$ arcsec RSS or $\leq \pm 3$ arcsec PP   |   |   |  |   |  |  |  |
| <b>Position Range</b>           | Outer Axis $\leq \pm 1$ arcsec RSS or $\leq \pm 3$ arcsec PP   |   |   |  |   |  |  |  |
| <b>Rate Stability†</b>          | Inner Axis $\pm(0.00000$ to $359.99999)$ deg unlimited rotation  |   |   |  |   |  |  |  |
| <b>Rate Range</b>               | Outer Axis -5 to 185 deg   |   |   |  |   |  |  |  |
| <b>Acceleration<sup>Δ</sup></b> | Inner Axis $\leq 1$ ppm  |   |   |  |   |  |  |  |
| <b>Wobble</b>                   | Outer Axis $\leq 1$ ppm  |   |   |  |   |  |  |  |
| <b>Sliprings</b>                | Inner Axis $\pm(0.00001$ to $10'000)$ deg/s  |   |   |  |   |  |  |  |
| <b>Temperature Range</b>        | Outer Axis $\pm(0.00001$ to $1'000)$ deg/s   |   |   |  |   |  |  |  |
| <b>Temperature Gradient†</b>    | Inner Axis $\geq 10'000$ deg/s <sup>2</sup>  |   |   |  |   |  |  |  |
| <b>Interface</b>                | Outer Axis $\geq 1'000$ deg/s <sup>2</sup> $\geq 500$ deg/s <sup>2</sup> $\geq 500$ deg/s <sup>2</sup> $\geq 500$ deg/s <sup>2</sup> $\geq 250$ deg/s <sup>2</sup> $\geq 250$ deg/s <sup>2</sup> |   |   |  |   |  |  |  |
| <b>User Software</b>            | Inner Axis $\leq \pm 1$ arcsec RSS or $\leq \pm 3$ arcsec PP   |   |   |  |   |  |  |  |
| <b>Options</b>                  | Outer Axis $\leq \pm 1$ arcsec RSS or $\leq \pm 3$ arcsec PP   |   |   |  |   |  |  |  |
| <b>Model Options</b>            | 2 x 5A (S) 240VDC<br>12 x 2A (S) 150VDC<br>12 x 2A (TP) 150VDC   |   |   |  |   |  |  |  |
|                                 | 4 x 10A (SS) 400VDC<br>24 x 2A (SS) 150VDC<br>30 x 2A (TSP) 150VDC   |   |   |  |   |  |  |  |
|                                 | -60°C to 100°C   |   |   |  |   |  |  |  |
|                                 | Heat: $\geq 3^{\circ}\text{C}/\text{min}$<br>Cool: $\leq -3^{\circ}\text{C}/\text{min}$  |   |   |  |   |  |  |  |
|                                 | Acuitas Control System (ACS)   |   |   |  |   |  |  |  |
|                                 | Acuitas Motion Studio (AMS) or Acuitas Device Interface (ADI), LabView Driver (optional)   |   |   |  |   |  |  |  |
|                                 | - Custom slipring, - Custom tabletop, - North alignment kit, - Slow motion clamp, - On-site installation, - Customer acceptance test (CAT) at Acuitas, - ADI High speed licence                  |   |   |  |   |  |  |  |
|                                 | - Digital encoder for tilt axis    - Digital encoder for tilt axis    - CO2 manifold    - CO2 manifold    - Water cooled compressor unit   |   |   |  |   |  |  |  |

\* All given specifications are maximum values

<sup>Δ</sup> 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

