Q-SYS™
Higher Education Solutions

Integrated Audio, Video and Control

Q-SYS is a singular platform, offering advanced DSP processing, flexible AV routing and robust control engine, providing you with a blank canvas to design a truly unique experience in any space. Whether it's centralized or a standalone system, Q-SYS has the flexibility to manage every application across campus.

One Software Platform

With Q-SYS, there is just one software to learn: Q-SYS Designer. Configure the DSP, route audio and video and build intuitive user control interfaces in a single suite of tools that enables ANY installation type, regardless of size.

Elevate Hybrid Experiences with AI

From intelligent presenter tracking to intelligent audio-based camera switching, Q-SYS VisionSuite uses multimodal AI to improve the visibility of in-room participants to promote a natural viewing experience for the far-end, empowering teams to feel united and stay engaged no matter where they are.

Third-party Device Integration

Q-SYS offers a growing library of third-party device plugins, supporting lighting, media systems, HVAC and more allowing you to design a holistic AV experience in any space.

Remote Monitoring and Management

Q-SYS Reflect lets you remotely monitor your Q-SYS systems, including connected third-party devices, to help you diagnose and troubleshoot issues before sending a technician to the site.

Colleges and universities across the globe share a common goal of delivering the best on-campus and online learning experiences for students and teachers, which is increasingly dependant on innovative AV technology.

Q-SYS delivers an end-to-end audio, video, and control solution for higher education applications, from remote learning technology and small classrooms to sprawling lecture halls and performance venues.

Whether it's a small classroom or large lecture hall, the fundamental needs are the same - instructors should be able to walk into the room and command the learning experience for the students without worrying about the technology.
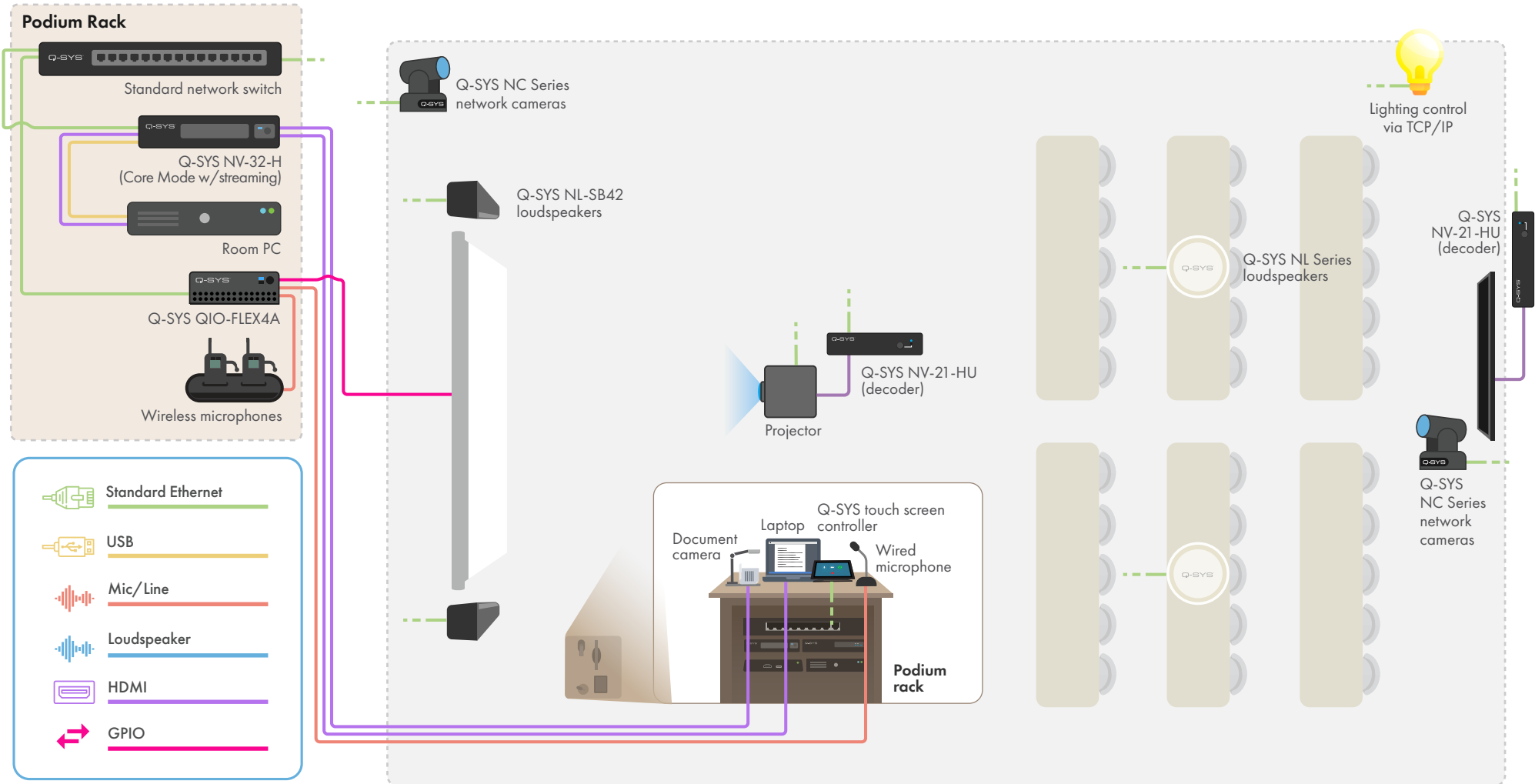
Q-SYS enables you to design to the needs of each unique space, including:

- local audio reinforcement
- network video routing
- intelligent audio-based camera switching
- seamless UC platform integration
- outputs for lecture capture
- simplified room control

UC Platform Integration for Hybrid Classroom

- Q-SYS integrates with any major UC platform via USB
- USB connection (Room PC to Q-SYS network video endpoint) bridges room's audio and camera feeds to the UC Platform
- Q-SYS and third-party device control from a single user interface

- Deploy as many Q-SYS network cameras as needed
- Voice reinforcement
- Remote monitoring and management for systems across campus

Podium Rack

Standard network switch

Q-SYS NV-32-H
(Core Mode w/streaming)

Room PC

Q-SYS QIO-FLEX4A

Wireless microphones

Q-SYS NC Series network cameras

Q-SYS NL-SB42 loudspeakers

Q-SYS NV-21-HU (decoder)

Projector

Lighting control via TCP/IP

Q-SYS NL Series loudspeakers

Q-SYS NV-21-HU (decoder)

Q-SYS NC Series network cameras

Document camera

Laptop

Q-SYS touch screen controller

Wired microphone

Podium rack

Legend:
- Standard Ethernet
- USB
- Mic/Line
- Loudspeaker
- HDMI
- GPIO

Q-SYS VisionSuite elevates hybrid learning experiences to the next level.

Pair intelligent audio and video with the integrated Q-SYS Control engine to equip your system with complete automation of native Q-SYS devices and other third-party room devices. Imagine a presenter triggering light changes, or toggling power on a display simply by walking into a specific area of the room. The possibilities with vision-based automation are endless.

Intelligent audio-based camera switching features use of in-room microphones to automatically switch between in-room cameras, recalling appropriate camera presets and framing up the best suited shot possible.

