

Q-NEX Solution

Make Digital Campus Organized



RETURNSTAR TECHNOLOGY

Returnstar Interactive Technology Group Co., Ltd has been dedicated to educational industry since 2006. With 17 years of development, we have been well-known in the global market for two brands: IQ and Q-NEX. Our solutions under the IQ brand include IQClass Interactive Teaching Solution (e.g. IFP, visualizer, student response system, etc.) , IQVideo Lecture Capture System and IQMeet Audio&Video Conference Solution (Camera, speakerphone, BYOD system, etc.). As for the Q-NEX brand, it focuses on Smart Campus Solution to realize IoT control of classroom devices and AV broadcast throughout the campus.

Headquarter of Returnstar is located in Fuzhou city of Fujian Province. Our office building sits in the Fuzhou High-tech Park with more than 100 staff, among which 70% are R&D personnel. Technology innovation has been the core of the company's development strategy.

So far, our products have received wide acknowledgment from both domestic and international market. Bearing in mind the mission to transform education with technology, Returnstar will keep on the path to offering more competitive products and solutions to education customers in the years to come.

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01 /

**SOLUTION
OVERVIEW**



Solution Background

In today's world, information and communication infrastructure in various countries is developing rapidly, and technological change has become a major strategic measure for the development of education and conferences. With the popularization of information technology, people have begun to pursue the use of technology to maximize the convenience of learning and work.

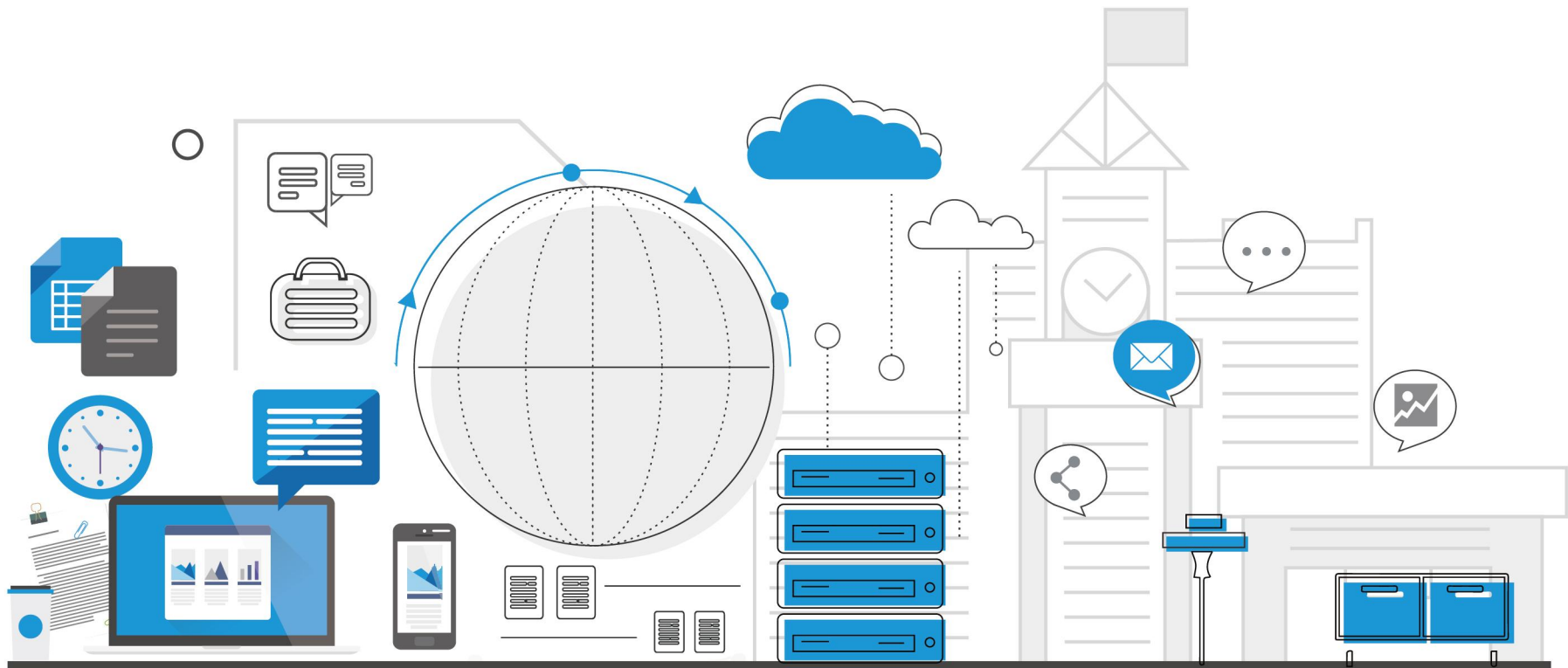
But at the same time, with the development of science and technology, some new problems have also arisen:

- High learning costs
- Adaptability across multiple devices
- Implementation budget concern

What is Q-NEX

Based on the TCP/IP protocol, Q-NEX solution involves connecting all the Q-NEX terminal units to Q-NEX cloud management platform and an optional media server to realize the following:

- Remote and unified control for whole school/organization.
- Campus-wide audio and video broadcast / live streaming.
- Effective and orderly execution of scheduled tasks automatically.
- BYOD & BYOM for online and offline meetings.



Advantages of Q-NEX Solution

01 Highly-Integrated Device

Q-NEX terminal unit is an all-in-one device integrated with versatile functional modules-specially designed to meet all kinds of application scenarios under the education and conferencing environment-while reducing the budget for ICT infrastructure.

02 Powerful Functions

Q-NEX solution can realize device centralized control through the Internet, audio and video matrix switch, scheduled task management, campus-wide live streaming, audio and video broadcasting, campus information distribution, BYOM and other functions.

03 Networked Remote Control

The Q-NEX terminal unit can be operated flexibly by local classroom/conference room Touch Panel, web-based Console or mobile APP, which makes it possible for remote and unified control by different users anytime and anywhere.

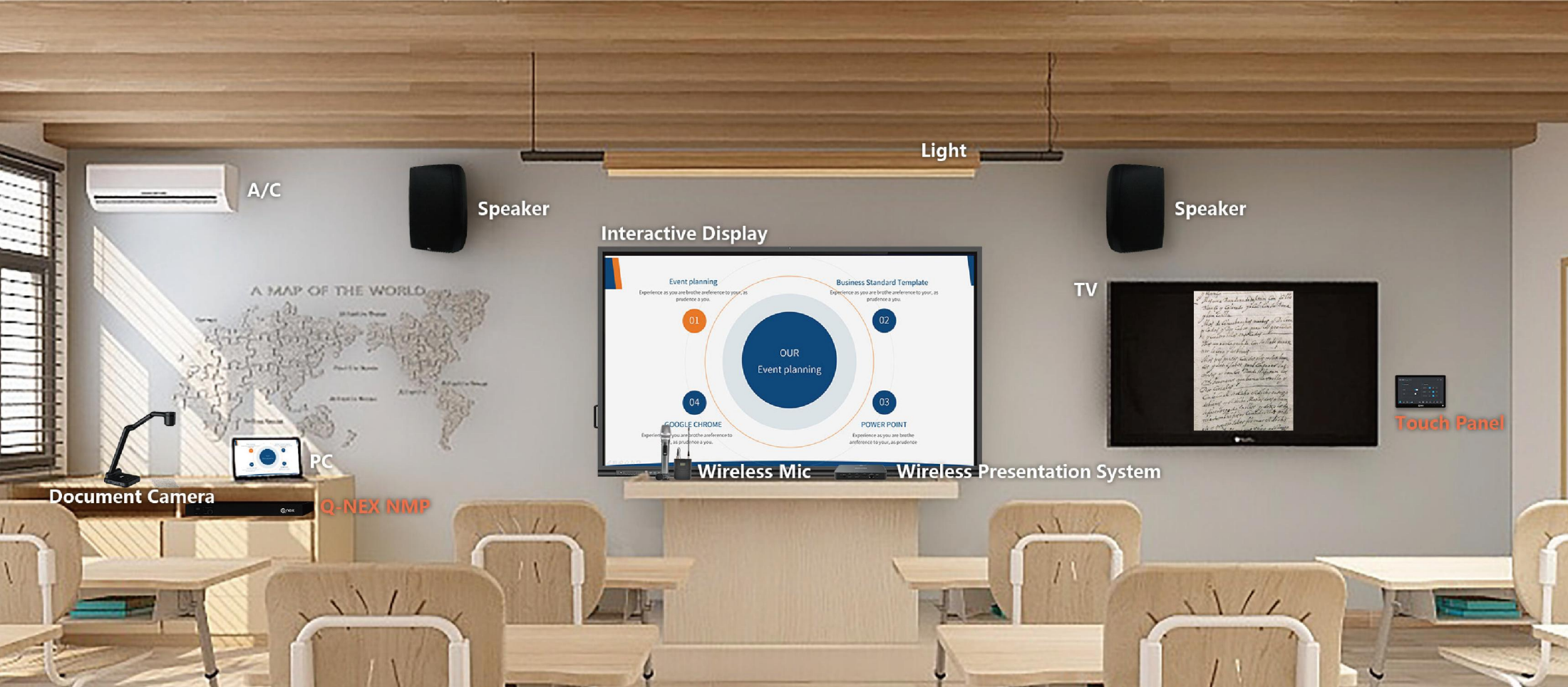
04 Simplified Deployment

Q-NEX smart solution can be implemented under existing network infrastructure. The Q-NEX terminal unit is easy to install, and can be configured without programming. The visual user interface makes it intuitive for end users to get started.





