

OPTIKA®
I T A L Y



Wi-Learn

OPTIKA-WI-LEARN: TRANSFORM YOUR CLASSROOM
INTO AN INTERACTIVE LEARNING ENVIRONMENT



Optika-Wi-Learn provides the teacher with a true central command station, collecting real-time images from all the connected microscopes in the classroom. The teacher can choose to display images from all stations in "mosaic" mode, focus on specific microscopes, or view only one. Additionally, the teacher can save images or videos from each individual station, share them with the class, and stimulate collective discussion.

The station also includes a large 24" monitor that displays microscope images clearly and in detail, facilitating a shared view.

Thanks to the HDMI port on the main station, a second monitor or interactive whiteboard can be connected, enabling real-time sharing of observations with the class.

This setup creates an interactive visual environment that enriches the educational experience, promoting interaction among all participants.

Modularity and flexibility:

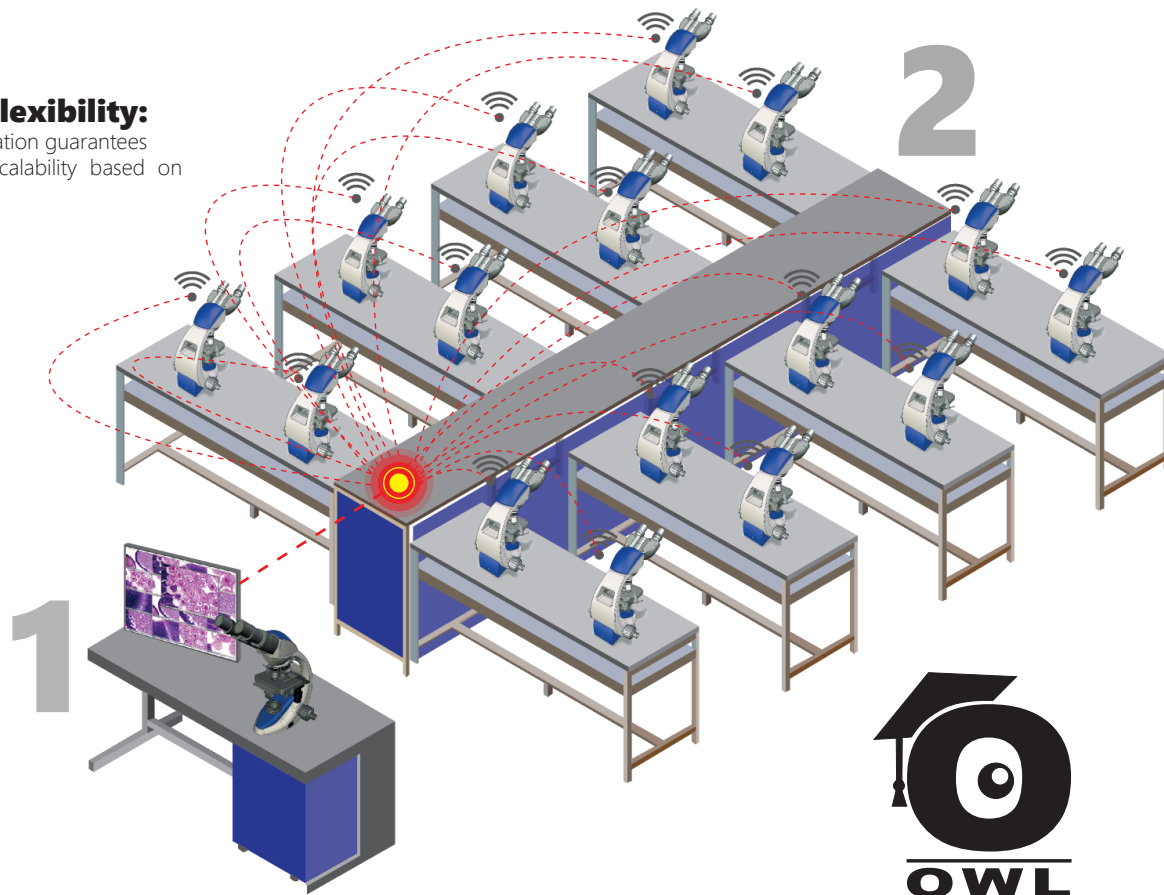
The pre-configured configuration guarantees immediate use and easy scalability based on classroom needs.

Centralized Control:

The teacher can monitor what each student observes, choose which images to project to the class, and save photos or videos for later analysis.

Shared Viewing:

Thanks to the HDMI port, the Teacher Station content can be projected onto a multimedia whiteboard or a second monitor.