Intelligent presenter tracking leverages computer vision-based scene analysis and adaptive full-body tracking to autonomously follow and frame a presenter for more natural viewing experiences.
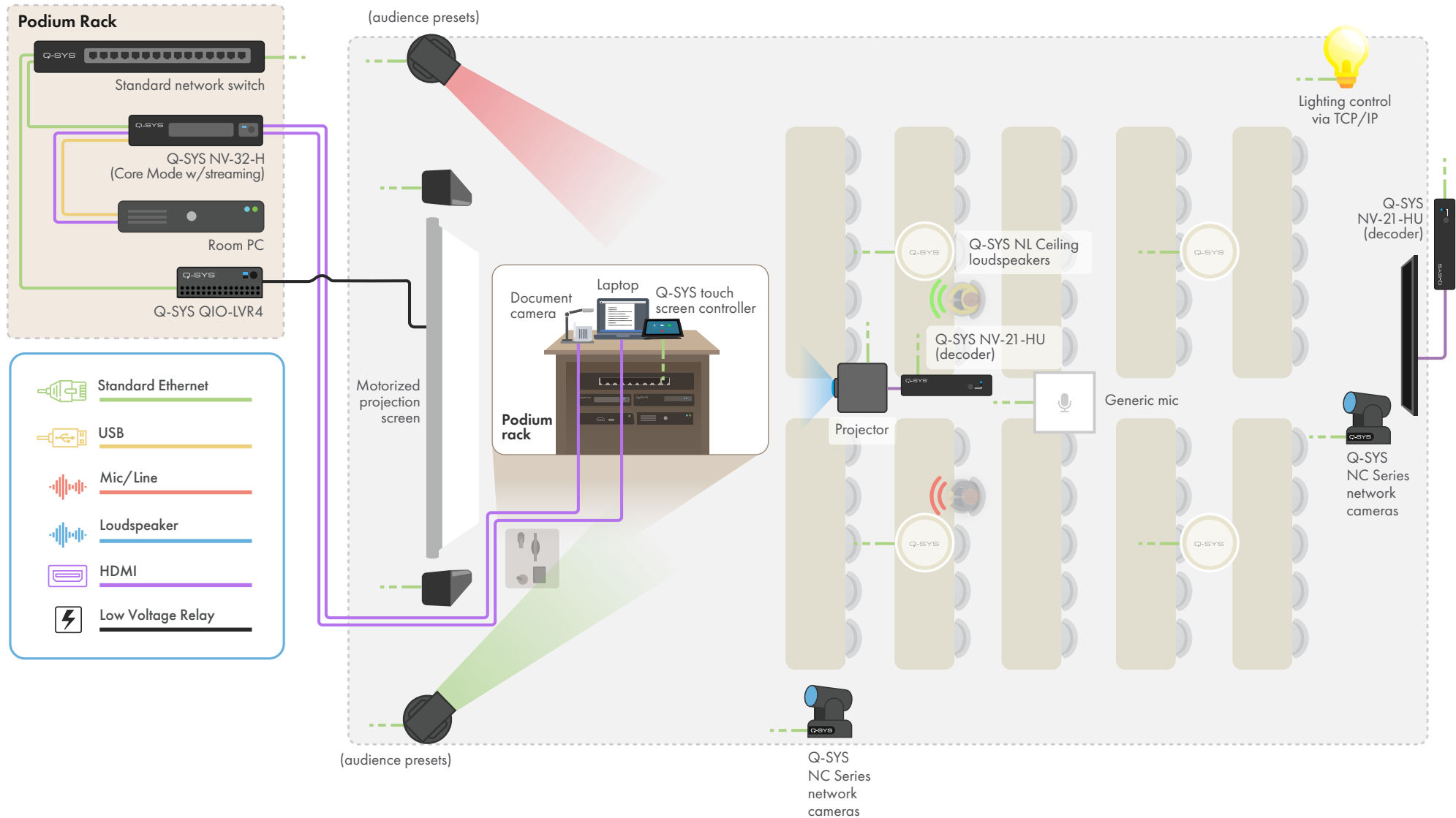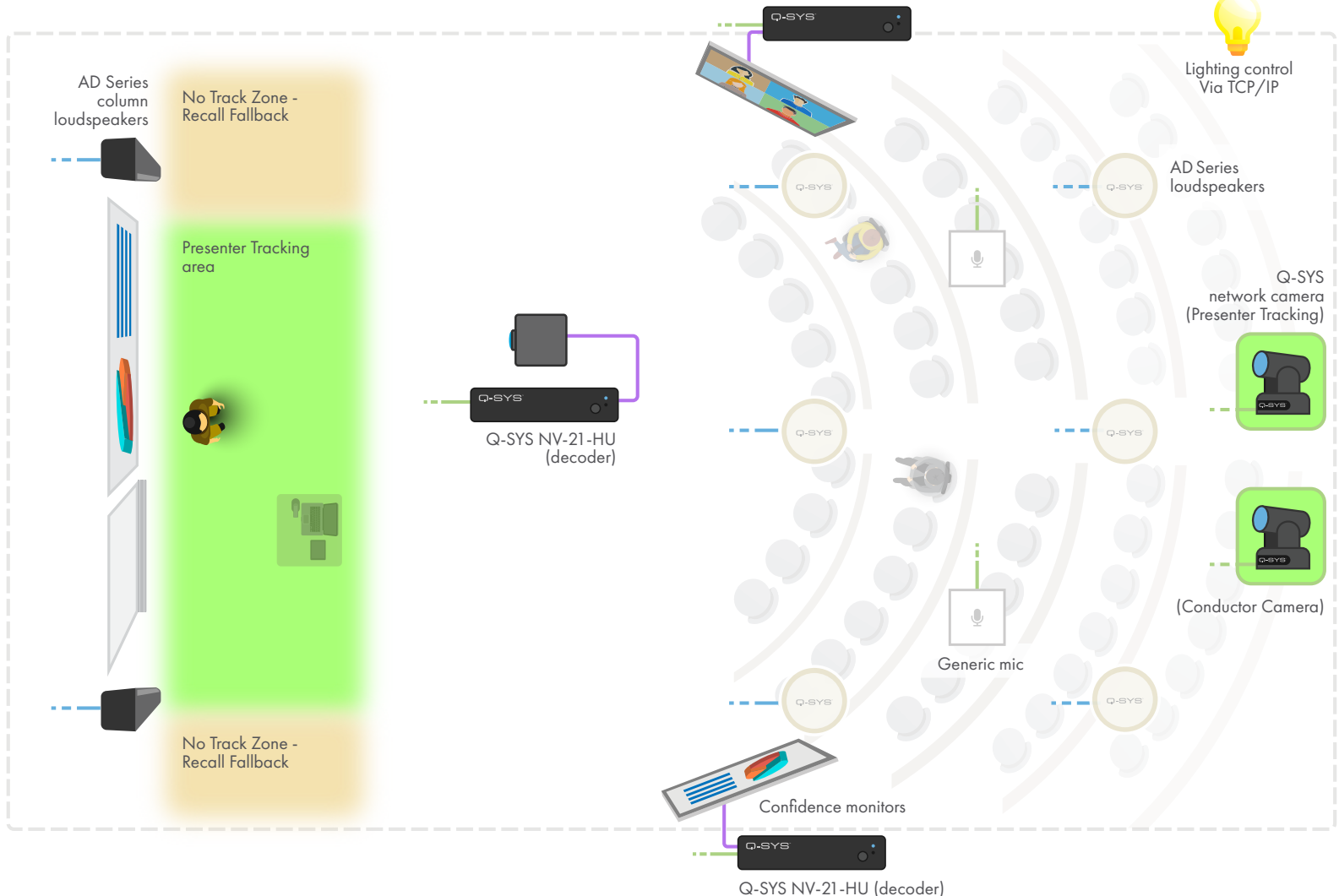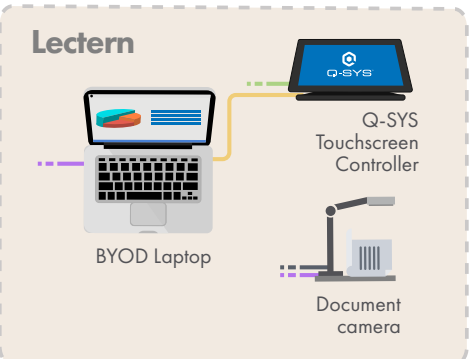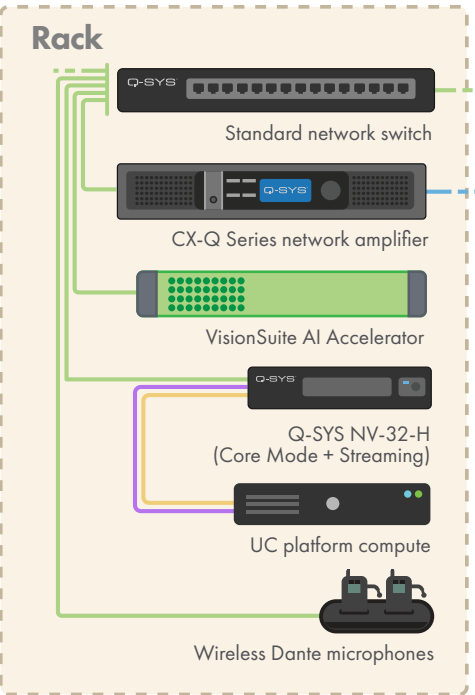
Q-SYS™ VISIONSUITE

