MotionSystems

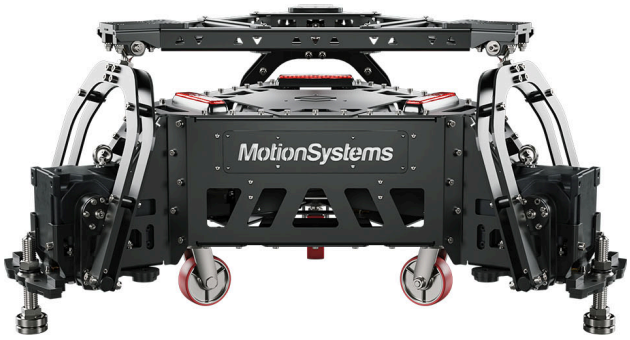
TM SERIES

PS-3TM-350

Mid-range tripod for single-seat training cockpits and VR or mixed-reality rigs. Quick pitch for stall and recovery work - one cabinet, no hydraulics to service.

MADE IN POLAND EUROPEAN UNION MEMBER

GLOBAL SHIPPING



0.5 G	266 mm/s	24.1°	266+ mm
MAX ACCELERATION	MAX VELOCITY	MAX TILT	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

Fastest Pitch Rate in the 3TM Range

Emergency-braking and stall-recovery cues reach the trainee as a sharp motion, carrying the lesson into the real vehicle.

One Cabinet, One Single-Phase Feed

The integrator wires one rack to a single-phase industrial socket and drops a single-seat cockpit into a classroom in a day.

No Hydraulics, No Service Stops

A center running sessions all day keeps the platform on its calendar, with no oil to schedule and no leak to mop.

Three-leg low-profile platform

Three electric rotary actuators carry the cockpit in a low-profile tripod. In each leg an electric servo motor turns a helical-bevel gearbox, and the gear output swings an arm that drives a pulling rod on ball joints up to the upper frame.

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	-127.8 / 139.1 mm	-127.8 / 139.1 mm	266 mm/s	0.5 G
Pitch	-17.1 / 17.1°	-24.1 / 22.6°	60 °/s	250 °/s²
Roll	-19.8 / 19.8°	-20 / 20°	50 °/s	250 °/s²

PAYLOAD SPECIFICATIONS	
Payload	350 kg
CoG height above MPC	<500 mm
Moments of inertia (Ixx, Iyy, Izz)	125 kg·m²

MAIN DIMENSIONS	
Total Width	1210 mm
Total Length	1317 mm
Min Height	531 mm
Max Height	798 mm

SPECIFICATIONS	
Architecture	3 DOF
Drive technology	Helical-Bevel Geared
Product weight	260 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	1.5 kVA
Peak power	3.4 kVA
Average current	7 A
Peak current	16 A
Avg power - stress test	0.8 kW
Avg power - typical game	0.4 kW

What's in the Box.

HARDWARE

- **PS-3TM-350**
  A low-profile three-actuator tripod on helical-bevel geared servos, with the muscle for a heavier seat than the entry tripod.
- **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 3 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.

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.

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