02/ **SOLUTION** **APPLICATION**



Smart Classroom

By using the Q-NEX Smart Classroom Solution, you can connect multiple multimedia devices in the classroom with one NMP to achieve centralized control and video distribution. It is convenient for teachers, principals, and information administrators to remotely control the classroom through the Internet and mobile devices. This plan is applicable to both the renovation of the original classroom and the construction of the new classroom.

Key Features



Device Control



Audio&Video Matrix



Timing Task



Remote Control



AV Broadcasting

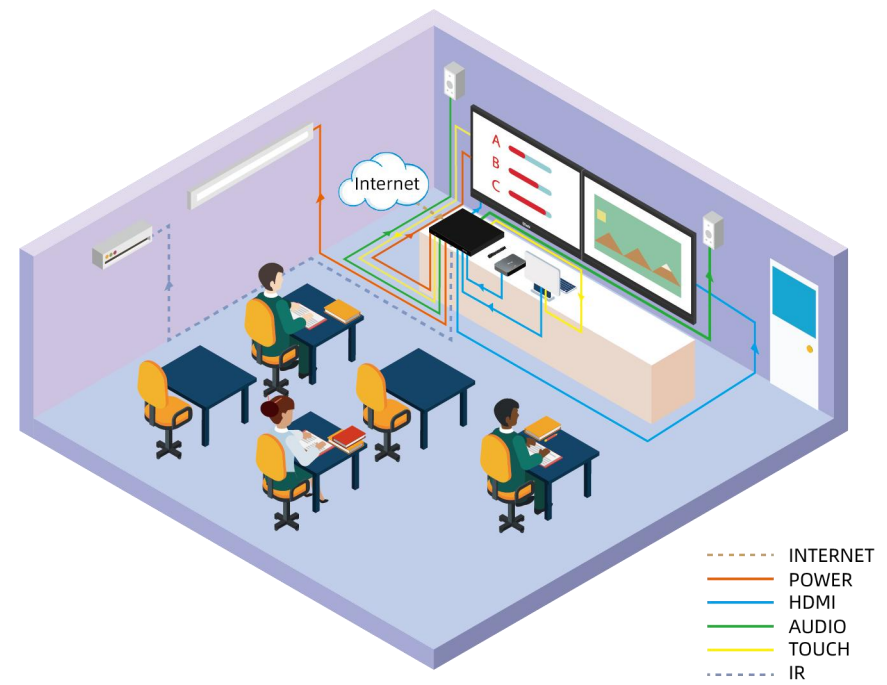


Live Streaming

Solution Details



Solution 1 Classroom using projector and IWB



Solution 2 Classroom using an IFP

Features

- One key to turn on/off projector and projection screen.
- One key to turn on/off the IFP.
- Audio and video matrix switch.
- Real-time campus audio, video and text broadcast.
- Turn classroom facilities such as lamps, air-conditioners, e-curtain, TV, etc., to Internet-connected devices.
- Remote control of classroom equipment by mobile devices at any time and place.
- Reduce repetitive work for IT administrators.
- Get classroom devices under control by schedule or play designated audio and video content by schedule.

Recommended Products

Function	Recommended Model	Item Description	Quantity
Networked Media Processor	Q-NEX NMP211-G-L2U	Device Central Control & Networked AV Decoder	1
Video Output	IQBoard IR	Infrared Interactive Whiteboard working with Projector	1
	IQTouch 1300 Series	Interactive Flat Panel	1
	-	TV	1
Video Input	-	Teacher's laptop/Classroom PC	1
	IQShare WP40	Wireless Presentation System	1
	IQView E4521	Document Camera	1
Audio Output	IQSound PS610	Passive Speaker	1 (pair)
Audio Input	-	Wireless Mic (enclosed in NMP set)	1

Other peripherals -- Lights, air conditioner, electronic door lock *1, projection screen*1



Lecture Capture Classroom

By connecting the Lecture Capture System to NMP, we can build a Lecture Capture classroom with live streaming, so that the class can be broadcast not only to websites like YouTube for students studying at home, but also to other classrooms for students in the school. Meanwhile, the NMP can realize multiple device control of the classroom.

Using the video conferencing software in hybrid learning environment, the Video Station enables a mixed video (combination of teacher and students captured by cameras in the classroom and teacher's courseware) to be presented as the participant for those students who connected remotely at home.

Key Features



Lecture Recording



Automatic Director



Live Streaming



Remote Management

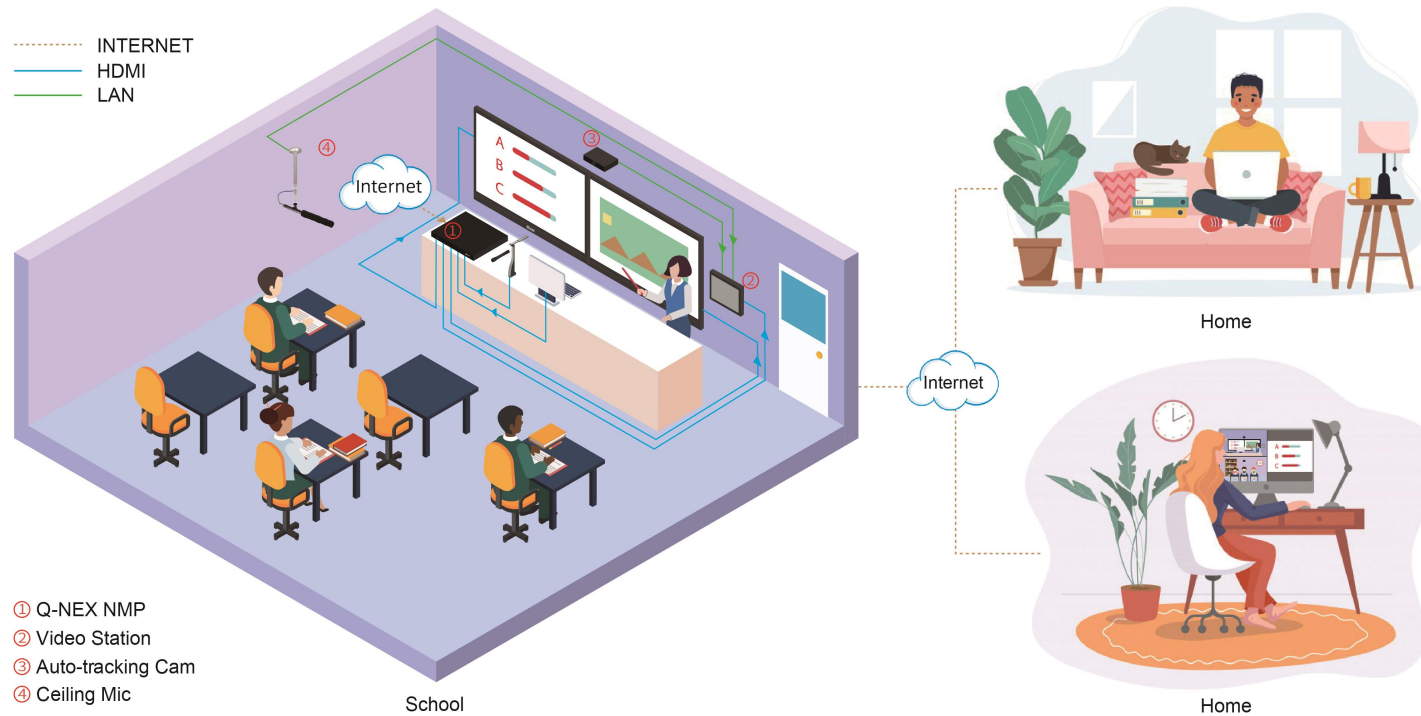


AV Broadcasting



AV Matrix Switching

Solution Details



Features

- Through the Internet, teachers can stream live classes to remote learning platforms like YouTube for students to watch.
- One click to start recording the class, and the system will automatically conduct close-up, switch and jump of lens.
- After recording, teachers can also upload the video to the school FTP server for students to download and study offline.
- With the help of Q-NEX live streaming, the school's popular teachers can deliver public lectures to all classrooms in school LAN in real time, so as to solve the problem of limited classroom space. Meanwhile, the lecture can also be recorded for playback.
- During lecture capture process, the AV switching function of NMP will output the multi-source courseware screen to the Video Station, so as to ensure the richness and diversity of the teaching content.

Recommended Products

Function	Recommended Model	Item Description	Quantity
Networked Media Processor	Q-NEX NMP211-G-L2U	Device Central Control & Networked AV Decoder	1
Video Output	IQTouch 1300 Series	Interactive Flat Panel	1
Video Input	-	Teacher's Laptop or Classroom PC	1
	IQView E4521	Document Camera	1
	IQShare WP40	Wireless Presentation System	1
Audio Output	IQSound PS610	Passive Speaker	1 (pair)
Audio Input	A100 (IQVideo LCS710)	Ceiling Mic	1
	-	Wireless Mic (enclosed in NMP set)	1
Lecture Capture System	IQVideo LCS710	Video Station	1
		Teacher's Camera	1
		Student's Camera	1

Other peripherals -- Lights, air conditioner, electronic door lock *1, projection screen*1



Lecture Hall

This is an integrated solution for auditoriums, lecture halls, seminar rooms and other large classrooms. The Q-NEX NDP100 serves as a highly-integrated smart lectern, incorporating features like device central control, desktop annotation, AV broadcasting, and live streaming. With the Q-NEX NDP100, the traditional auditorium can be transformed into a multifunctional one with centralized control under minimum cost. By simply standing in front of the lectern, the lecturer can have one-button control over the electric screen and projector, easily switch input sources, power on/off lights and air conditioner, it simplifies the process of initiating auditorium devices with one-touch activation, eliminating the need for manual setups. By using the desktop smart display, the lecturer can connect his laptop for courseware annotation, promoting eye contact between the lecturer and students for an enriched interactive learning experience.