Hybrid Classroom with Audio-based Camera switching

- Intelligent audio-based camera switching ensures the active talker is always seen by the far end
- NV-32-H network video endpoint encodes up to three HDMI sources to the network and bridges the room's audio and camera feeds to the far end via driverless USB.
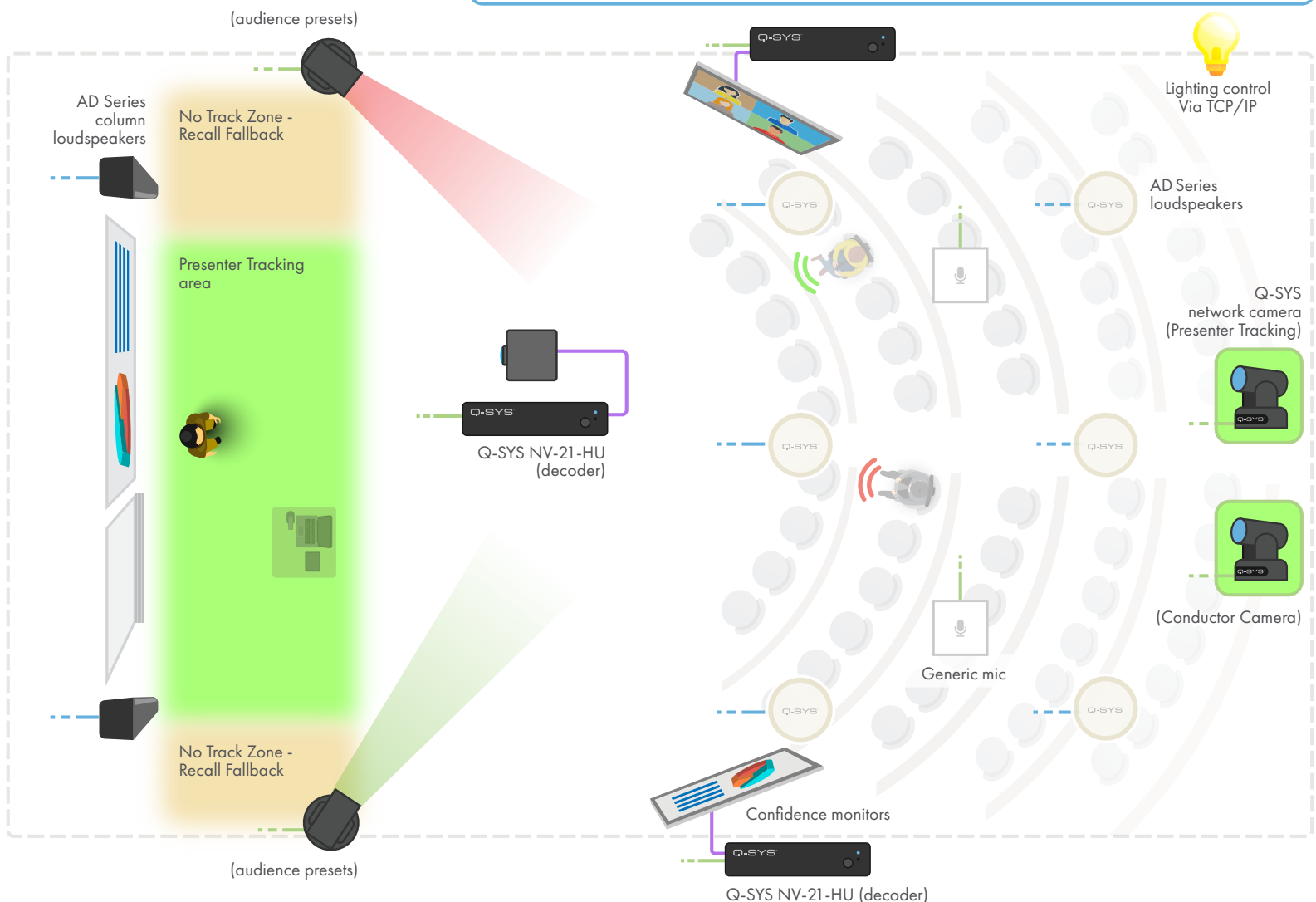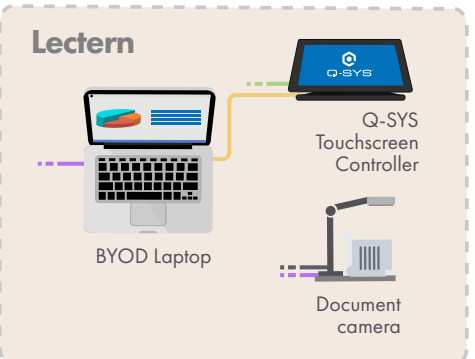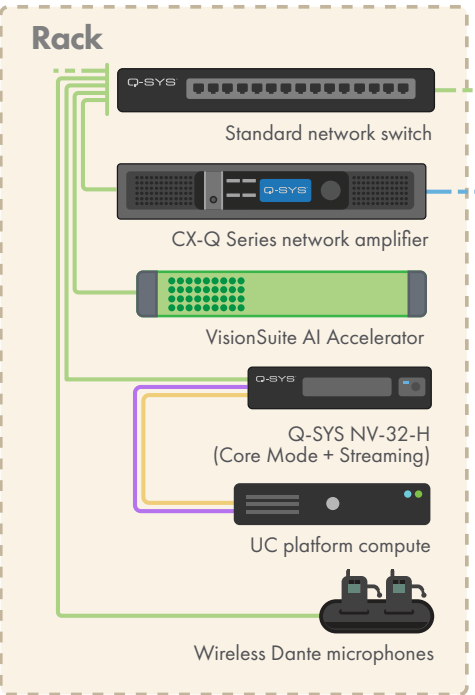- Deploy as many Q-SYS network cameras as needed

Podium Rack

Standard network switch

Q-SYS NV-32-H
(Core Mode w/streaming)

Room PC

Q-SYS QIO-LVR4

Legend

- Standard Ethernet
- USB
- Mic/Line
- Loudspeaker
- HDMI
- Low Voltage Relay

(audience presets)

Motorized projection screen

Podium rack

Document camera

Laptop

Q-SYS touch screen controller

(audience presets)

Lighting control via TCP/IP

Q-SYS NL Ceiling loudspeakers

Q-SYS NV-21-HU (decoder)

Projector

Generic mic

Q-SYS NV-21-HU (decoder)

