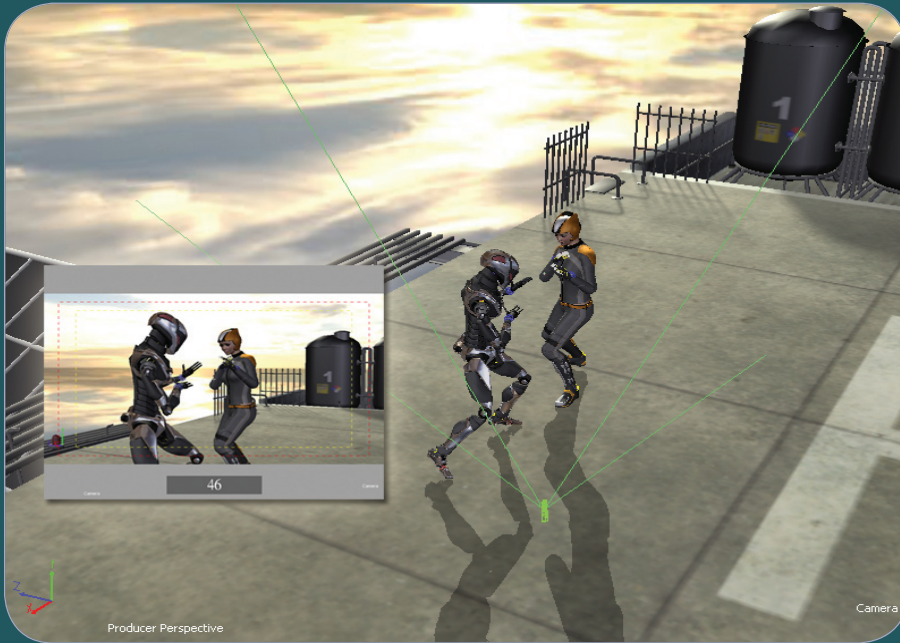


# InterSense VCam™ Virtual Camera Tracking System

*Real-time Previs with Autodesk® MotionBuilder® puts the camera back in the hands of the director*



Character image courtesy of Autodesk

## InterSense VCam System Includes:

- IS-900 VETracker™ Processor
- IS-900 SoniStrips™
- Autodesk® MotionBuilder® Plug-in
- VCam (Virtual Camera) with Embedded MicroTrax™ tracking technology

## VCam Features:

- MotionBuilder Control through integrated joystick, zoom and buttons
- Wireless Operation
- Integrated Video Viewer

## Revolutionary Previs Technique

Previsualization is revolutionizing the way content is created in feature films & games. Previsualization helps streamline the entire production pipeline, giving directors, producers and VFX supervisors interactive control of the pre and post production pipeline. This simple and completely intuitive technique is provided with a fully integrated solution from InterSense combining our industry standard motion tracking technology with mature and powerful virtual production software.

The InterSense VCam Tracking System enables animated & 3D feature film, game and video productions to increase their productivity, streamline their workflow and lower their production costs.

## Greater Creativity & Realism

The InterSense VCam Tracking System provides a simple and natural way to create virtual camera moves with realism from handheld and steady-cam operators. Previsualization of virtual content occurs in real-time, at production resolution, providing the director with flexibility and creativity previously unavailable.

When combining animated or motion captured characters with the 3D scene, the VCam controls the motion, camera angles and point of view for setting shots in a natural and intuitive manner. Direct control of the shot is transferred from the keyboard to the camera giving a virtual production the look and feel of live-action cinematography.

## Total Previs Production Solution

VFX supervisors, directors and producers can now save hours in production time by directly scouting virtual shots, or trying multiple camera moves, without key framing or pre-programming camera paths. The VCam System uses InterSense's MicroTrax 6-DOF motion tracking sensors directly integrated into a production camera body with Autodesk MotionBuilder functions mapped to the camera's interface controls.

A 3-axis analog joystick added to the VCam allows translation, rotation, and scaling of the virtual environment in MotionBuilder to help set-up or scout a virtual shot. Zoom, play, record, jog, scrub and keyframe controls on the VCam transfer total production control to the camera operator. Integrated virtual video and wireless options add additional freedom and flexibility.

