

PS-3TM-550

Built for busy training centers - a two-seat cockpit that rolls in, bolts down and runs session after session. Quiet enough to run in occupied rooms.

 MADE IN POLAND  EUROPEAN UNION MEMBER

 GLOBAL SHIPPING



0.3_G

MAX ACCELERATION

340_{mm/s}

MAX VELOCITY

22.6°

MAX TILT

299+_{mm}

TOTAL HEAVE

Total heave is full travel; other motion figures are per-axis maxima from neutral. Axes are not driven to their extremes simultaneously.

Engineered for professional simulation

Quiet Enough for a Shared Room

A center sites it beside instructor desks and open classrooms, so one room holds the motion run and the briefing.

Two-Seat Cockpit on a 3DOF Base

One platform runs paired instructor-and-trainee scenarios, not single-seat cycles, so two learners share one run and learners-per-hour climbs.

Rolls In, Bolts Down, Runs

One person rolls it in, bolts down and powers up from a single-phase industrial socket, reaching first run without three-phase rewiring.

Three-leg low-profile platform

Three electric rotary actuators sit in a low-profile tripod, one driving each corner of the upper frame. Working together, the three actuators tilt the cockpit in pitch, roll and heave under the full 550 kg payload, while the tripod layout keeps the deck low for easy group boarding.

Plug-and-play for supported titles, or full SDK

- **ForceSeatPM** - platform manager, auto-detects supported titles
- **ForceSeatMI/DI SDK** - integrate motion into custom applications
- **ACE Engine** - professional motion-cueing
- **VR HeadWay** - VR motion compensation

Axis	Single Excursion	Max Excursion	Max Velocity	Max Acceleration
Heave	-142.8 / 156.7 mm	-142.8 / 156.7 mm	340 mm/s	0.3 G
Pitch	-16.1 / 16.2°	-22.6 / 21.2°	45 °/s	420 °/s ²
Roll	-18.7 / 18.7°	-18.8 / 18.8°	45 °/s	420 °/s ²
Payload Specifications				
Payload	550 kg			
CoG height above MPC	<500 mm			
Moments of inertia (Ixx, Iyy, Izz)	225 kg·m ²			
Main Dimensions				
Total Width	1444 mm			
Total Length	1554 mm			
Min Height	610 mm			
Max Height	910 mm			
Specifications				
Architecture	3 DOF			
Drive technology	Helical-Bevel Geared			
Product weight	390 kg			
Power & Installation				
Supply	230V single-phase (Wye), ground and neutral; industrial CEE connector supplied. For a 120V supply, contact Technical Support.			
Circuit protection	25A type C circuit breaker.			
EMC configuration	Runs on a standard RCD/GFCI-protected circuit.			
Grounding	High leakage current - permanent solid protective earth, fitted by a qualified electrician.			
Installation	Single-phase install by a qualified electrician; full detail in the manual.			

POWER DRAW

Average power	1.9 kVA
Peak power	4.7 kVA
Average current	9 A
Peak current	23 A
Avg power - stress test	1.2 kW
Avg power - typical game	0.6 kW

What's in the Box.

HARDWARE**✓ PS-3TM-550**

A three-actuator tripod on helical-bevel geared servos - a high-payload tripod in the line, for two-seat and heavier cockpits.

✓ PS-SB230 Cabinet

Power and control - AC/DC protection and controller, fed from a dedicated 230V single-phase industrial CEE socket. For a 120V supply, contact Technical Support.

✓ PS-SBR Remote + E-Stop

The PS-SBR remote (E-STOP, KNEEL, POWER LOCK) and PS-SBEC stop button - the hardware safety chain to park or stop motion. The keyed POWER LOCK keeps arming with the operator; the 5 m PS-SBEC lead adds a stop within reach.

✓ Electromagnetic Brakes

One safety brake per actuator - engages on power loss and holds the load. A fail-safe, standard here.

✓ Cable Set

Mains, USB to the host PC, and the PS-SBR remote and EMCY safety leads - wired together as delivered.

✓ Packing & Handling

Ships factory-assembled and calibrated in a forklift-ready crate - the integrator unpacks and installs, with no on-site build.

SOFTWARE & LICENSES

✓ ForceSeatPM

Auto-detects 154+ supported games with pre-tuned profiles. Included free, with free software updates.

✓ Sim Profiles

Pre-tuned motion profiles for the popular sims and games, so the first session already feels right.

✓ ACE

The motion cueing engine that turns simulator telemetry into felt acceleration - the sharp onset of a bend or brake on the platform, with sustained forces held by coordinated tilt rather than a crude static roll.

✓ VR HeadWay

VR motion compensation that cancels the platform's own movement from the headset, so the view stays stable and motion sickness stays low. Included free.

✓ Docs & 3D Model

Full documentation and a simplified 3D STP model, plus the EC Declaration of Incorporation (2006/42/EC) for partly completed machinery - the platform is integrated into a final machine on site.

✓ 24-Mo Warranty

A 24-month warranty on the hardware and motion electronics, with free software updates throughout.

OPTIONAL HARDWARE

Wheels & Feet Set

Transport wheels and adjustable feet to move and level the platform where it is not bolted down; suitability for a given cockpit follows the product documentation.

Extended Top Frame

A larger top frame with extra holes and brackets to bolt a seat or full cockpit straight on. Sized for this model.

OPTIONAL SOFTWARE AND SERVICES

ForceSeatMI - Motion SDK

Motion SDK to drive the platform from custom software on top of ForceSeatPM. Licensed per motion platform, with the key stored on the PC.

ForceSeatDI - Direct Interface SDK

Low-level SDK that drives the hardware directly, without ForceSeatPM - each platform driven independently, on Windows, Linux or Raspberry Pi. Licensed per platform, with the key stored on the motion controller.

Remote Training (online)

Six-hour online session - overview, safety, operation, maintenance, ForceSeatPM setup, diagnostics and tuning. Per session.

VR HeadWay CrossPC

A paid VR add-on, licensed separately from the base VR HeadWay. One CrossPC license covers exactly two VR users on a shared platform - each seat has its own rendering PC and geometry-correct compensation (for example pilot and copilot). More seats need an additional license.

Motion Theater

Plays pre-authored motion with video or group sessions - for theaters, attractions and briefings, not live sim. Per platform.

More Options

Profile packs, installation, reports, extended warranty and bespoke development - talk to the Motion Systems team to tailor it.

MOTION SYSTEMS

Miedziana 7, 55-003 Nadolice Wielkie, Poland

motionsystems.eu

info@motionsystems.eu

Made in Poland (EU)



PRODUCT

RESOURCES

All platforms

Knowledge Hub

Buyer's Guide