Layout of Connected Devices



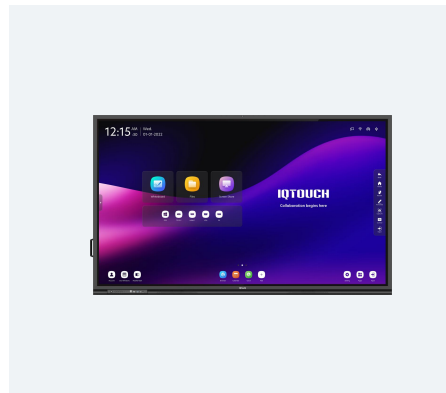
Features

- Device connected to Q-NEX NDP100 can be controlled remotely. School IT administrators can control devices on campus through the Internet, either Q-NEX Console by Web browser on PC or Q-NEX APP from mobile devices.
- When receiving the campus AV broadcast or the principal's live broadcast, Q-NEX NDP100 can automatically roll down the projection screen and turn on the projector, to ensure campus-wide AV distribution will not be missed in the classrooms on campus.
- Teachers can control multimedia devices in the classroom through the Touch Panel of Q-NEX NDP100, such as power on/off devices like projectors /lights, control projection screen up and down, adjusting air conditioners, initiating lecture recording, microphone volume adjustment, etc.
- Q-NEX NDP100 has the function of executing scheduled tasks. By setting the scheduled power on/off task of classroom equipment and the scheduled task of AV broadcasting on the Q-NEX Console, NDP100 can automatically turn on/off connected devices or play the distributed AV content in the classroom at the scheduled time.
- Q-NEX NDP100 provides versatile interfaces, accommodating user's laptops with HDMI or Type-C ports, as well as USB drives, ensuring hassle-free connectivity of coursewares for educators.
- Transforming traditional auditoriums into digital spaces requires seamless audiovisual integration. This conversion facilitates remote device control and audiovisual reception, creating a smart, connected auditorium.

Recommended Products



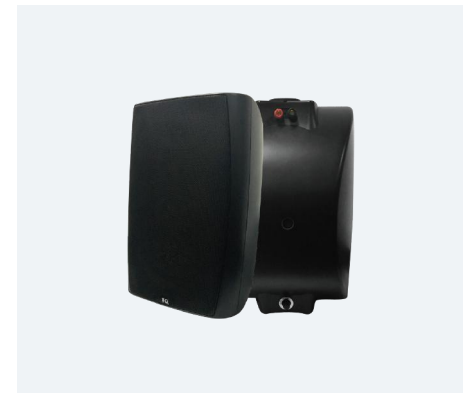
Q-NEX NDP



IQTouch 1100Series



IQShare WP40



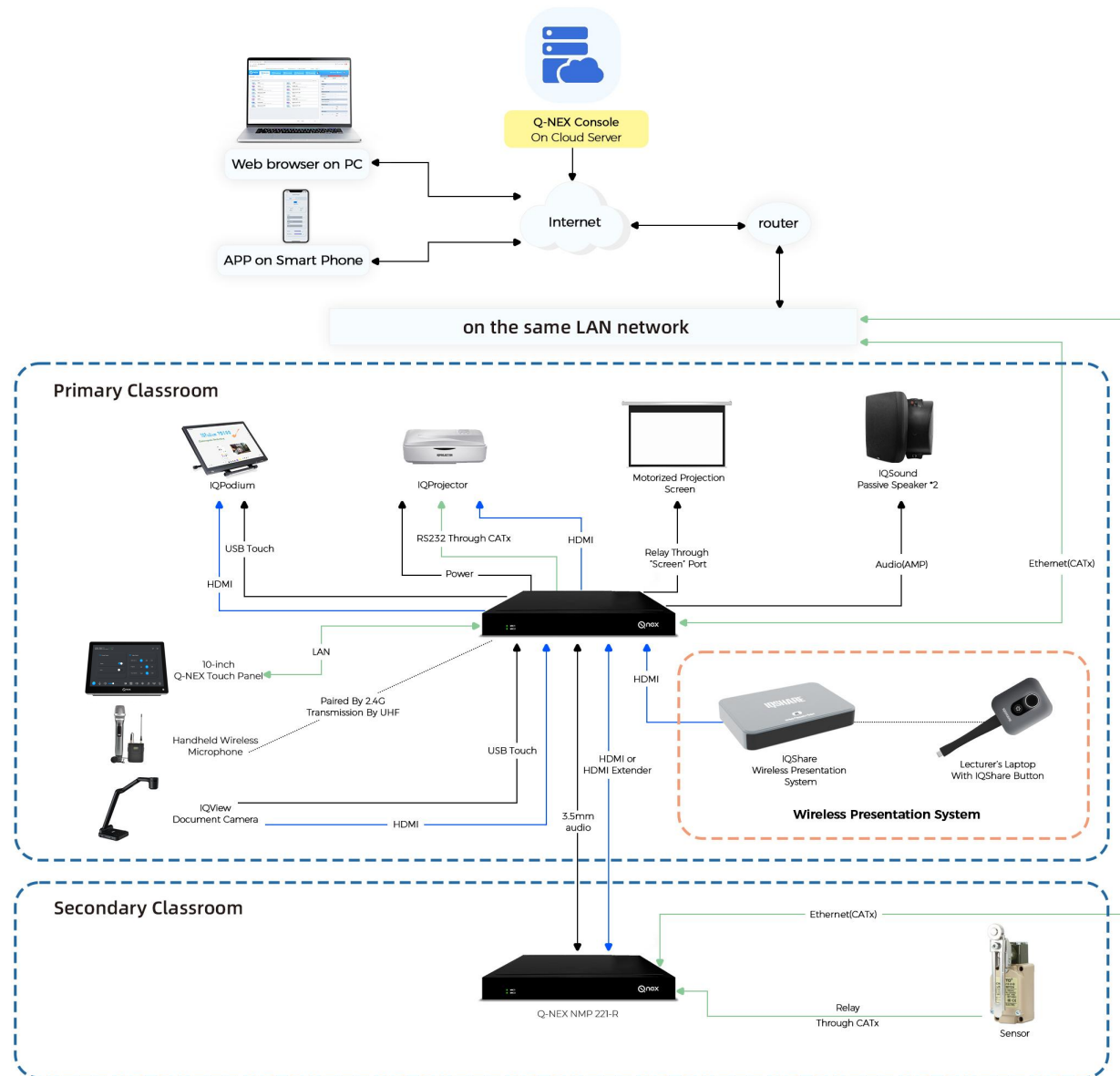
IQSound PS610



Divisible Classroom

Along with Q-NEX NMP as a highly integrated media control processor, not only taking over centralized device control for classrooms, but also setting up divisible classroom enabled sharing AV content of primary classroom to secondary classrooms.

Layout of Connected Devices

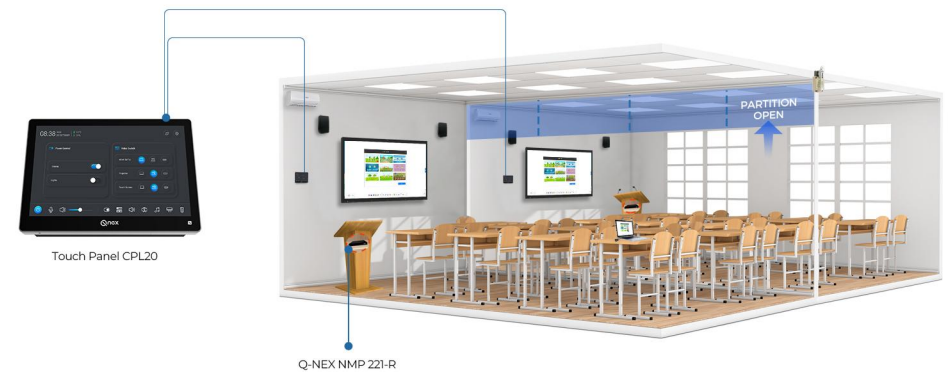


Independent Rooms Control

For classroom/meeting rooms with partition used, when the partition is set to divide one room into two, each divided room can achieve independent multimedia device control and work with no interruption in daily use. And when needed, the rooms can merge into one again with partition removed.