Q-SYS NC Series network cameras

Q-SYS NC Series network cameras

Lecture Space with
Intelligent Presenter Tracking

- Q-SYS network camera (Presenter Tracking) automatically follows and frames the lecturer resulting in a more natural viewing experience for remote attendees
- Leverage Q-SYS Control engine to automate the experience based on how the space is used

Standard Ethernet   USB   HDMI   Loudspeaker   Serial

Rack

Standard network switch

CX-Q Series network amplifier

VisionSuite AI Accelerator

Q-SYS NV-32-H
(Core Mode + Streaming)

UC platform compute

Wireless Dante microphones

Lectern

Q-SYS Touchscreen Controller

BYOD Laptop

Document camera

AD Series column loudspeakers

No Track Zone -
Recall Fallback

Presenter Tracking area

No Track Zone -
Recall Fallback

Q-SYS NV-21-HU
(decoder)

Q-SYS NV-21-HU (decoder)

Confidence monitors

Generic mic

Lighting control
Via TCP/IP

AD Series loudspeakers

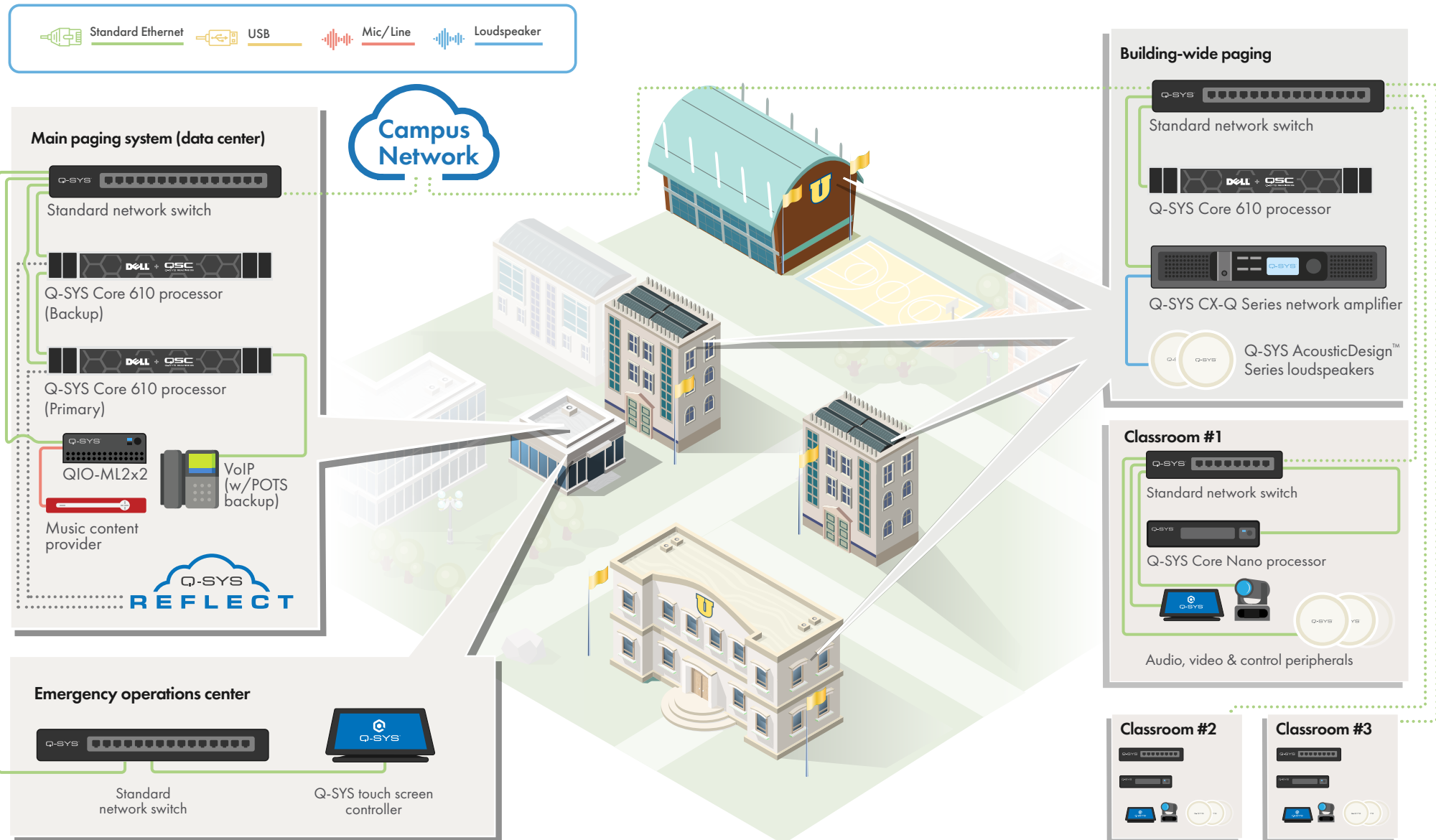Q-SYS network camera (Presenter Tracking)

(Conductor Camera)

Lecture Space with Intelligent Presenter Tracking + Audio-Based Camera Switching

- Q-SYS network camera (Presenter Tracking) automatically follows and frames the lecturer resulting in a more natural viewing experience for remote attendees
- Q-SYS leverages audio location data from the connected microphones to automatically recall audience camera presets so the far end always sees the active talker

Legend: Standard Ethernet · USB · HDMI · Loudspeaker · Serial

Rack
- Standard network switch
- CX-Q Series network amplifier
- VisionSuite AI Accelerator
- Q-SYS NV-32-H (Core Mode + Streaming)
- UC platform compute
- Wireless Dante microphones

Lectern
- Q-SYS Touchscreen Controller
- BYOD Laptop
- Document camera

- AD Series column loudspeakers
- No Track Zone - Recall Fallback
- Presenter Tracking area
- No Track Zone - Recall Fallback
- (audience presets)
- Q-SYS NV-21-HU (decoder)
- (audience presets)
- Q-SYS NV-21-HU (decoder)
- Confidence monitors
- Generic mic
- Lighting control Via TCP/IP
- AD Series loudspeakers
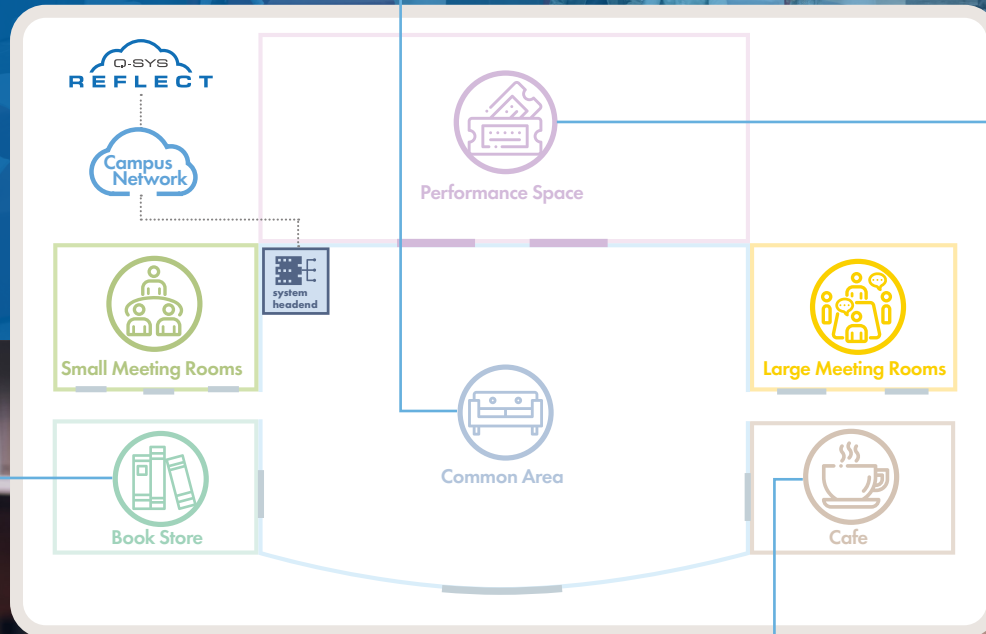- Q-SYS network camera (Presenter Tracking)
- (Conductor Camera)