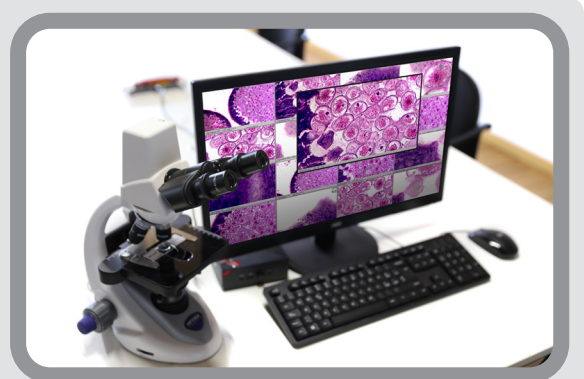
1 Teacher Station:

B-290 Microscope with Optika-Wi-Learn Digital Binocular Head Optika-Wi-Learn Digital Binocular Head

- Type: Binocular inclined at 30°, 360° rotation, with interpupillary distance adjustment from 48 to 75 mm and dioptric correction on the left tube.
- Sensor: CMOS 1/3" for clear and precise vision.
- Frame Rate: 25 fps with resolutions 2560x1440, 1920x1080, and 1280x720.
- Video Compression: Supports H264, H265, H264+, and H265+ for smooth and high-quality transmission.
- Connections: Supports RJ45 Ethernet (10/100 Base-T) and 2.4 GHz Wi-Fi for a stable and secure connection.

B-290 Microscope

- Field of View (FOV): 20 mm for a wide sample view.
- Objectives: N-PLAN 4x, 10x, 40x (spring), 100x (oil, spring); working distance 160 mm; magnifications from 40x to 1000x.
- Condenser: Abbe 1.25 N.A., centering and focusing, with iris diaphragm for precise and controlled illumination.
- Illumination: X-LED3 3.6 W, with a lifespan of over 65,000 hours, for intense and durable light.
- Focusing: Coaxial system for macro and micrometric focusing.
- Stage: 150x139 mm, with double layer and rackless movement, travel 75x33 mm, for smooth and precise sample manipulation.



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Student Station:**B-190 Microscope with Optika-Wi-Learn Digital Binocular Head****Optika-Wi-Learn Digital Binocular Head**

- Type: Binocular inclined at 30°, 360° rotation, with interpupillary distance adjustment from 48 to 75 mm and dioptic correction on the left tube.
- Sensor: CMOS 1/3" for clear and precise vision.
- Frame Rate: 25 fps with resolutions 2560x1440, 1920x1080, and 1280x720.
- Video Compression: Supports H264, H265, H264+, and H265+ for smooth and high-quality transmission.
- Connections: Supports RJ45 Ethernet (10/100 Base-T) and 2.4 GHz Wi-Fi for a stable and secure connection.

B-190 Microscope

- Field of View (FOV): 18 mm for a sharp sample view.
- Objectives: N-PLAN 4x, 10x, 40x (spring), 100x (oil, spring); working distance 160 mm; magnifications from 40x to 1000x.
- Condenser: Abbe 1.25 N.A., pre-centered and focusing, with iris diaphragm for controlled illumination.
- Illumination: X-LED2 3 W, with a lifespan of over 65,000 hours, for intense and durable lighting.
- Focusing: Coaxial system for macro and micrometric focusing.
- Stage: 125x115 mm, with double layer and rack & pinion movement, travel 75x30 mm, for smooth and precise sample manipulation.



With Optika We-Learn, every discovery becomes a moment of collective growth, making learning more engaging and collaborative.



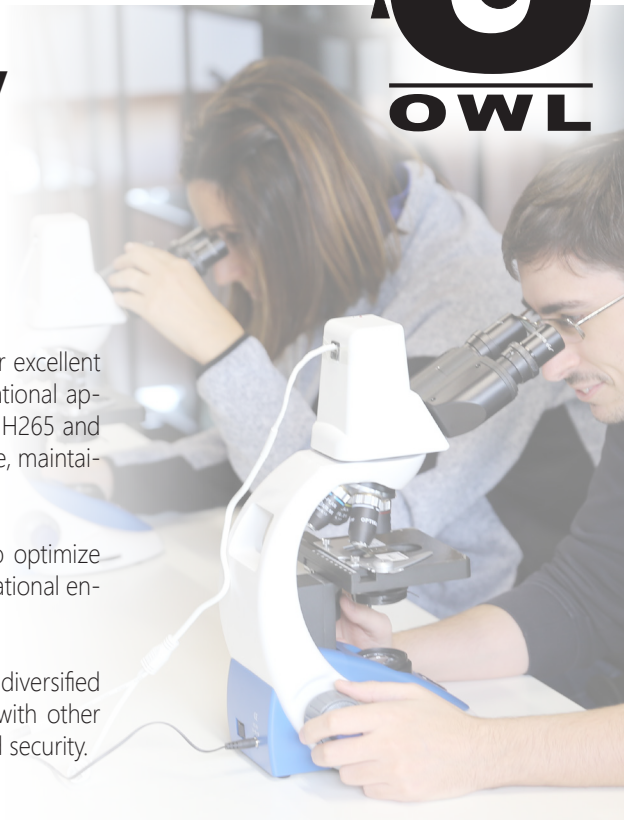
MEGAPIXEL
HIGH-RESOLUTION



Our WiFi digital heads, equipped with ONVIF certified sensors, offer excellent resolution up to 4MP, ensuring clear and detailed images for educational applications. Thanks to the modern video compression formats H264, H265 and H265+, these cameras minimize the use of bandwidth and disk space, maintaining high streaming quality.