Divided Rooms

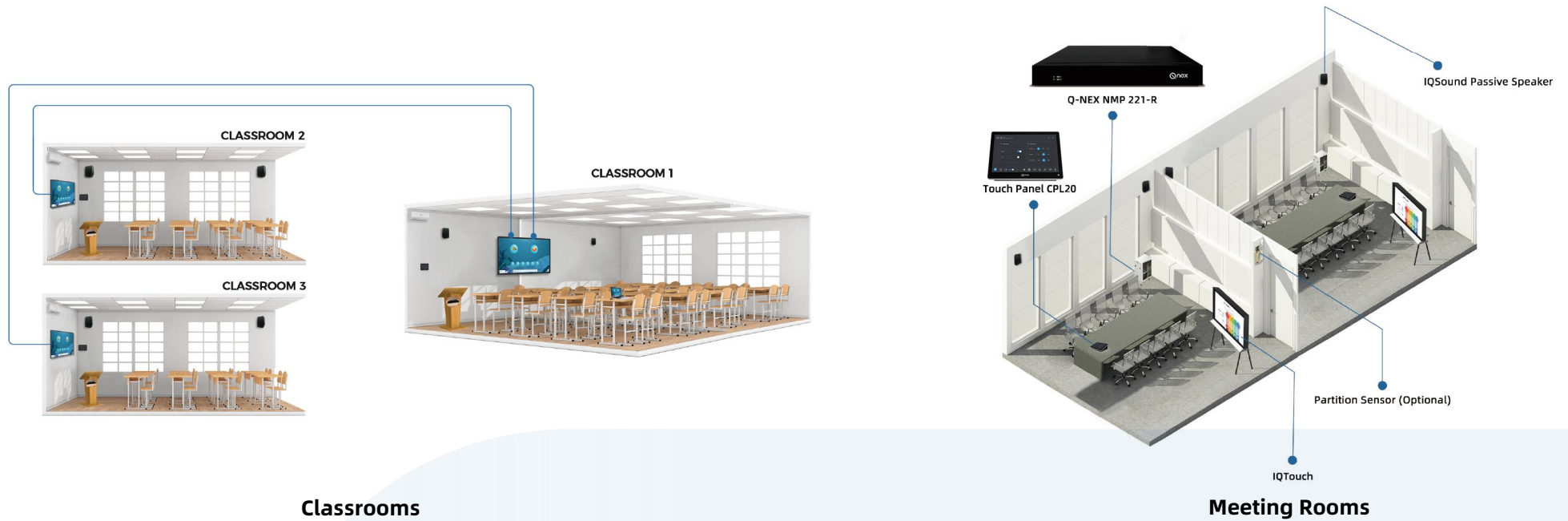


Merged Room

Flexible Space Utilization

Transforming two independent classrooms/meeting rooms into one bigger multipurpose classroom /meeting room. The partition sensor allows a variety of different scenes and configurations in a room with independent control, which promotes the flexible utilization of the space.





Divisible Classroom Control

Build the connection of two classrooms/meeting rooms through NMPs, one tap on Touch Panel to switch to Primary-Secondary Mode, which enables AV distribution from the primary classroom to the displays and audio devices in secondary classrooms. Switch off divisible mode and back to independent states.



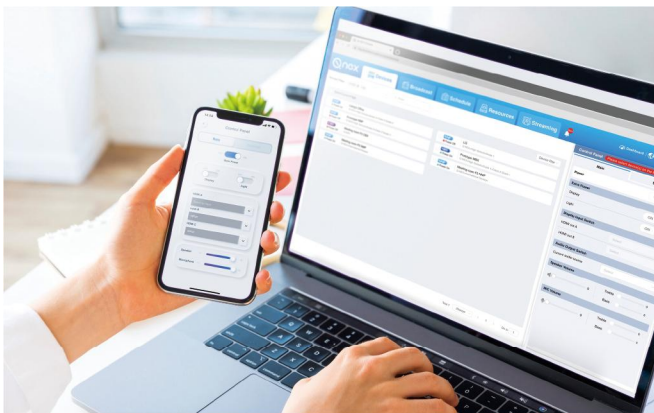
One Touch to Handle All

A compact Touch Panel delivers an intuitive user interface with versatile functions, simple click to centrally control classroom devices such as AV matrix switch, volume adjustment, and IoT device control for display, light, A/C, e-curtain, etc.



AV Centralized Control

There is a complete set of AV devices and an AV controller equipped in each room. Both rooms can be independent in use or conducted completely under one control that all displays and speakers in the rooms play the same media content at the same time.



Scheduled Task Management

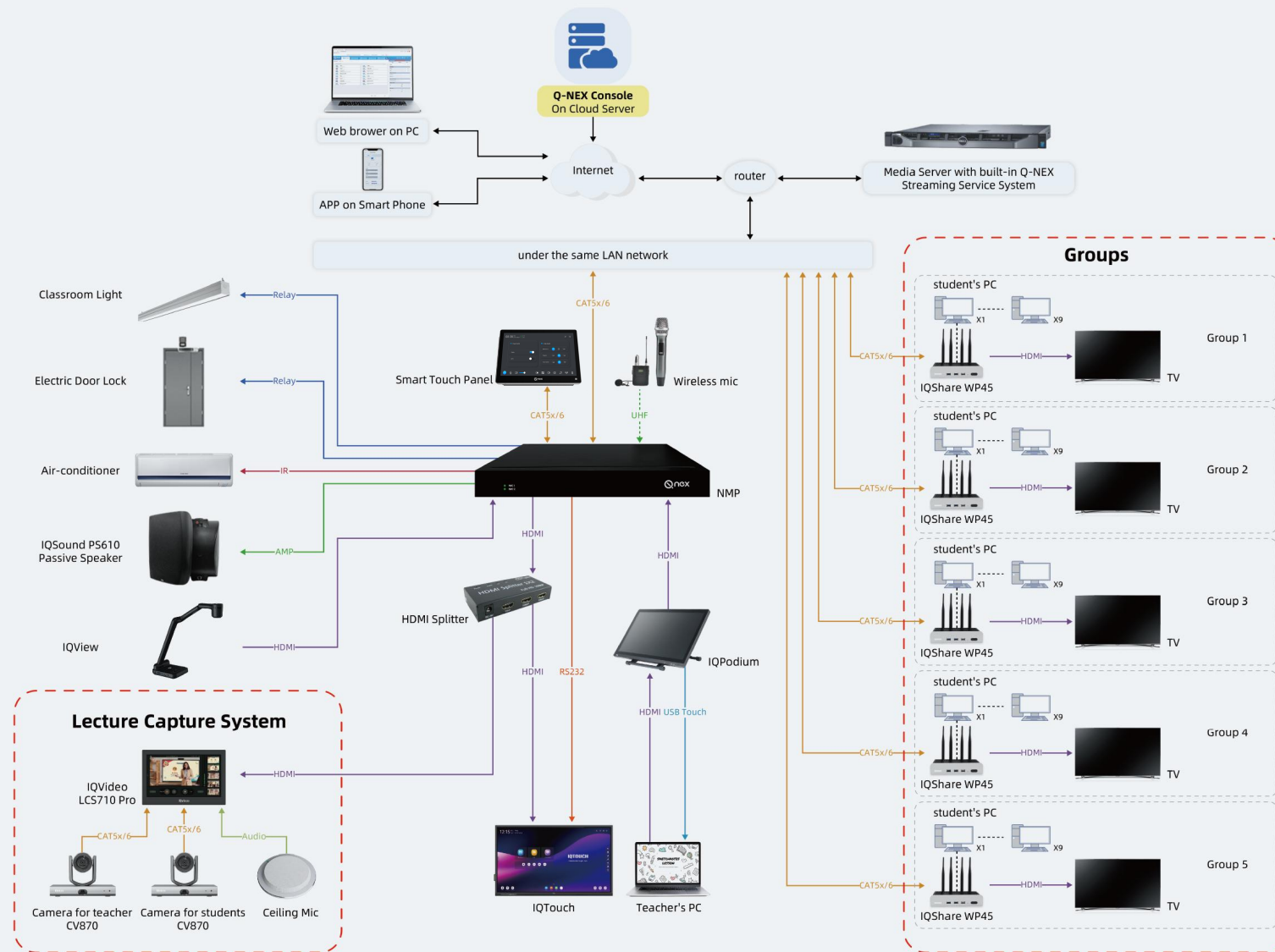
Set scheduled tasks including broadcasting the message, powering on/off the devices (such as lights, displays, A/C, etc.), and automatically executing tasks to each oriented classroom. Greatly reduce the time cost and free IT admin from repeated daily management.



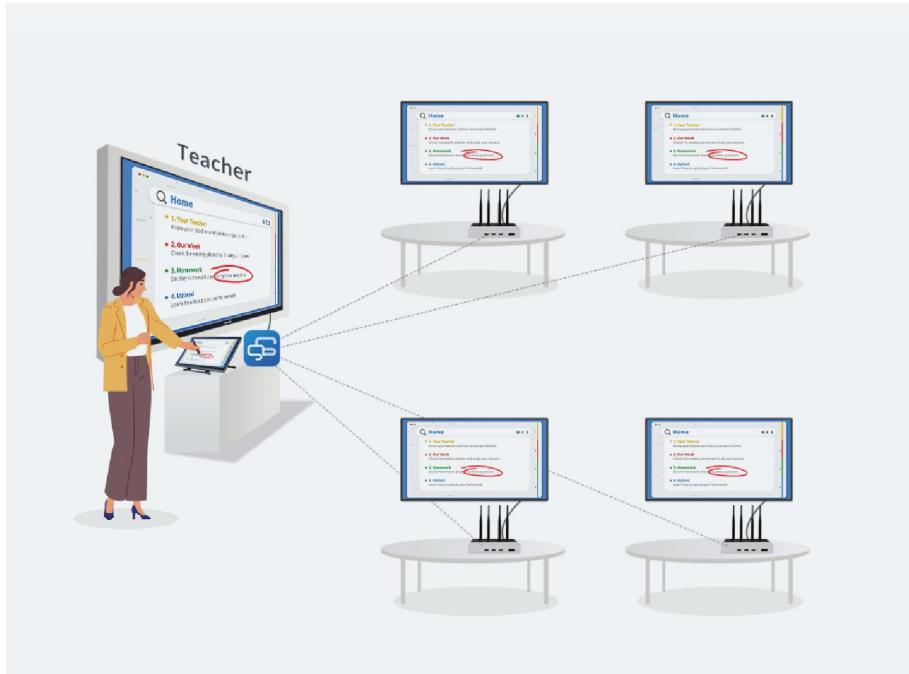
Collaborative Learning Solution

Q-NEX collaborative learning solution endeavors to bridge these gaps by enabling seamless two-way screen-sharing control between teachers and students. This innovative solution not only empowers teachers to deliver vibrant classes that greatly enhance students' interaction, but it also encourages students to actively participate in classroom discussions and yield fruitful outcomes.