Campus-wide Paging

- Stay connected with students across campus with Q-SYS comprehensive paging platform
- Ensure maximum uptime for your AV infrastructure with Q-SYS Reflect robust cloud monitoring and management for Q-SYS systems

- Distributed background music
- Redundancy

Legend

- Standard Ethernet
- USB
- Mic / Line
- Loudspeaker

Campus Network

Main paging system (data center)

- Standard network switch
- Q-SYS Core 610 processor (Backup)
- Q-SYS Core 610 processor (Primary)
- QIO-ML2x2
- Music content provider
- VoIP (w/POTS backup)

Q-SYS REFLECT

Emergency operations center

- Standard network switch
- Q-SYS touch screen controller

Building-wide paging

- Standard network switch
- Q-SYS Core 610 processor
- Q-SYS CX-Q Series network amplifier
- Q-SYS AcousticDesign™ Series loudspeakers

Classroom #1

- Standard network switch
- Q-SYS Core Nano processor
- Audio, video & control peripherals

Classroom #2

Classroom #3

Student Union Building

Your campus supports a vibrant mixture of learning, collaboration, congregation and performance. Q-SYS is designed to **support the nuances of all these spaces**, regardless of their size, and can often times use **centralized processing** and networked endpoints to maximize the potential of the campus system.

Q-SYS
REFLECT

Campus Network

system headend

Performance Space

Small Meeting Rooms

Large Meeting Rooms

Common Area

Book Store
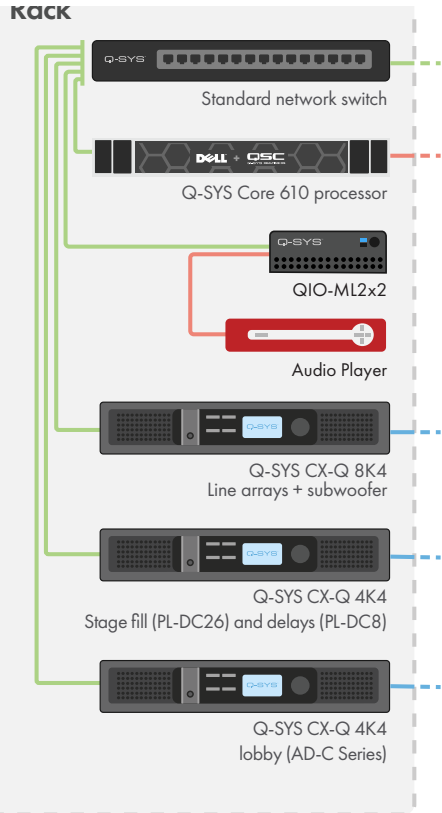
Cafe

Common Area

- Background Music
- Voice Reinforcement
- Paging
- Device Control
- Redundancy
- Monitoring & Management

System Headend

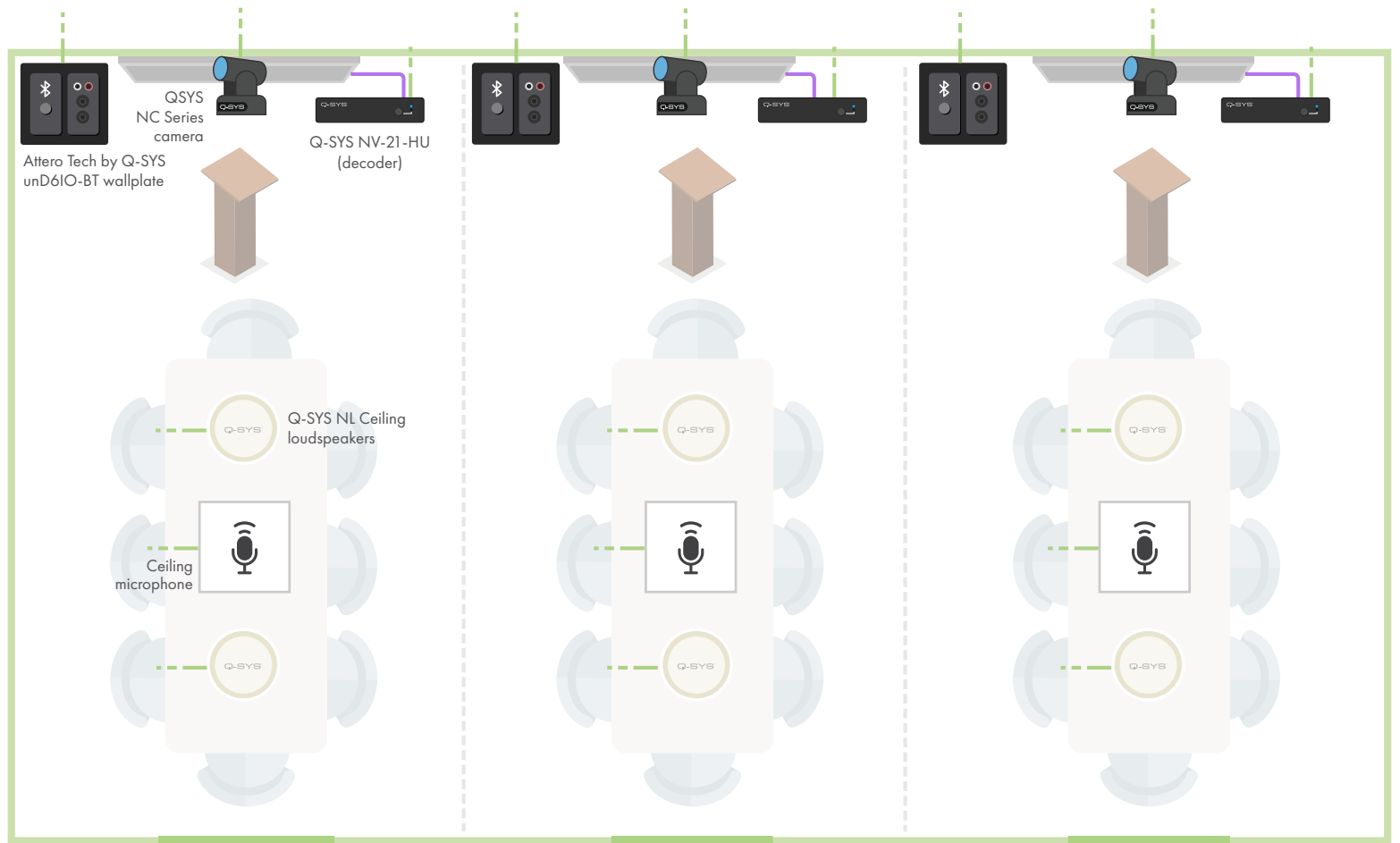Standard network switch

Q-SYS Core 610 processor (primary)

Q-SYS Core 610 processor (back up)

