

PS-6TL-350

For single-seat training cockpits and tight-access sites - ships assembled, or in modules that pass through standard doorways.

 MADE IN POLAND  EUROPEAN UNION MEMBER

 GLOBAL SHIPPING



0.66_G

MAX ACCELERATION

700_{mm/s}

MAX VELOCITY

26°

MAX TILT

±31.8°

YAW RANGE

354+_{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

Wide Yaw for Turn and Sideslip

Helicopter sideslip, a lane-change or a hard turn reaches the trainee as real rotation.

Optional Modular Delivery for Tight Access

A tight corridor or compact room takes delivery, then a hoist lifts it into place.

Brakes Hold on Power Loss

The cockpit holds position through every stop, and acceptance testing clears on standard hardware.

Six-leg Stewart hexapod

Six electric ball-screw actuators stand in a Stewart hexapod between the base feet and the upper frame. In each leg a servo motor drives a recirculating ball screw through a timing belt, turning that rotation into smooth linear travel.

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	-165.8 / 189.1 mm	-165.8 / 189.1 mm	370 mm/s	0.51 G
Surge	-306 / 273.1 mm	-339 / 337 mm	680 mm/s	0.66 G
Sway	-265.3 / 265.3 mm	-298 / 298 mm	700 mm/s	0.5 G
Pitch	-19.8 / 18.1°	-26 / 23.4°	50 °/s	650 °/s ²
Roll	-20.6 / 20.6°	-21.4 / 21.4°	45 °/s	600 °/s ²
Yaw	-28.2 / 28.2°	-31.8 / 31.8°	60 °/s	700 °/s ²
Payload Specifications				
Gross Moving Load		350 kg		
Payload (top frame fitted)		300 kg		
CoG height above MPC		<500 mm		
Moments of inertia (Ixx, Iyy, Izz)		125 kg·m ²		
Main Dimensions				
Total Width		1726 mm		
Total Length		1660 mm		
Min Height		790 mm		
Max Height		1145 mm		
Specifications				
Architecture		6 DOF		
Drive technology		Linear Actuator		
Product weight		360 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.
Connection	USB or Ethernet

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-6TL-350

A six-leg ball-screw hexapod (gross moving load up to 350 kg) - all six axes with precise travel for research and training. The factory top frame takes 50 kg of that figure, leaving the 300 kg payload; removing it and bolting the cockpit floor directly to the mounting points frees the full 350 kg - validated during scoping.

✓ 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. The controller connects to the host PC over USB or Ethernet.

✓ 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 as standard; where access is tight, the platform can be prepared as modules that pass through a standard doorway and are connected on site.

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, including the mounting-point layout, 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

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

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Made in Poland (EU)



PRODUCT

RESOURCES

All platforms

Knowledge Hub

Buyer's Guide