Layout of Connected Devices



Application Scenarios



Convenient Screen Sharing for Teachers' Lecturing

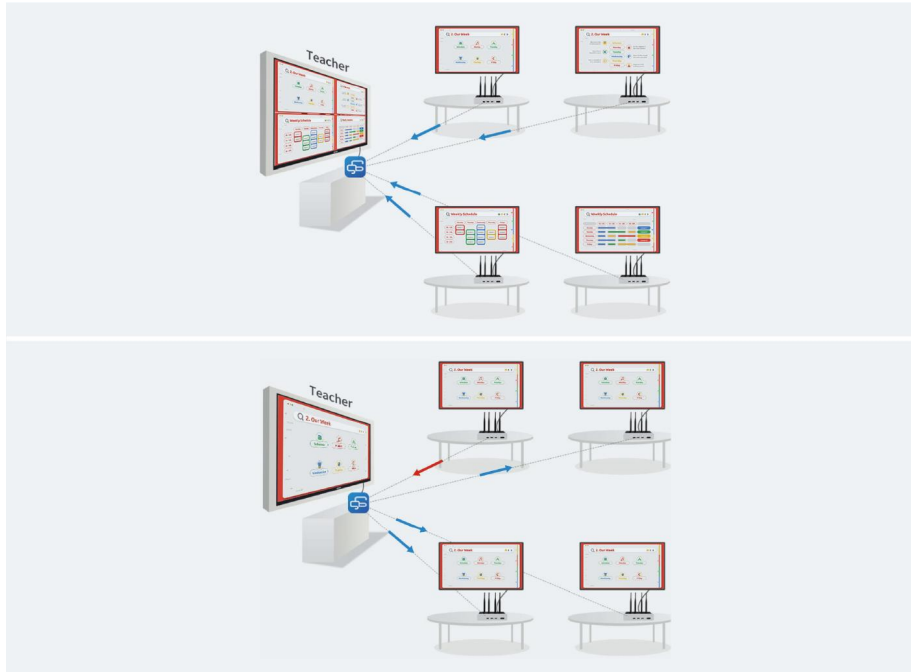
During lecturing, the teacher can wirelessly share screen contents from personal device (laptops or tablets) to the classroom display, and also to all or targeted group TVs, so that students can see the presentation clearly within their own group. Through the IQPodium interactive pen display, the teacher can easily make annotations and sync the content to students. Lecturing is made easier.



Easy Interaction and Collaboration among Students in a Group

In a group discussion, each group member can present personal content from his laptop or mobile devices to the group TV for efficient discussion. So, students do not need to move around in the group exchanging ideas. It maximizes the student's interaction and collaboration within the group.

Application Scenarios



Share Ideas across the Groups with Teacher-student Interaction

When students finish their discussion, the teacher can capture the group work from targeted or all the group TVs onto the big screen, then share the screen contents across the groups, enabling all the class to see the discussion result, make comparisons or comments. It not only improves students' engagement with a better learning experience but also enables students to think proactively.



Easy Integration with Lecture Capture System

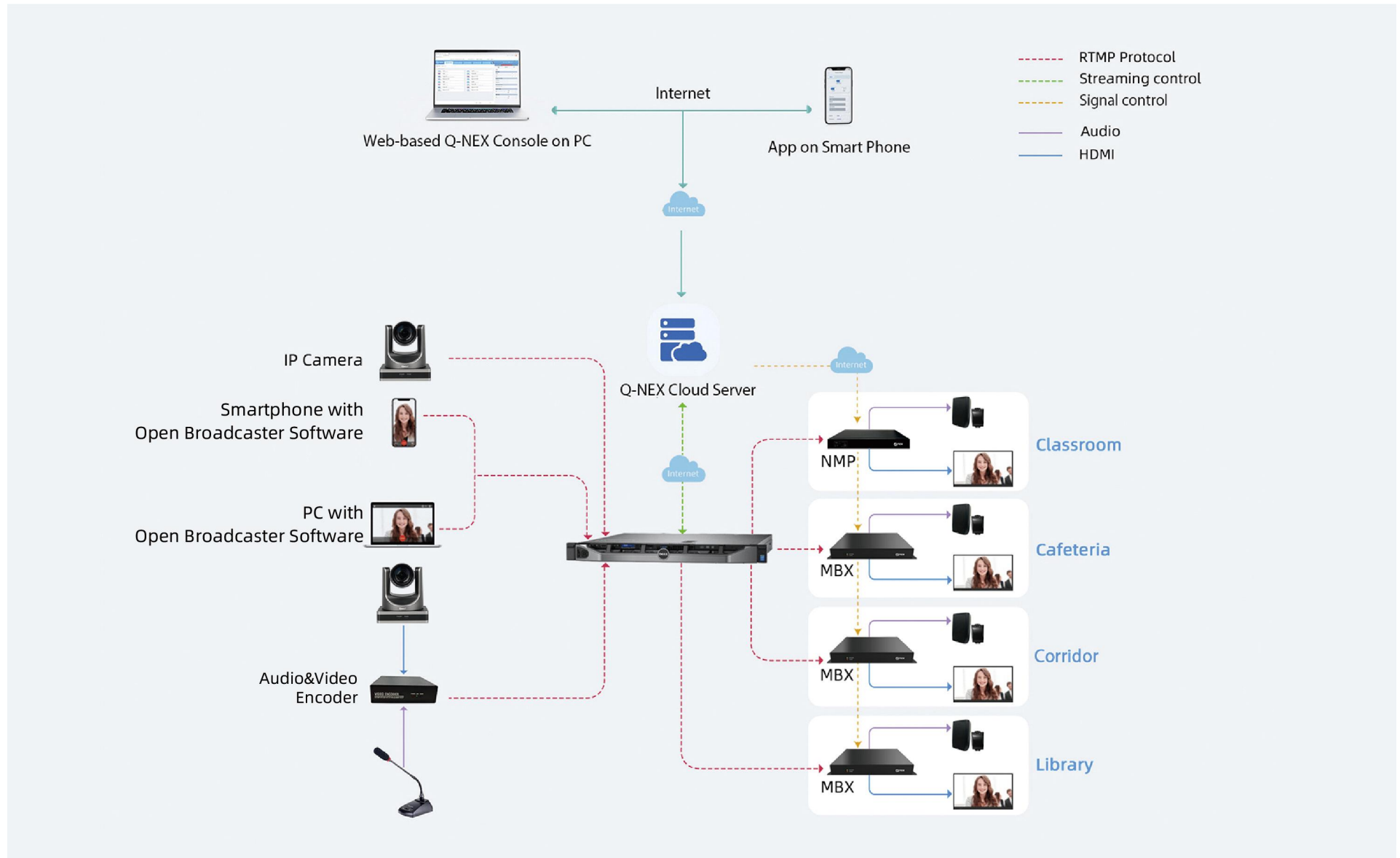
With IQVideo lecture capture system, classes can be recorded or live streamed to Facebook /YouTube for remote learning students. Also through integration with Q-NEX AV broadcast solution, the group learning class can be broadcast live via the Q-NEX platform to students campus-wide.



Campus Wide AV Distribution

The rapid advancement of AV-over-IP technology has transformed traditional AV infrastructures in our surroundings -- the campus environment is one of them. Q-NEX solution for campus-wide AV distribution is based on the AV-over-IP technology to realize not only audio and video broadcast, but also live streaming to all of the classrooms as well as spaces outside classrooms such as cafeteria, library, teacher's offices, corridor and reception hall. Through the deployment of Q-NEX Media Server, Networked Media Processor(NMP) and Media Box(MBX), this solution is capable of distributing audio, video and control signals over the Internet with the campus's existing network.