Q-SYS CX-Q Series network amplifier

Q-SYS CX-Q Series network amplifier

Standard Ethernet   Loudspeaker

System Headend

Q-SYS AcousticDesign™ Series column-mount loudspeakers

Attero Tech by Q-SYS unB6IO-BT wall plate

Q-SYS touch screen controller

Attero Tech by Q-SYS unDX2IO+ wallplate

Q-SYS AD-P.HALO integrated SUB/SAT loudspeakers

Q-SYS touch screen controller

Q-SYS network page station

Cafe & Book store

- Background Music
- Voice Reinforcement
- Paging
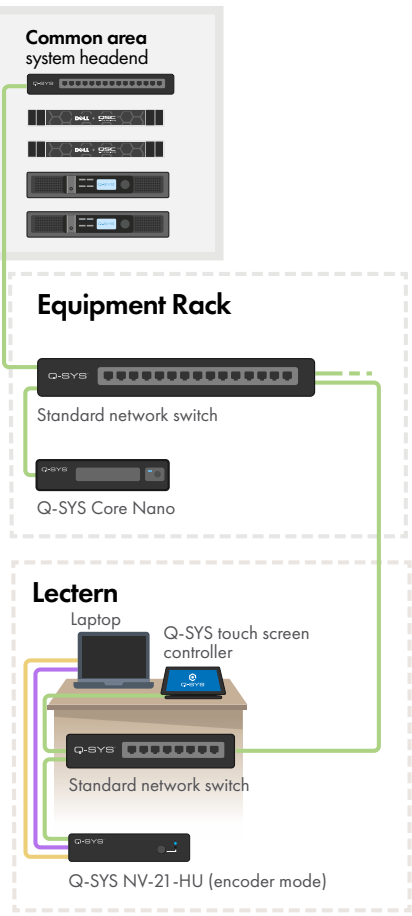- Device Control
- Redundancy
- Monitoring & Management

Standard Ethernet
Loudspeaker

Common area system headend

Equipment

Q-SYS AcousticDesign™ Series pendant-mount SUB/SAT loudspeakers

Q-SYS AcousticDesign™ Series ceiling-mount loudspeakers

Attero Tech by Q-SYS unD6IO-BT wall plate

Attero Tech by Q-SYS Axon C1 controller
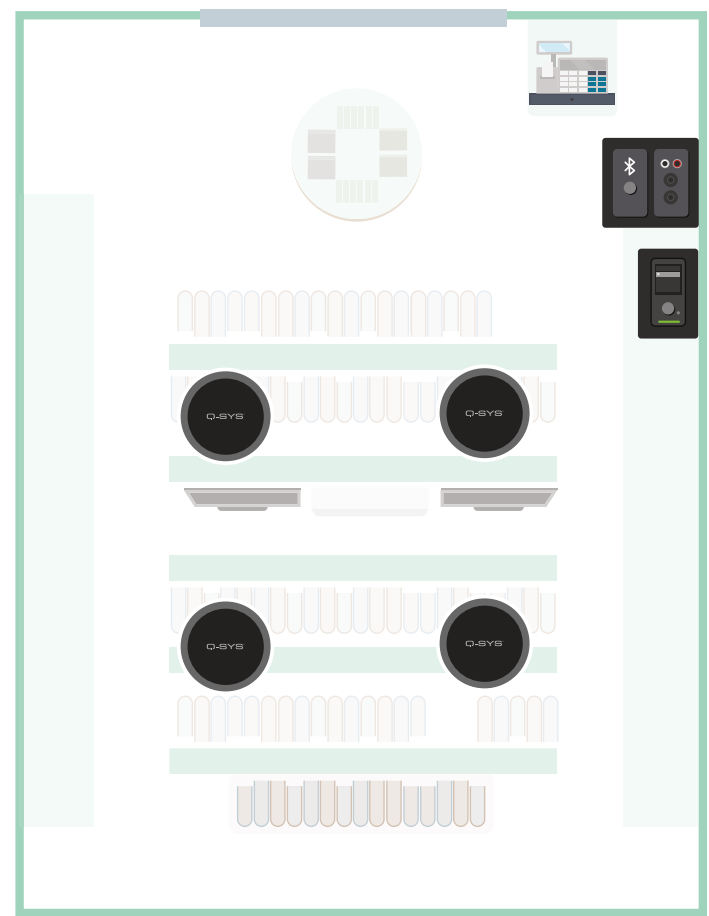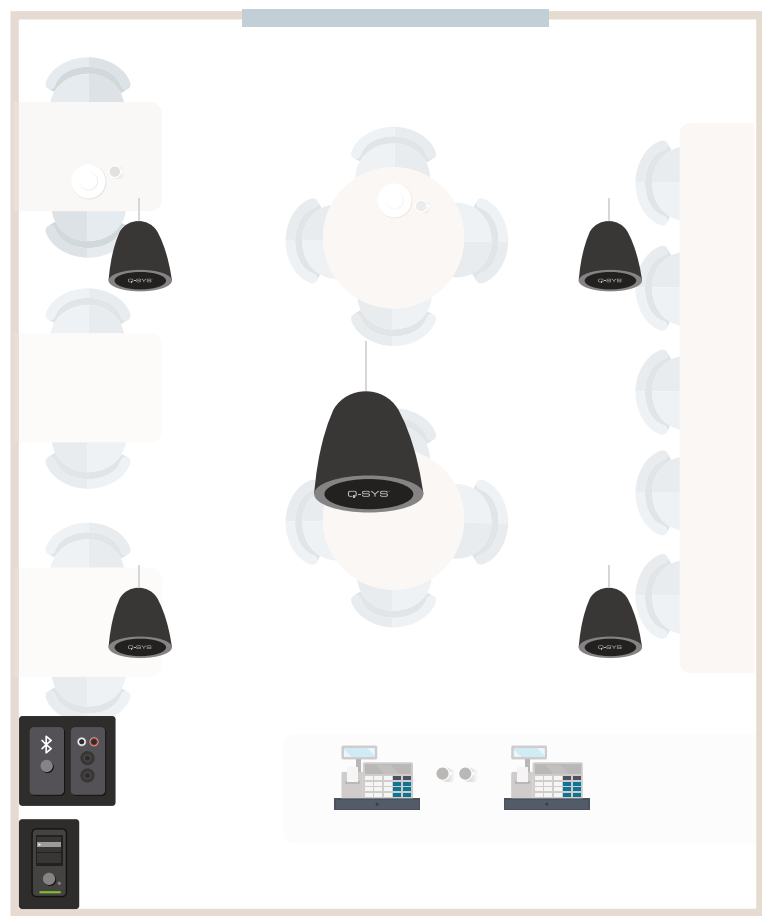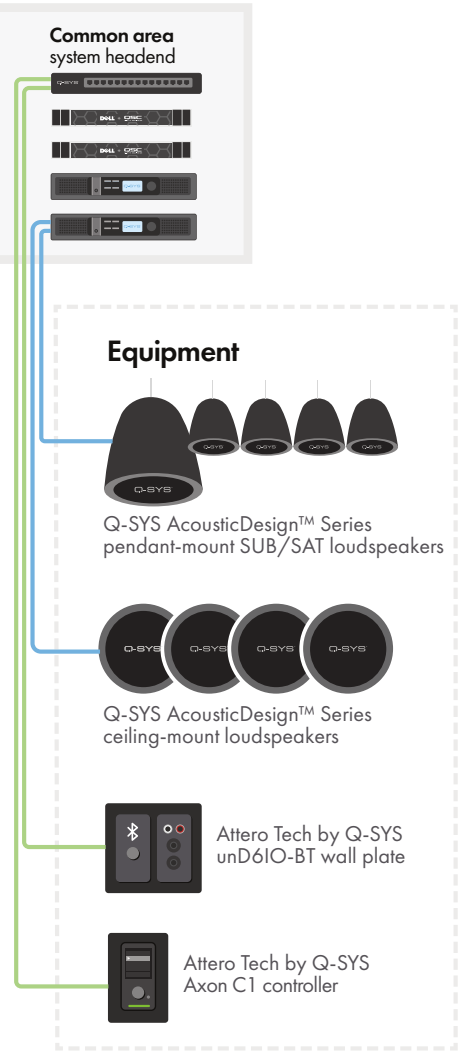
Performance Spaces

