



SANLAB

"Your Motion Partner"

SMotion500-Outdoor



COMPATIBLE WITH

- ▶ Remote control weapon systems
- ▶ Turret systems
- ▶ Optical systems
- ▶ Antenna systems
- ▶ Radar systems
- ▶ Vehicle cabin/body systems
- ▶ Aircraft cabin systems



FACTS

- ▶ 6 degrees of freedom
- ▶ 6 electro-mechanical actuators
- ▶ 500 kg total payload
- ▶ 300 mm actuator stroke
- ▶ IP class 66



APPLICATIONS

- ▶ Turret & RCW test
- ▶ Component validation
- ▶ Signal replication
- ▶ Signal generation
- ▶ Real time simulation table
- ▶ Field data system testing simulator

3D CONNECTION CONTROLLER
OPTIONAL



SMOTION PRODUCT LINE

SMOTION50

SMOTION100

SMOTION200

SMOTION500

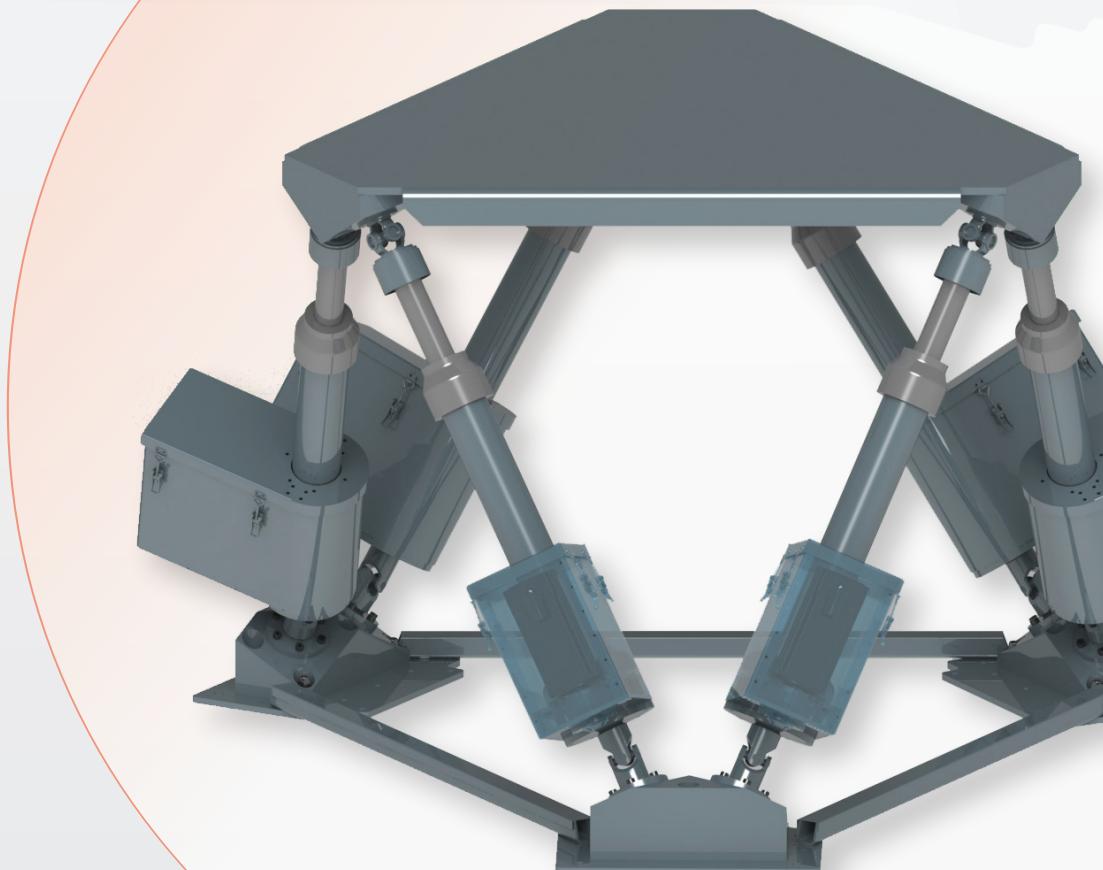
SMOTION800

SMOTION1000



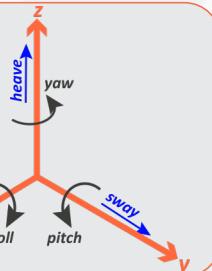
DIMENSIONS

L 1.6 X_w 1.4 X_h 1.2 m





TECHNICAL SPECIFICATIONS



HARDWARE COMPONENTS

- ▶ User friendly interface control (GUI)
- ▶ Hardware real-time control
- ▶ UDP based PC communication
- ▶ IMU integrated measurement system
- ▶ Passive and active limitations