Layout of Connected Devices



Application Scenarios



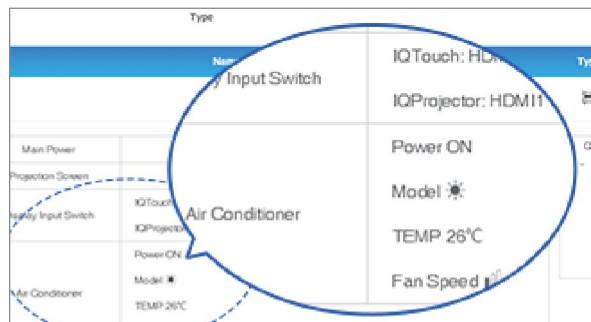
Audio and Video
Broadcast on Campus



Notification Push on Campus



Live Streaming on Campus



Broadcast on Schedule



Compatible with any HDMI Displays



Displays Auto Power on
when Broadcasting



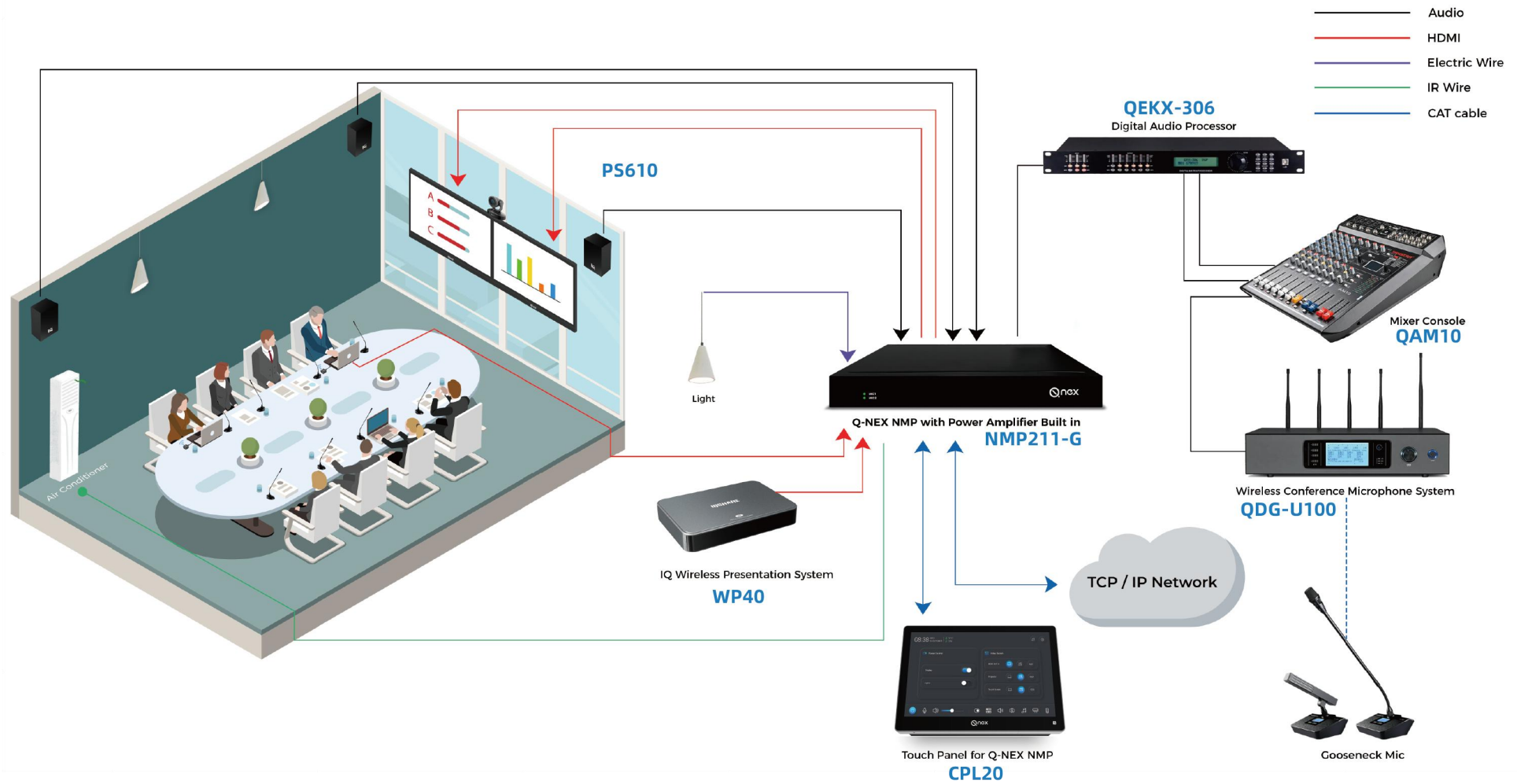
Smart Meeting Room

Designed for meeting rooms, this solution utilizes Q-NEX Networked Media Processor(NMP) and professional audio and video system to realize unified device control and management in the meeting room.

Solution Features

- Device Management
- One Touch to Control
- Scheduled Tasks
- AV Integration
- Wireless Mic System
- Wireless Screen Sharing
- Dual Screen Display
- PTZ Camera

Layout of Connected Devices



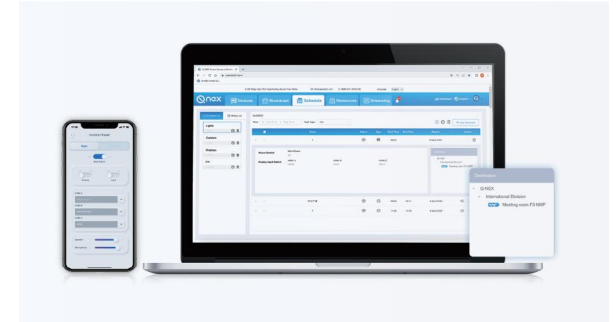
Application Scenarios



Intelligent Wireless Mic System



Central Control by Touch Panel



Scheduled Tasks for Efficient Management



Wireless Screen Sharing



All-in-one Display



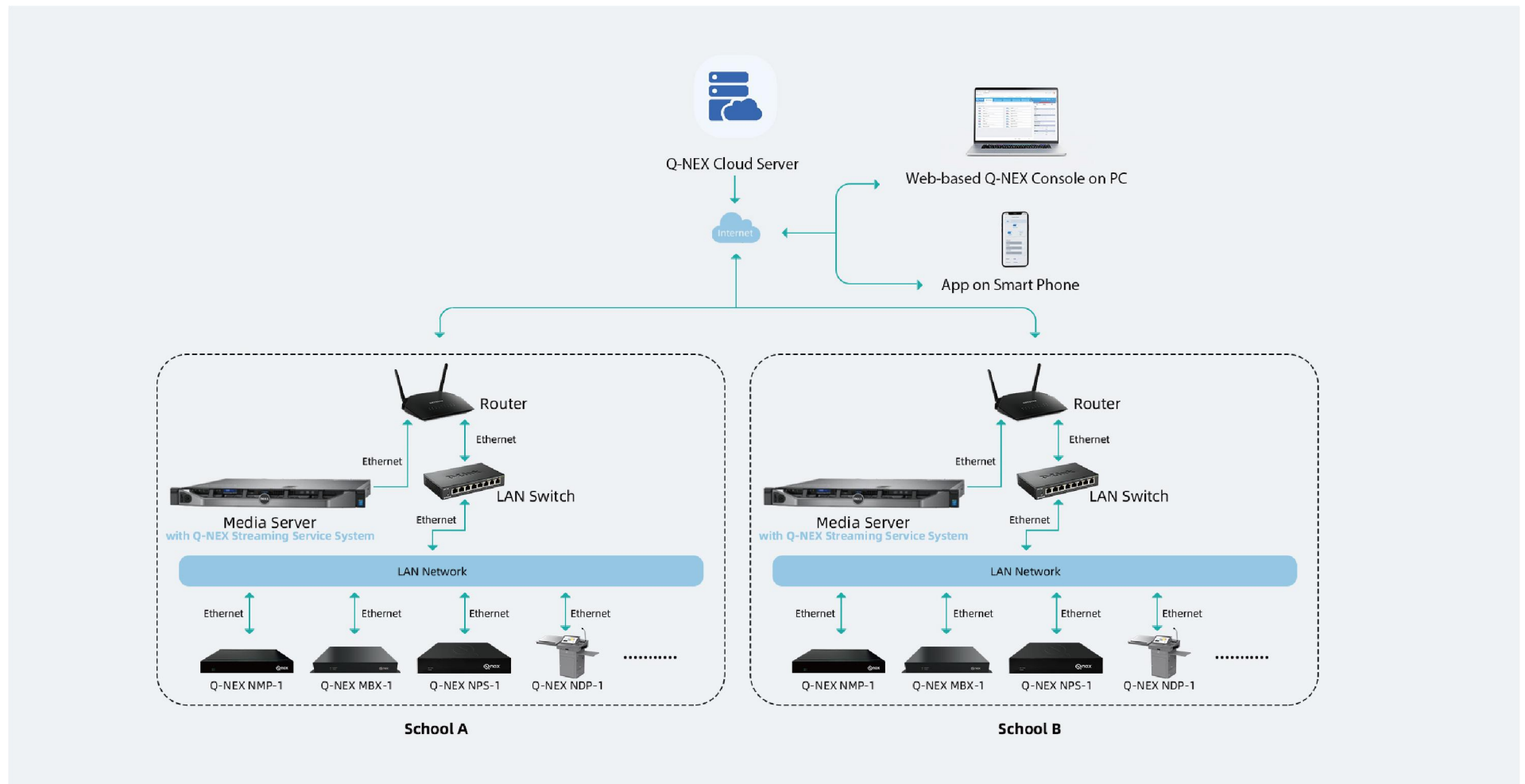
Dual Screen Display



03/

KEY PRODUCTS

The Main Elements in Q-NEX Solution



- **Q-NEX Platform** - system management on Cloud Servers
- **Media Server** - AV broadcasting/ live streaming on LAN
- **Q-NEX Terminal Units** - NMP (Networked Media Processor)/ MBX (Media Box)/NPS(Networked Presentation Switcher)/NDP(Networked Digital Podium)

Q-NEX Platform

Q-NEX Platform is the core player in the whole Q-NEX solution, it is a management platform for all Q-NEX terminal units. Since it is deployed on Cloud servers, users can access to it by Internet to manage their own Q-NEX terminals through Web browser on PC or APP (Android or iOS) on smart phone.

Q-NEX Platform consists of **Dashboard** and **Console**.

Q-NEX Dashboard

Q-NEX Dashboard is mainly for administrator to manage the organization structure, users privilege, Q-NEX terminal units, IC card permission, media server configuration, user storage distribution etc. And they can regulate the whole system through the Internet.



Device Data Analysis



User Management



Card Management



Device Management



Media Server/ Cloud Storage Management



Device Data Analysis

The screenshot shows the Q-NEX Console interface with a table of device management data. The table has columns for Device Name, Status, Groups, Video Switch, Audio Control, Power Control, RS232, and IR. The data rows list various device models and their corresponding status and control settings.

