

Intel® Education Lab Camera by Intellisense



Lab Camera is a science exploration application with six tools that enable students to carry out scientific concepts using the laptop's or tablet's built-in camera. It's a cost-effective way to enhance STEM curriculum and promote scientific inquiry.



FEATURES/BENEFITS

Value for Schools

- Enhances project-based learning, an ideal complement to STEM curriculum
- Reduces the need for expensive lab equipment
- Tools work across several science disciplines, such as biology, life science, chemistry, physics, etc.

Value for Students

- Engagement; fosters deep understanding of scientific principles and phenomena with modern digital tools
- Anytime anywhere access to science tools built into the students' device

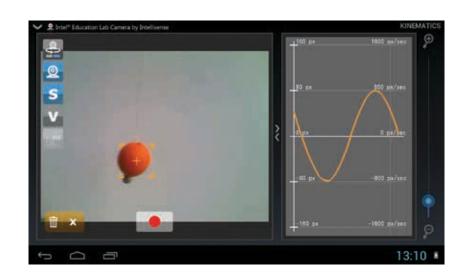
Value for Teachers

- Enhances project-based learning in science disciplines
- Develops higher-order skills such as investigation, drawing conclusions, collaboration, analysis, problem solving, deductive reasoning
- With six tools built into one application, educators can save time managing and distributing probes and peripherals during valuable class time



LAB CAMERA TOOLS

- Time lapse cam: Record nature's slow processes.
- **Kinematics:** Track and graph horizontal and vertical movement.
- Microscope: Explore the world through size and distance.
- Pathfinder: Discover invisible paths and detect patterns.
- Motion cam: Record movement in targeted areas.
- Universal logger: Digitize any instrument that has a digital, radial-dial, or fluid-based display.



USAGE EXAMPLES

Subject	K-5	6-8	9-12
Language Arts	Student groups track plant growth using the Motion Camera tool to observe and record plant growth overnight. Then they write about their scientific observations.	Students track the motion of a pendulum through Lab Camera's Kinematics tool. In their lab report, they describe the motion of the ball as it relates to the force of their push on the ball.	Students set up Time Lapse Camera to record worms feeding and make observations in their written lab reports.
Math	Using Lab Camera's Microscope tool to measure and describe the size of items that cannot be measured by a ruler.	Students use Lab Camera Kinematics tool to represent and analyze the relationship between independent and dependent variables such as motion and velocity.	Students use Lab Camera Pathfinder tool to create a motion map of termite movement and statistically analyze their pattern of movement.
Science	Using the Time Lapse tool, students record cloud movement in their study of weather patterns.	Students use the Kinematics tool to investigate roller-coaster design and learn about velocity and acceleration.	Using Pathfinder, students learn about insect behavior by tracking termite trails.