Furthermore, thanks to the frame rate adjustment, it is possible to optimize performance according to needs, offering an ideal solution for educational environments that require reliability and advanced performance.

ONVIF certification allows the use of high-quality IP video devices in diversified environments, ensuring a stable connection and easy integration with other systems, making them ideal for applications that require stability and security.



Optika-Wi-Learn Preconfigured Packages

Optika-Wi-Learn is available in preconfigured packages, ideal for meeting the needs of classrooms of various sizes. Each package includes:

- **Teacher Microscope:** Optika-Wi-Learn Teacher Station, which combines a microscope with a Wi-Fi digital head, a mini PC with a 24" monitor, and a preconfigured Wi-Fi router for the selected number of "student" devices.
- **Student Microscopes:** Optika-Wi-Learn Student Station, microscopes with Wi-Fi digital heads, ideal for classroom interaction.
- **Wi-Fi Cameras:** Digital sensors for microscope heads.
- **Software:** License free (no license required, completely free).
- **Network Cables and Preconfigured Router:** Facilitates installation and immediate use of the system.

The packages are available for:

- **OWL-8PKG: 8 students + 1 Teacher Station**
- **OWL-12PKG: 12 students + 1 Teacher Station**
- **OWL-16PKG: 16 students + 1 Teacher Station**

This modular configuration allows you to easily choose the solution most suitable for your classroom's needs, with a ready-to-use system that can grow with your school, up to a maximum of 32 students.



COMPLETE OPTIKA-WI-LEARN SYSTEM FOR

8 STUDENT STATIONS + 1 TEACHER STATION

- Includes 8 Optika-Wi-Learn Student Stations + 1 Teacher Station
- Includes a factory preconfigured router to ensure a dedicated Wi-Fi connection
- The Teacher Station allows the teacher to monitor in real-time all the digital microscope stations in the classroom
- Includes 8 microscopes with Wi-Fi digital heads for the students
- The microscope images can be projected on a dedicated 24" monitor or an interactive whiteboard for an engaging visual experience
- The images from a single student station can be shared with the entire class in real-time
- Easy sharing of images between the teacher and students through a dedicated Wi-Fi connection
- Simple management of microscopes in the classroom, no additional licenses or software required
- The Optika-Wi-Learn system does not require any licenses

12 STUDENT STATIONS + 1 TEACHER STATION

- Includes 12 Optika-Wi-Learn Student Stations + 1 Teacher Station.
- Includes a factory preconfigured router to ensure a dedicated Wi-Fi connection.
- The Teacher Station allows the teacher to monitor in real-time all the digital microscope stations in the classroom.
- Includes 12 microscopes with Wi-Fi digital heads for the students.
- The microscope images can be projected on a dedicated 24" monitor or an interactive whiteboard for an engaging visual experience.
- A student's work can be shared with the entire class to stimulate discussion.
- Easy sharing of images between the teacher and students through a dedicated Wi-Fi connection.
- Simple management of microscopes in the classroom, no additional licenses or software required.
- The Optika-Wi-Learn system does not require any licenses

16 STUDENT STATIONS + 1 TEACHER STATION

- Includes 16 Optika-Wi-Learn Student Stations + 1 Teacher Station.
- Includes a factory preconfigured router to ensure a dedicated Wi-Fi connection.
- The Teacher Station allows the teacher to have an overview of all microscope stations in the classroom in real-time.
- Includes 16 microscopes with Wi-Fi digital heads for the students.
- The microscope images can be displayed on a dedicated 24" monitor or an interactive whiteboard for an immersive experience.
- A student's work can be shared with the entire class in real-time to stimulate discussion.
- Easy sharing of images between the teacher and students through a dedicated Wi-Fi connection.
- Centralized and simple management of microscopes in the classroom, no additional licenses required.
- The Optika-Wi-Learn system does not require any licenses.

Note on Technical Details

The Teacher Station is based on the B-290 microscope in a customized configuration for the Optika-Wi-Learn system, while the Student Station is based on the B-190 microscope. For more technical details related to the B-290 and B-190 microscopes, refer to their respective datasheets or product documentation available upon request.



v 1.3 - OPTIKA reserves the right to make corrections, modifications, enhancements, improvements and other changes to its products at any time without notice.

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