Device Name	Status	Groups	Video Switch	Audio Control	Power Control	RS232	IR
1	Online	Group 1	On	On	On	On	On
HCNEX-1-000001	Online	Group 1	On	On	On	On	On
HCNEX-1-000002	Online	Group 1	On	On	On	On	On
HCNEX-1-000003	Online	Group 1	On	On	On	On	On
HCNEX-1-000004	Online	Group 1	On	On	On	On	On
HCNEX-1-000005	Online	Group 1	On	On	On	On	On
HCNEX-1-000006	Online	Group 1	On	On	On	On	On
HCNEX-1-000007	Online	Group 1	On	On	On	On	On
HCNEX-1-000008	Online	Group 1	On	On	On	On	On
HCNEX-1-000009	Online	Group 1	On	On	On	On	On
HCNEX-1-000010	Online	Group 1	On	On	On	On	On
HCNEX-1-000011	Online	Group 1	On	On	On	On	On
HCNEX-1-000012	Online	Group 1	On	On	On	On	On
HCNEX-1-000013	Online	Group 1	On	On	On	On	On
HCNEX-1-000014	Online	Group 1	On	On	On	On	On
HCNEX-1-000015	Online	Group 1	On	On	On	On	On

Device Management

The screenshot shows the Q-NEX Console interface with a table of user management data. The table has columns for Q-NEX ID, Name, Employee ID, Role, Phone, Email, Status, and Group. The data rows list various users and their corresponding information.

Q-NEX ID	Name	Employee ID	Role	Phone	Email	Status	Group
1000001	John	1000001	General User	10000010001		Online	Group 1
1000002	Sarah	1000002	General User			Online	Group 1
1000003	Mike	1000003	General User	10000030001		Online	Group 1
1000004	Anna	1000004	General User	10000040001		Online	Group 1
1000005	David	1000005	General User	10000050001		Online	Group 1
1000006	Emily	1000006	General User	10000060001		Online	Group 1
1000007	Frank	1000007	General User	10000070001		Online	Group 1
1000008	Grace	1000008	General User	10000080001		Online	Group 1
1000009	Henry	1000009	General User	10000090001		Online	Group 1
1000010	Ivy	1000010	General User	10000100001		Online	Group 1
1000011	Jack	1000011	General User			Online	Group 1
1000012	Karen	1000012	General User			Online	Group 1

User Management

Q-NEX Console

Q-NEX Console can be accessed through browser or mobile App, so that users can operate anytime and anywhere over all connected devices.

● Web-based Console

Users can log in at <https://mg.qnextech.com/console/login> on their personal computer with authorized account to get access to the web-based console.



Remote Device Control

IT administrators can manage campus devices through laptop or mobile phone when they're on business trip or on leave.



Campus Broadcast

Admins can play music during the after-class time, listening comprehension tests and campus notification/announcements, etc.



Schedule List Setting

All devices on campus/organization can be set to turn on before school/meeting and turn off afterwards, and ring school bell, play music or video for class automatically from Monday to Friday during a semester.



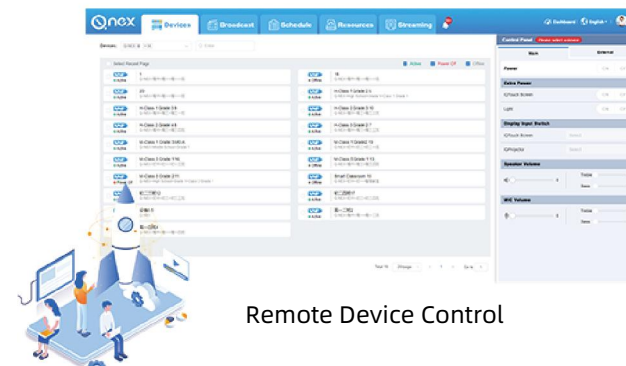
Cloud Storage

IT admins have the authority to allocate public and individual storage, which will make it easier for teachers to share curriculum resources and courseware in the school.

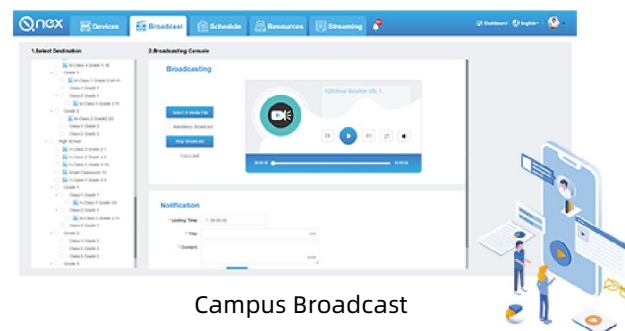


Live Streaming

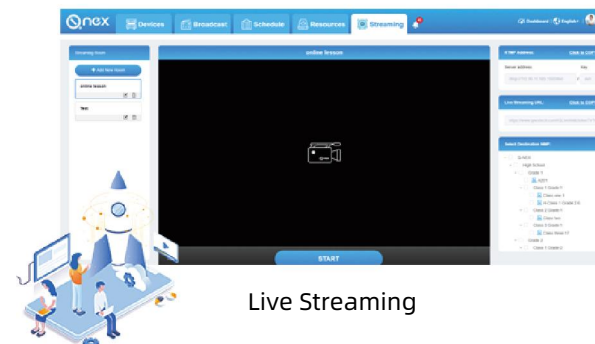
Create live public address of a principal, broadcast campus events to TVs in classrooms or school auditorium, and emergency notification by broadcasting.



Remote Device Control



Campus Broadcast



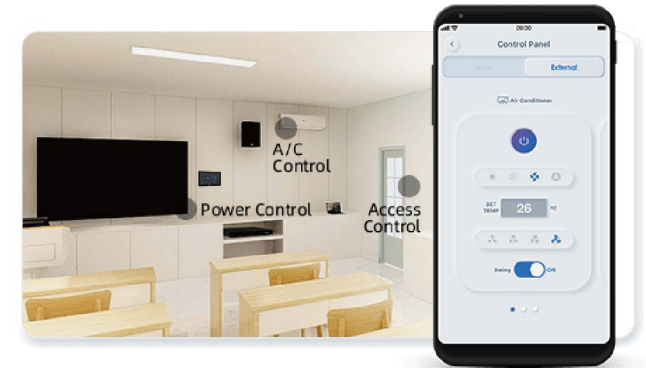
Live Streaming

● App Console



Device Control

The Q-NEX App turns your mobile device into the ultimate mobile control panel, enabling control of classroom multimedia devices, lighting, A/C, access control, and other systems from virtually anywhere.

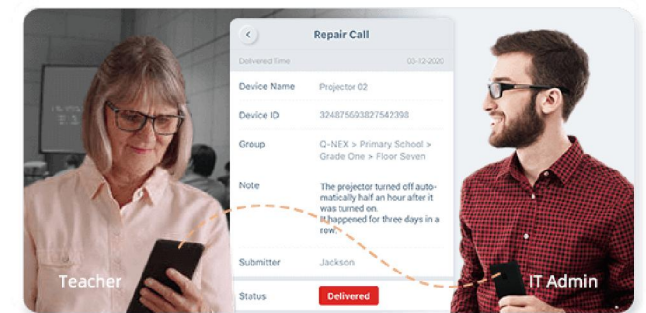


Device Control



Report A Repair To The IT Admin

Report to IT admin by mobile when devices can't work. It's convenient for teacher to report rapidly and for IT admin to follow up the process of repair.

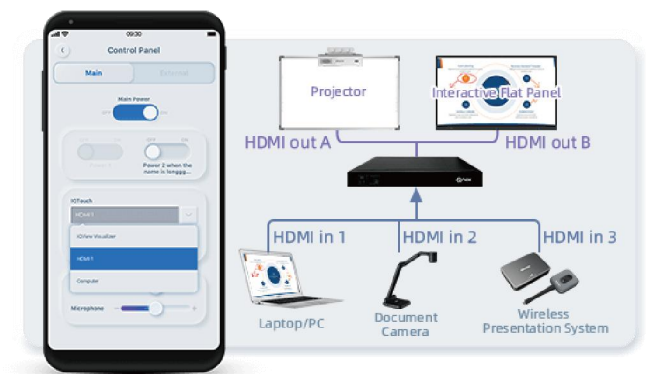


Report A Repair To The IT Admin



Display Input Switch

Flexibly switch the input sources of multiple display devices in the classroom and adapt to different teaching scenarios, which is easy to use.



Display Input Switch



Campus Broadcast

IT admins can realize audio and video broadcast on the APP as well as on web-based Console.



Schedule Tasks

All scheduled device control and broadcast tasks can be seen on the APP for a quick check.

