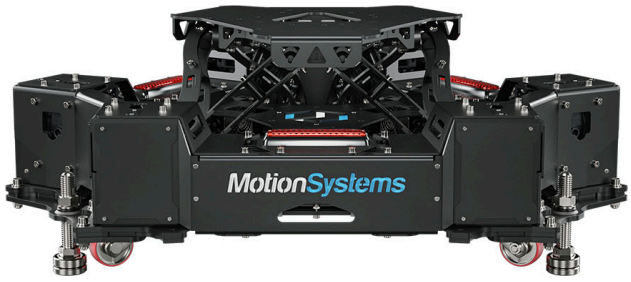
PS-6TM-150

Entry 6DOF platform for VR research, light training cockpits and prototype rigs. Fuller, true-to-physics motion cues - more real forces than a 3DOF base reaches.

MADE IN POLAND EUROPEAN UNION MEMBER

GLOBAL SHIPPING



0.25 G	370 mm/s	30.8°	±25°	198+ mm
MAX ACCELERATION	MAX VELOCITY	MAX TILT	YAW RANGE	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

Full 6DOF on Single-Phase Power

A VR center or small lab installs the platform on a single-phase industrial socket, skips the three-phase fit-out, and starts sessions sooner.

Crisp, Agile Motion at the Entry Tier

Aerobatic flight, vehicle slides and sharp yaw hit the trainee at the very start of each motion cue, keeping simulator sickness low.

Independent Yaw and Side-Slip Axes

Helicopter side-slip and lane-change drills stay available at this tier, so a single platform serves both rotorcraft and ground-vehicle curricula.

Six-leg low-profile platform

Six electric rotary actuators sit horizontally in a low-profile layout, each rotating a worm gearbox that swings a crank arm to lift its leg of the upper frame. The worm drive keeps this among the most compact platforms in the range - a large gear reduction in one small stage, quiet and self-holding, with just the slight play any gear pair carries.

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	-93.6 / 105.3 mm	-93.6 / 105.3 mm	270 mm/s	0.17 G
Surge	-103.1 / 109.6 mm	-124 / 122 mm	300 mm/s	0.25 G
Sway	-96.8 / 96.8 mm	-114 / 114 mm	370 mm/s	0.23 G
Pitch	-23 / 23.8°	-29 / 30.8°	69 °/s	420 °/s²
Roll	-24.5 / 24.5°	-27.2 / 27.2°	70 °/s	420 °/s²
Yaw	-21.8 / 21.8°	-25 / 25°	84 °/s	490 °/s²

PAYLOAD SPECIFICATIONS	
Payload	150 kg
CoG height above MPC	<500 mm
Moments of inertia (Ixx, Iyy, Izz)	60 kg·m²

MAIN DIMENSIONS	
Total Width	1147 mm
Total Length	1273 mm
Min Height	336.5 mm
Max Height	535 mm

SPECIFICATIONS	
Architecture	6 DOF
Drive technology	Worm Geared
Product weight	305 kg

POWER & INSTALLATION	
Supply	230V single-phase (Wye), ground and neutral; industrial CEE connector supplied. For a 120V supply, contact Technical Support.
Circuit protection	16A 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	3.2 kVA
Peak power	4.4 kVA
Average current	15 A
Peak current	30 A
Avg power - stress test	1.7 kW
Avg power - typical game	0.9 kW

What's in the Box.

HARDWARE

- ✓ **PS-6TM-150**
  A low-profile six-actuator platform on worm-geared servos - all six axes, top yaw agility in the 6TM range. Self-locking, no brakes.
- ✓ **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.
- ✓ **Inverter Cabinets (FI123 + FI456)**
  PS-SB230-FI123 and PS-SB230-FI456 - two rack cabinets that hold the motor inverters, chained from the PS-SB230 and wired to the platform. The power set ships as three rack cabinets in all.
- ✓ **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.
- ✓ **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.

MotionSystems

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.

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

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PRODUCT

RESOURCES

All platforms
Knowledge Hub
Buyer's Guide