Performance Specifications

- | | |
|--|---------------------|
| ▶ Gross Moving Load up to | 500 kg |
| ▶ Actuator Stroke | 300 mm |
| ▶ Center of Gravity Above Top Platform | 0.50 m (Max) |
| ▶ Settled Height | 0.80 m |
| ▶ Neutral Height | 1.10 m |

Moment of Inertia About

- | | |
|----------------------------------|-----------------------------|
| ▶ Moment of Inertia About X axis | 250 kg.m² |
| ▶ Moment of Inertia About Y axis | 250 kg.m² |
| ▶ Moment of Inertia About Z axis | 250 kg.m² |

Power Supply

- ▶ **380VAC ±10%, 3ph , 50/60Hz**
- ▶ **Operation Temperature -20°C, +50°C**
- ▶ **Storage Temperature -30°C, +60°C**

Velocity

Surge $\pm 0.45 \text{ m/s}$ || $\pm 5 \text{ m/s}^2$

Sway $\pm 0.45 \text{ m/s}$ || $\pm 5 \text{ m/s}^2$

Heave $\pm 0.35 \text{ m/s}$ || $\pm 6 \text{ m/s}^2$

Roll $\pm 40^\circ/\text{s}$ || $\pm 300^\circ/\text{s}^2$

Pitch $\pm 40^\circ/\text{s}$ || $\pm 300^\circ/\text{s}^2$

Yaw $\pm 50^\circ/\text{s}$ || $\pm 500^\circ/\text{s}^2$

Acceleration

Surge $\pm 0.45 \text{ m/s}$ || $\pm 5 \text{ m/s}^2$

Sway $\pm 0.45 \text{ m/s}$ || $\pm 5 \text{ m/s}^2$

Heave $\pm 0.35 \text{ m/s}$ || $\pm 6 \text{ m/s}^2$

Roll $\pm 40^\circ/\text{s}$ || $\pm 300^\circ/\text{s}^2$

Pitch $\pm 40^\circ/\text{s}$ || $\pm 300^\circ/\text{s}^2$

Yaw $\pm 50^\circ/\text{s}$ || $\pm 500^\circ/\text{s}^2$

Excursion

Single Axis

Surge $-0.22 \text{ m} - 0.24 \text{ m}$ || $-0.30 \text{ m} - 0.30 \text{ m}$

Sway $-0.22 \text{ m} - 0.22 \text{ m}$ || $-0.31 \text{ m} - 0.31 \text{ m}$

Heave $-0.19 \text{ m} - 0.18 \text{ m}$ || $-0.19 \text{ m} - 0.18 \text{ m}$

Roll $-21.00^\circ - 21.00^\circ$ || $-24.00^\circ - 24.00^\circ$

Pitch $-20.00^\circ - 22.00^\circ$ || $-25.00^\circ - 25.00^\circ$

Yaw $-22.00^\circ - 22.00^\circ$ || $-26.00^\circ - 26.00^\circ$

Multi Axis

Surge $-0.22 \text{ m} - 0.24 \text{ m}$ || $-0.30 \text{ m} - 0.30 \text{ m}$

Sway $-0.22 \text{ m} - 0.22 \text{ m}$ || $-0.31 \text{ m} - 0.31 \text{ m}$

Heave $-0.19 \text{ m} - 0.18 \text{ m}$ || $-0.19 \text{ m} - 0.18 \text{ m}$

Roll $-21.00^\circ - 21.00^\circ$ || $-24.00^\circ - 24.00^\circ$

Pitch $-20.00^\circ - 22.00^\circ$ || $-25.00^\circ - 25.00^\circ$

Yaw $-22.00^\circ - 22.00^\circ$ || $-26.00^\circ - 26.00^\circ$



SIMPLE, SAFE AND ERGONOMIC SOFTWARE

- ▶ Signal generations
- ▶ Field data signal replication
- ▶ Real time signal visualization
- ▶ Signal recording and processing



USER FRIENDLY GUI