### InterSense VCam Tracking System Performance Specifications

Degrees of Freedom	6 (X, Y, Z, Yaw, Pitch, and Roll)
Angular Range	Full 360° - all axes
Tracking Volume	
- Starter Package (3 SoniStrips/SoniFrame)	2.5 m x 2.5 m for installation height less than or equal to 4 m from floor
- Standard Package (10 SoniStrips)	3 m x 8 m for installation height less than or equal to 4 m from floor
Update Rate	180 Hz Nominal (120 Hz Nominal Wireless)
Latency	4 ms Typical
Interface	RS-232 Serial Port Ethernet
O/S Compatibility	Windows 32 and 64-bit XP
Software Support	Custom Camera Plug-in for Autodesk MotionBuilder 2009 & 7.5 Ext. 2 SDK with full InterSense API for other OS (Linux, Vista) ISDEMO control and connectivity software
Maximum Tracked Devices (VCams or other MicroTrax Devices)	7 for VETracker processor (Wired or Wireless)

### IS-900 Processor Physical Specifications

AC Input	100 - 120 V, 200 - 240 V, 60/50 Hz, 6/3 A (auto switching)
Operating Temperature	0° to 50° C (32° to 122° F)
Storage Temperature	-20° to 70° C (-4° to 158° F)
Processor Size	1U rack mounted (44.45 cm wide x 40.64 cm deep x 4.45 cm tall)
Processor weight	15.0 lbs. (6.8 kg)

### InterSense VCam Tracking Device Specifications

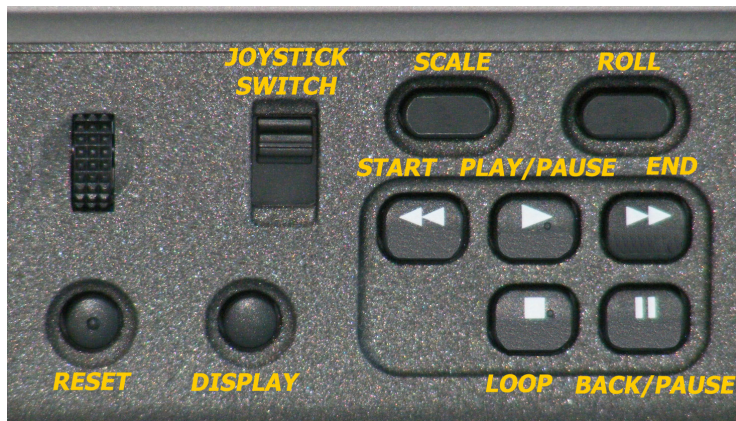
Static Accuracy	2.0 – 3.0 mm 0.25° RMS in Pitch & Roll, 0.50° RMS in Yaw 3.0 – 5.0 mm (Wireless) 0.50° RMS in Pitch & Roll, 1.00° RMS in Yaw (Wireless)
Resolution	0.75 mm (1.5 mm Wireless) 0.05° (0.10° Wireless)
Weight	4.4 lbs. (2.0 kg)
Dimensions	8 7/16 in x 8 7/16 in x 18 1/2 in (21.4 cm x 21.4 cm x 47.0 cm)
Integrated Analog & Button Interface	4 analog channels 14 digital buttons mapped to MotionBuilder functions
Standard Cable length	45 feet (14 meters) - IS-900 processor to VCam
On-Camera NTSC Video Playback	not available as wireless

Wireless Option Available

### InterSense VCam MotionBuilder Plug-in

Designed for plug and play compatibility with MotionBuilder 2009 and 7.5 Ext. 2 for 32 & 64-bit Windows XP  
MotionBuilder Controls Mapped to VCam

- 3-axis Analog Joystick with four modes for translation, rotation and scaling of tracking volume plus timeline scrub
- Variable Speed Analog Zoom for Camera Field of View Control
- Record Button
- MotionBuilder Transport Controls for record and playback
- Supports Standard InterSense Tracking Devices (MicroTrax Head, Hand or Wand) through generic MotionBuilder IS-900 interface allowing custom button and control mapping



**VCam's MotionBuilder Control Panel**

Specifications are determined in a controlled and quantified environment and subject to change without notice.  
Please visit the InterSense web site for up-to-date specifications at [www.intersense.com](http://www.intersense.com)

## InterSense VCam Tracking System

Precision inertial-ultrasonic tracking system



The InterSense VCam™



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