**Lumens®**

*Your Success, Our Focus*

*For End Users*

**Application Introduction**

# Higher Education

January 2026

**About Lumens**

Lumens Digital Optics Inc., founded in 1998 and part of the PEGATRON Group, is a leader in optical and Pro AV solutions. Helping our customers grow and creating value for them is at the core of Lumens' philosophy — and that's why your success is always our focus

# OUR MISSION

## *"Your Success, Our Focus"*

Helping our customers grow and creating value for them is at the core of Lumens' philosophy — and that's why your success is always our focus.

# Higher Education Scenarios

Lumens technology creates student-centered interactive classrooms that are immersive and can adapt to a variety of teaching methods. Lumens hybrid classroom solution combines the best of traditional face-to-face classroom teaching with new approaches to online learning.

**H1. Classrooms**

**H2. Lecture Halls**

**H3. Hybrid Teaching Classrooms**

**H4. Seminar Rooms**

**H5. Multi-purpose Rooms**

# H1. Classrooms

## S01 Automated Tracking

Lumens' multi-camera CamConnect Pro system is spearheading the classroom revolution, with AI-based auto-tracking and voice tracking technology. CamConnect Pro pairs with directional microphone arrays and multiple Lumens cameras to switch and focus cameras automatically on the active speaker.

## S02 BYOD & BYOM

Lumens' one cable solution is designed for maximum flexibility. It allows the AV team to install microphones and PTZ cameras in any position for use in teaching session. And it operates autonomously – simply turn the system, connect the presentation laptop via USB-C and the meeting will run with superb sound and expertly framed video.

# H1. Classrooms

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## S04 IP to USB

The Lumens all-IP classroom solution converts USB and HDMI equipment to IP, for use on the existing local area network (LAN). This minimizes the cost of cabling, reduces the installation time and allows for remote management and control of the AV within the room.

## S05 Recording and Live Streaming

Lumens CaptureVision media processors support multi-channel video and audio recording with an easy-to-use interface. Users can capture the full session, including video of each speaker, presentation content, and audience reactions, and save it for archiving and future playback. Compatible with leading content Learning Management Systems, such as Panopto and Kaltura, recordings can easily be catalogued, managed and viewed on demand.

# H2. Lecture Halls



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# H2. Lecture Halls

![Lumens logo]

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## S06 Intelligent Director

Intelligent Director automates your classroom, whether it's a school lesson, university lecture or interactive seminar. This function analyzes the behavior of the teacher and the students to intelligently produce a multi-camera production.

# H3. Hybrid Teaching Classrooms

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## S01 Automated Tracking

Lumens' multi-camera CamConnect Pro system is spearheading the classroom revolution, with AI-based auto-tracking and voice tracking technology. CamConnect Pro pairs with directional microphone arrays and multiple Lumens cameras to switch and focus cameras automatically on the active presenter.

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# H3. Hybrid Teaching Classrooms

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# H4. Seminar Rooms

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## S01 Automated Tracking

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## S02 BYOD & BYOM

Lumens' one cable solution is designed for maximum flexibility. It allows the AV team to install microphones and PTZ cameras in any position for use in the meeting. And it operates autonomously – simply turn the system, connect the presentation laptop via USB-C and the meeting will run with superb sound and expertly framed video.

## S04 IP to USB

The Lumens all-IP classroom solution converts USB and HDMI equipment to IP, for use on the existing local area network (LAN). This minimizes the cost of cabling, reduces the installation time and allows for remote management and control of the AV within the teaching space.

# H4. Seminar Rooms

## S05 Recording and Live Streaming

Lumens CaptureVision media processors support multi-channel video and audio recording with an easy-to-use interface. Users can capture the full session, including video of each lecturer, presentation content, and audience reactions, and save it for archiving and future playback. Compatible with leading content management systems, such as Panopto and Kaltura, recordings can easily be catalogued, managed and viewed on demand.

## S06 Intelligent Director

Intelligent Director automates your production, whether it's team training, a school lesson, university lecture or conference session. This function analyzes the behavior of the presenter and the audience to intelligently produce a multi-camera production.

# H5. Multi-purpose Rooms

## S01 Automated Tracking

Lumens' multi-camera CamConnect Pro system is spearheading the classroom revolution, with AI-based auto-tracking and voice tracking technology. CamConnect Pro pairs with directional microphone arrays and multiple Lumens cameras to switch and focus cameras automatically on the active speaker.

## S02 BYOD & BYOM

Lumens' one cable solution is designed for maximum flexibility. It allows the AV team to install microphones and PTZ cameras in any position for use in the teaching space. And it operates autonomously – simply turn the system, connect the presentation laptop via USB-C and the meeting will run with superb sound and expertly framed video.

# H5. Multi-purpose Rooms

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## S04 IP to USB

The Lumens all-IP classroom solution converts USB and HDMI equipment to IP, for use on the existing local area network (LAN). This minimizes the cost of cabling, reduces the installation time and allows for remote management and control of the AV within the room.

## S05 Recording and Live Streaming

Lumens CaptureVision media processors support multi-channel video and audio recording with an easy-to-use interface. Users can capture the full session, including video of each speaker, presentation content, and audience reactions, and save it for archiving and future playback. Compatible with leading Learning Management Systems, such as Panopto and Kaltura, recordings can easily be catalogued, managed and viewed on demand.