- Background Music
- Voice Reinforcement
- Paging
- Monitoring & Management

Rack

Standard network switch

DELL + QSC
Q-SYS Core 610 processor

QIO-ML2x2

Audio Player

Q-SYS CX-Q 8K4
Line arrays + subwoofer

Q-SYS CX-Q 4K4
Stage fill (PL-DC26) and delays (PL-DC8)

Q-SYS CX-Q 4K4
lobby (AD-C Series)

Lectern

Wireless microphones

Q-SYS Touchscreen
Controller

HDMI
monitor

Q-SYS NV-21-HU
(encoder)

Q-SYS
PL-LA12 +
PL-SUB18

90°

Q-SYS PL-DC26
loudspeaker

120°

Q-SYS
PL-DC8
loudspeaker

105°

Q-SYS NV-21-HU
(decoder)

Sound Booth

Console audio output
delivered to Q-SYS via Dante®

Q-SYS AD Series
Ceiling loudspeakers

Lobby

Q-SYS
Touchscreen
controller

Small Divisible Meeting Rooms

- UC Platform Integration
- Web Conference Integration
- Voice Reinforcement
- Divisible Rooms
- Network Video Streaming
- Video Collaboration
- Monitoring & Management

Legend:
- Standard Ethernet
- USB
- HDMI
- Loudspeaker
- Air Wall

Common area system headend

Equipment Rack

Standard network switch

Q-SYS Core Nano

Lectern

Laptop

Q-SYS touch screen controller

Standard network switch

Q-SYS NV-21-HU (encoder mode)

QSYS NC Series camera

Attero Tech by Q-SYS unD6IO-BT wallplate

Q-SYS NV-21-HU (decoder)

Q-SYS NL Ceiling loudspeakers

Ceiling microphone

Large Multipurpose Rooms

- UC Platform Integration
- Web Conference Integration
- Voice Reinforcement
- Divisible Rooms
- Network Video Streaming
- Video Collaboration
- Monitoring & Management

Legend:
- Standard Ethernet
- USB
- HDMI
- Loudspeaker
- Mic/Line
- Air Wall

Common area system headend

Equipment Rack
- Standard network switch
- Q-SYS Core Nano
- Q-SYS CX-Q Series network amplifier

Lectern
- Laptop
- Q-SYS touch screen controller
- Standard network switch
- Q-SYS NV-21-HU (encoder mode)

Attero Tech by Q-SYS unD6IO-BT wallplate

Q-SYS PTZ-IP camera

Q-SYS NV-21-HU (decoder mode)

Q-SYS AcousticDesign™ Series ceiling-mount loudspeakers

Ceiling microphone

Q-SYS PTZ-IP camera

Q-SYS touch screen controller
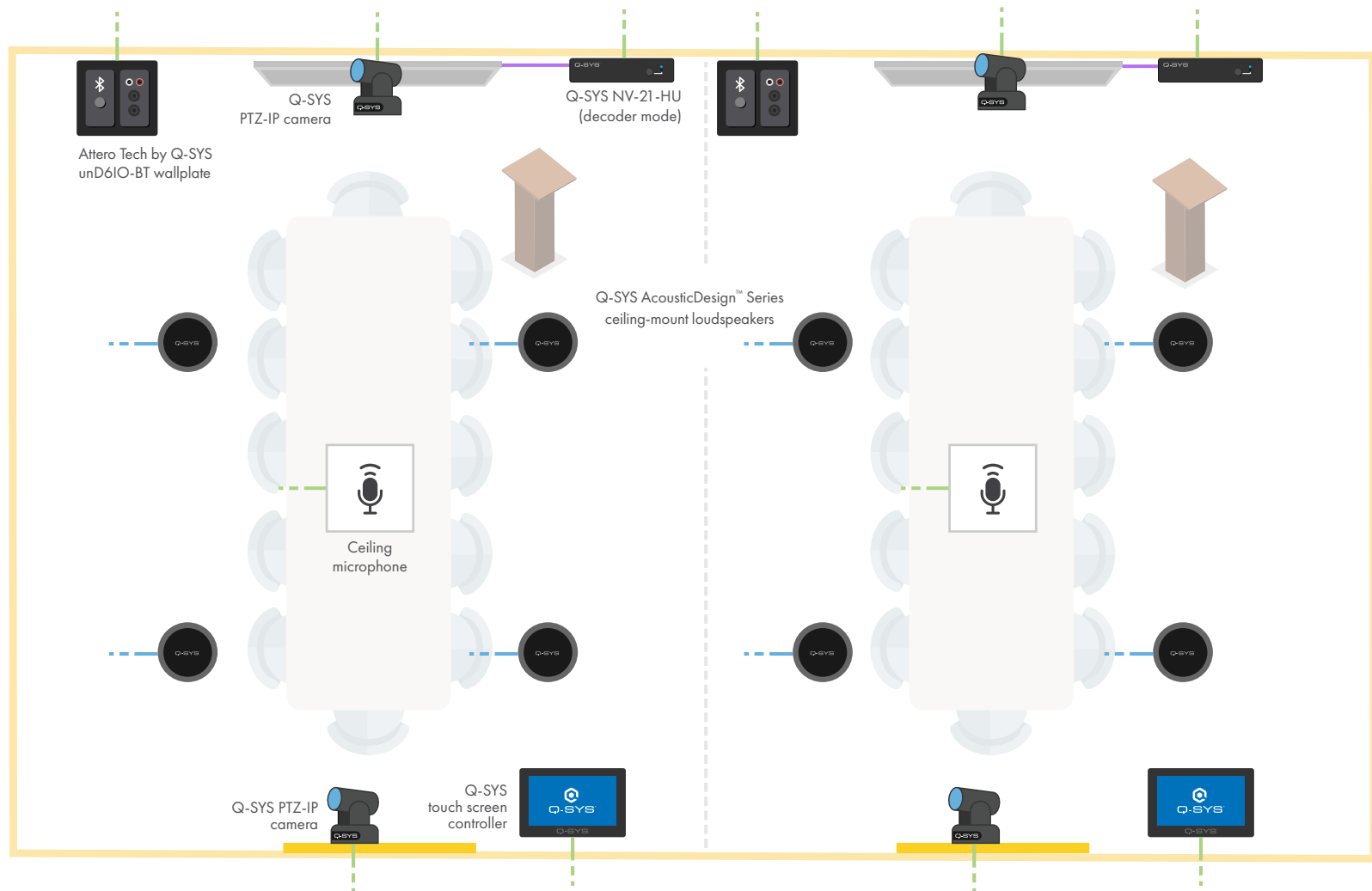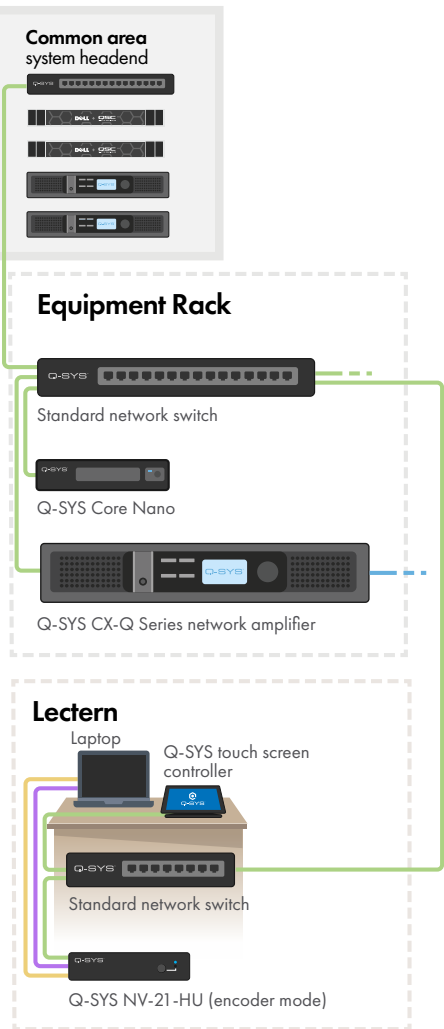
Customizable user interfaces
Simplify the control experience
for your staff

Q-SYS Processing

Q-SYS™

Core Nano

- Network I/O only
- Ideal for spaces with all networked endpoints
- Ability to centralize multiple small spaces

Core 8 Flex

- Onboard + Network I/O
- Ideal for spaces needing onboard IO and in-room processing

NV-32-H (Core Capable)

- Onboard + Network I/O
- Ideal for in-room processing and network video encoding/decoding (requires feature license)

Core 110f

- Onboard + Network I/O
- Ideal for spaces needing plenty of onboard I/O and in-room processing
- Ability to centralize processing for multiple spaces

Core 610

- Network I/O only
- Ideal for centralized processing

Core 5200

- Network I/O only
- Ideal for centralized processing or large scale venues

Monitoring

Now included with every Q-SYS system, Q-SYS Reflect makes it easier than ever to make quick decisions and deliver confidence for your users with detailed, real-time system information from every connected device

Reliability & Uptime

- Real-time health monitoring for all connected Q-SYS and third-party devices.

- Integrate customizable, real-time alerts into your daily workflow (Slack, Microsoft Teams, Outlook, and more).

Security & Continuity

- Apply security patches without changing firmware.

- Single Sign-on (SSO) support

Level up with Reflect Plus to leverage comprehensive remote system management and control capabilities

- **Quickly resolve issues with users in the room:** Remotely access any user control interface from a web browser

- **Configure your Q-SYS system from anywhere** and automatically backup to the cloud

- **Reflect API:** extends Q-SYS Reflect data to your IT management platform for a single-pane-of-glass view of your entire AV/IT infrastructure

Control

Q-SYS™
TSC SERIES
GEN 3

- Integrated, simplified, and scalable control

- Customizable drag-and-drop user control interface (UCI) creation

- Enhanced onboard processors

Available in:

- 5 in / 127 mm
- 7 in / 177.8 mm
- 10 in / 254 mm

Q-SYS VisionSuite

- Processing
- Monitoring
- Control
- VisionSuite ▶
- Network Video Endpoints
- Network Cameras
- Network Amplifiers
- Network I/O
- Installation Loudspeakers
- Performance Loudspeakers
- Licenses

Elevate Your Hybrid Experiences with AI

From intelligent presenter tracking to intelligent audio-based camera switching, Q-SYS VisionSuite uses multimodal AI to improve the visibility of in-room participants to promote a natural viewing experience for the far-end, empowering teams to feel united and stay engaged no matter where they are.

Network Video Endpoints

Q-SYS™ NV SERIES

NV-32-H
3 input; 2 output; + AV Bridging

NV-21-HU
2 input; 1 output; + AV Bridging

- Q-SYS NV Series network video endpoints are multipurpose, software-configurable devices native to the Q-SYS Platform enabling high-quality, low-latency video distribution.

- NV Series are flexible and scalable, allowing you to tailor your system components to the project requirements, placing the correct type and quantity of video I/O where it's needed most.

Network Cameras

Q-SYS™
NC SERIES

The Q-SYS NC Series conference cameras deliver high-quality video feeds natively to the Q-SYS Platform. With three models to choose from, these network cameras offer a simple, scalable collaboration video solution for any size space.

Q-SYS NC-110

Fixed-lens, ePTZ camera that features a 110° horizontal field-of-view for smaller and wider rooms,

Q-SYS NC-12x80

Motorized PTZ, 12x optical zoom and 80° horizontal FoV

Q-SYS NC-20x60

Motorized PTZ, 20x optical zoom and 60° horizontal FoV

Network Amplifiers

Q-SYS™ CX-Q SERIES

- Four-channel models with max power ranging from 800W to 2400W per channel
- Eight-channel models with max power of 1000W and 1500W per channel
- Low impedance, 70V or 100V direct drive available on all channels

Q-SYS™ SPA-Q SERIES

- Two-channel and four-channel models with 60W per channel
- bi-directional GPIO for control
- two flex channels (either mic/line inputs or line outputs)

Network I/O

Q-SYS™

QIO SERIES

Audio I/O Expanders

• QIO-ML2x2: Two (2) mic/line inputs and two (2) line outputs

• QIO–ML4i: Four (4) mic/line inputs

• QIO-L4o: Four (4) line outputs

• QIO-AES8x8: Four (4) stereo pairs of AES3 digital inputs and four (4) stereo pairs of AES3 digital outputs (8 input and output channels total)

• QIO-TEL2: Two (2) PSTN (POTS) phone lines on standard RJ11 (6P2C) connectors

Control I/O Expanders

• QIO-IR1x4: One (1) IR receiver input & four (4) IR emitter inputs

• QIO-S4: Four (4) bi-directional RS232 ports (one port includes RS-485 and RS-422 compatibility)

• QIO-GP8x8: Eight (8) general purpose inputs & eight (8) general purpose outputs

• QIO-LVR4: Four (4) contact closure relays (2-pin, 3.55 mm)
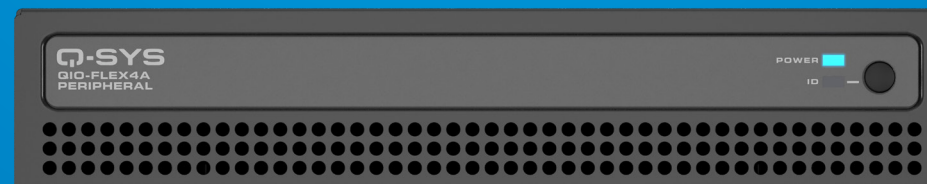
Multi-purpose I/O expander

• QIO-FLEX4A: Four (4) Flex I/O, 4x8 GPIO, one (1) RS232, two (2) amplifier outputs

Installation Loudspeakers

ACOUSTIC**DESIGN**™
S E R I E S

- Full range of surface-mount, column and ceiling loudspeakers for any acoustic environment
- Includes high-ceiling and high-power models available to ensure best performance in noisy environments
- Mix and match form factors throughout venue without any noticeable audio transition

Performance Loudspeakers

Q-SYS™

Q-SYS™ PL SERIES

The Q-SYS PL Series is a portfolio of performance installation loudspeakers designed to deliver premium sound for Q-SYS systems. PL Series offers multiple form factors, allowing you to design the optimal audio experience for each unique space.

PL-LA
Line Arrays

• Two-way, passive installation line arrays

PL-SUB
Subwoofers

• Passive installation subwoofers

PL-CA
Coaxial

• Two-way, coaxial loudspeaker with symmetrical coverage

PL-DC
Point Source

• Two-way point source loudspeakers with directivity control

Licenses

SOFTWARE-BASED
✳ Dante®
FOR **Q-SYS**™

Integrate Dante with Q-SYS via software. Most Q-SYS Cores include 8x8 Dante network audio channels with the optional feature license to add more.

Q-SYS™ UCI DEPLOYMENT
| FEATURE LICENSE |

Create custom user control interfaces for your Q-SYS system and deploy to a Q-SYS touch screen controller.

Q-SYS™ SCALING
| LICENSES |

Scale targeted feature sets to tailor your Q-SYS Cores to the needs of specific applications and use case.

Q-SYS™ SCRIPTING ENGINE
| FEATURE LICENSE |

- Create custom scripts in Lua.

- Visual coding tool to lower barrier of entry to programming.

- Growing library of third-party device plugins for easier integration into Q-SYS.

Q-SYS™

Q-SYS™

www.qsys.com/**highered**