# H5. Multi-purpose Rooms

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## S06 Intelligent Director

Intelligent Director automates your media instalaltion, whether it's for training, lectures or conference sessions. This function analyzes the behavior of the lecturer and the students to intelligently produce a multi-camera production.

# Solutions

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# All Solutions

Lumens offers a complete range of ProAV solutions—from speaker tracking and BYOM/ BYOD to IP conversion, recording, streaming, and intelligent automation—designed to enhance communication, presentation, and collaboration in every environment.

**S01. Automated Tracking**

**S02. BYOD & BYOM**

**S03. Multi-Point BYOM**

**S04. IP to USB**

**S05. Recording and Live Streaming**

**S06. Intelligent Director**

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# Automated Tracking

## AI-based Voice Tracking Technology

### What is Automated Tracking?

With speaker tracking, cameras focus on participants in a room. By automatically moving to focus on the active voice, speaker tracking transforms the remote experience, delivering instant meeting equity, greater engagement, and more meaningful interactions.

The multi-camera Lumens CamConnect Pro is spearheading the meeting room revolution, with AI-based auto-tracking and speaker tracking technology. CamConnect Pro pairs with directional microphone arrays and up-to 4 Lumens IP cameras to switch and focus cameras on the active speaker.

CamConnect Pro pairs with microphone systems from major manufacturers including Audio-Technica, Nureva, Sennheiser, Shure, Televic and Yamaha.

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# BYOD & BYOM

**Bring Your Own Device & Bring Your Own Meeting**

## What is BYOD & BYOM?

In a BYOD & BYOM meeting space, participants simply plug in their own laptop and run a video conferencing session using the room's installed AV.

Lumens' BYOD & BYOM solution is designed for maximum flexibility. It allows the AV team to install microphones and PTZ cameras in any position for use in the meeting. And it operates autonomously – simply turn the system on and the meeting will run with superb sound and expertly framed video.

Lumens supports audio and video transmission in a range of popular formats including RTSP, Dante AV-H, Dante Audio and NDI.

# Lumens®

# Multi-Point BYOM

## Connect From Any Seat, At Any Time

### What is Multi-Point BYOM?

Lumens OIP connects all BYOM stations, enabling users to host meetings or share content from any device while sharing the same camera, room microphones, and displays for a flexible collaboration experience.

This unified architecture streamlines device switching and ensures a consistent AV experience across the room, making collaboration effortless regardless of where users choose to connect.

Lumens OIP devices rely on the simplicity and versatility of USB-C and its DisplayPort capabilities. This single connection transmits video and audio bi-directionally and enables instant screen extension and sharing.

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# IP to USB
## Single Cable Integration with Conferencing Systems

## What is IP to USB Conversion?

You can now build an all-IP meeting room thanks to Lumens. The OIP-N60D Dante decoder connects to your network and converts IP video and Dante audio streams to USB. It allows a single USB-C port on a laptop to connect to the AV installed in the room.

As a Dante device, the decoder is visible to Audinate's management apps, including Dante Controller. With this application, high quality audio and video streams can be routed to USB-C with very low latency.

Say goodbye to USB and HDMI cable length limitations and help reduce the pressure on the AV team to support every meeting. Prepare for a single cable user experience and high-quality 4K output to large format monitors.

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# Recording and Live Streaming

**All-in-one multi-input media production systems**

## What is Recording and Live Streaming?

Conferences, training, departmental meetings and business presentations often need to be recorded or streamed for on-demand review, secure archiving, training, or real-time participation. Lumens CaptureVision media processors support multi-channel video and audio recording while also enabling seamless live streaming to platforms like YouTube, Twitch, and Facebook.

Users can easily capture speaker video, presentation content, and audience reactions, switch sources in real time, and deliver a professional live experience without requiring a production crew. Compatible with leading content management systems such as Panopto and Kaltura, CaptureVision allows recorded sessions to be uploaded and organized effortlessly for future playback and documentation.

CaptureVision units feature multiple inputs including IP, NDI, XLR, HDMI, SDU and USB. Easy to use, these all-in-one units are ready for all kinds of applications.

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# Intelligent Director
## Automated Production

### What is Intelligent Director?

CaptureVision systems from Lumens simplifies the process of event production. The Intelligent Director function goes one step further, fully automating the entire process.

Intelligent Director automates your production, whether it's in-house training, team meetings, or presentations. This function analyzes the behavior of the presenter and the audience to intelligently produce a multi-camera production - automatically.

AI-powered, the LC300 CaptureVision system works in tandem with selected Lumens tracking cameras to create a dynamic multi-angle production. It's like creating television, but without the need for a video crew.

# Solution Partners

**Lumens**®

## S01. Automated Tracking

audio-technica    BOSCH

nureva    televic conference

SENNHEISER    YAMAHA

## S02. BYOD & BYOM

Dante    audio-technica

BARCO    BOSCH    NDI

SENNHEISER    YAMAHA

## S03. Multi-Point BYOM

Dante    BOSCH

NDI    televic conference

## S04. IP to USB

Dante    audio-technica

BARCO    BOSCH    NDI

SENNHEISER    YAMAHA

## S05. Recording and Live Streaming

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Panopto™

## S06. Intelligent Director

Panopto™

**Third Party Partners**

ATEN    mersive technologies inc    NETGEAR AV    SKAARHOJ    telestream    vingloop    XILICA    ZOOM

# More Details

## Contact Sales
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## ProAV Lab Blog
Provides ProAV use cases, technical articles, and deployment insights.

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