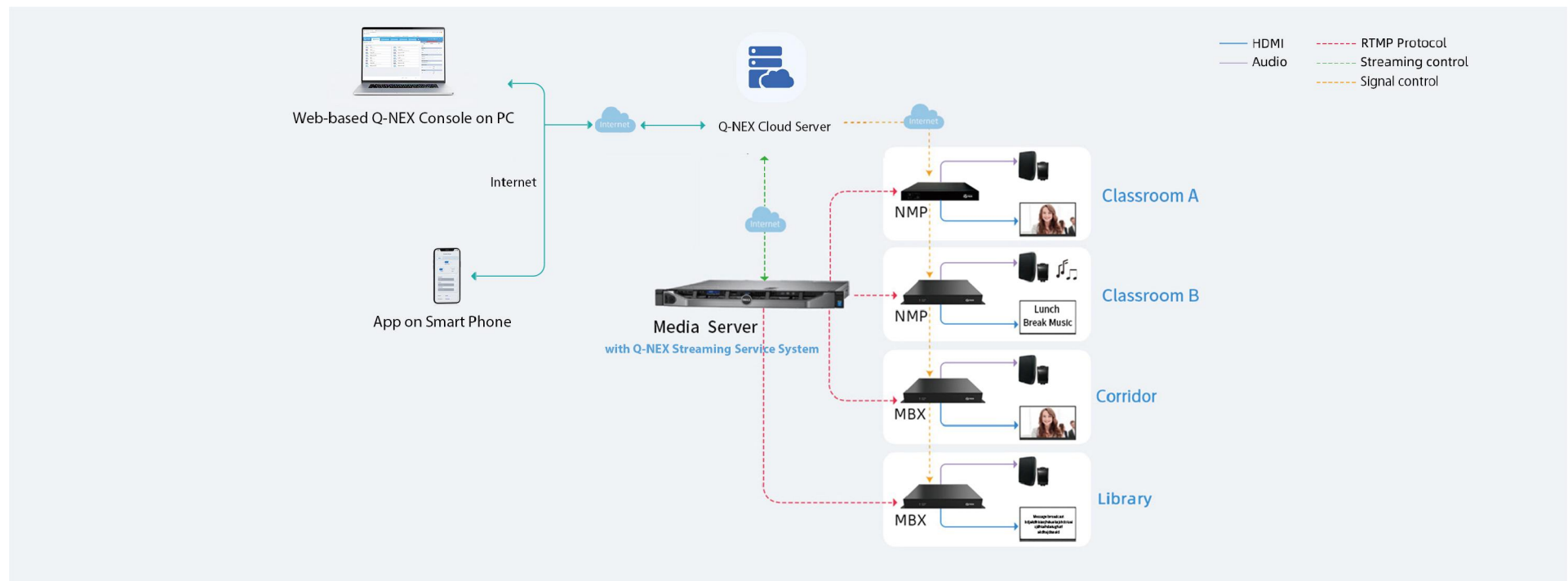
Media Server (Optional)

A media server is needed only when there is a need for AV distribution on the LAN.



Outline of the Working Principle: A media server with Q-NEX streaming service software installed, can receive instructors from Q-NEX Platform by Internet, to distribute AV contents on the media server to the designated Q-NEX terminal units NMP/MBX/NDP.

Based on a scalable network framework, Q-NEX solution allows the Media Server to be deployed over private network or public network for AV distribution.



Q-NEX Terminal Units

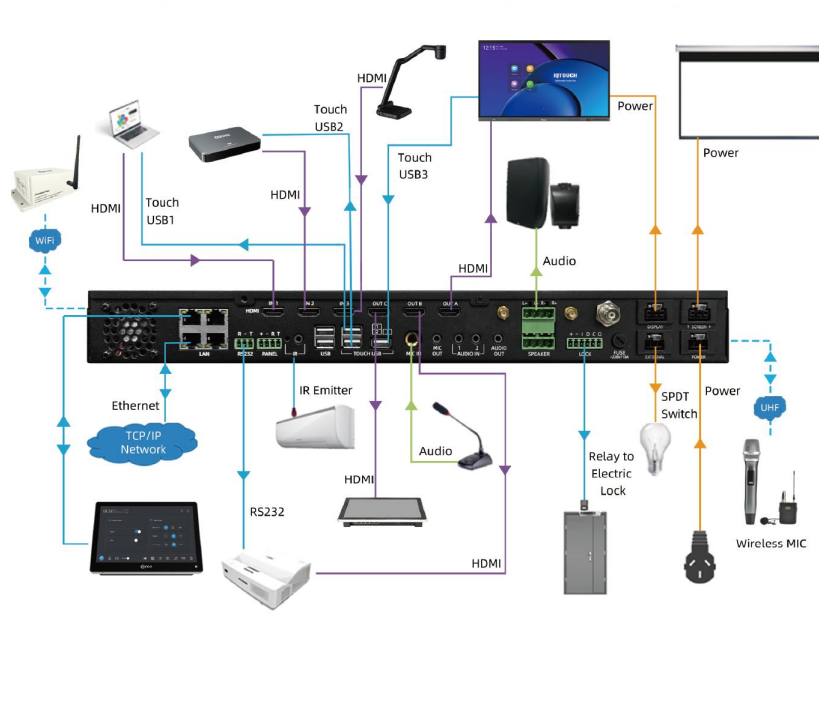
Q-NEX Terminal Units consist of Q-NEX Networked Media Processor, Q-NEX Networked Digital Podium, Q-NEX Media Box, Q-NEX Networked Presentation Switcher, and Q-NEX Desktop Digital Podium at present. They can be controlled by physical Control Panel or Touch Panel installed in the room, or smart phone through Internet anywhere and anytime.

Networked Media Processor



NMP211-G-L2U/NMP221-R-L2U

Q-NEX Networked Media Processor connects independent AV equipment and other devices to build a networked system, empowering campus all-round centralized device control of IoT ecosystem, in the meantime, it can also work as a networked AV decoder to process pre-recorded or live AV signals distributed from the Q-NEX Platform.



Connected Devices for NMP



Functional Modules Integrated in the NMP



Integrate multiple devices and functions into one single system.



Networked device deployment that enables remote control and management of all the devices through Internet or Intranet.

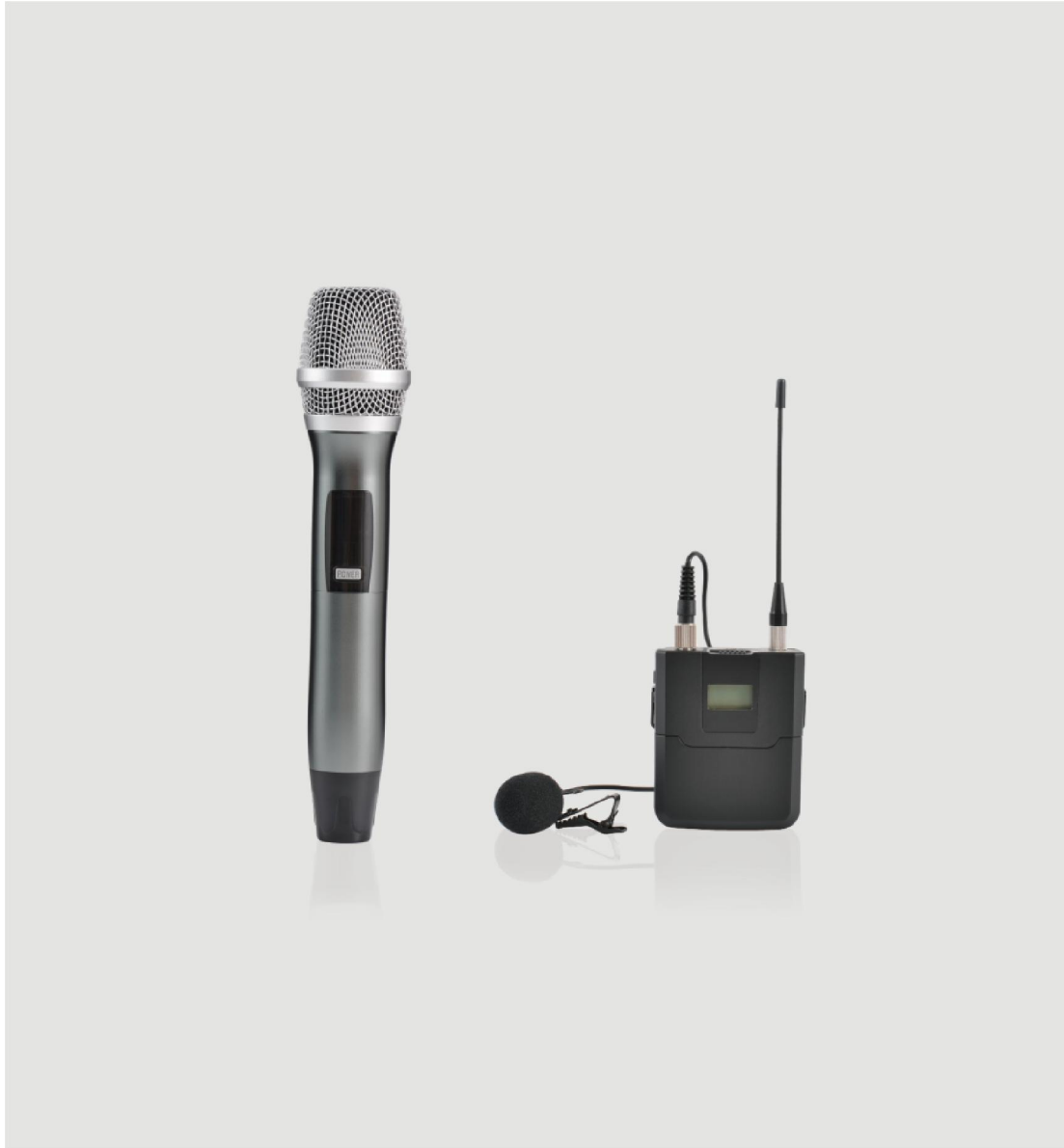


Centralized control of AV and commonly used devices in classrooms.



Networked AV decoder to process AV signals distributed from Q-NEX Platform, including instant and scheduled AV distribution tasks.

Wireless Microphone



UHF Frequency Band



Max 24 Channels Connection



Wireless Transmission
Up to 40 Meters



Automatic Frequency Matching

Touch Panel (CPL20)



Capacitive Touch Screen for Smart Control

Adopting a 10-inch LED touch screen, Q-NEX CPL20 provides an intuitive interface with easy-to-use capacitive controls, true feedback, and real-time status display.



Versatile Functions for Device Control

- Power control of classroom devices
- Video matrix switching for classroom devices
- Control the air-con power, temperature, modes, etc.
- Control the projector on/off and electric screen up/down
- Adjust mic & speaker volume
- Control the NMP to send IR signals for IR devices control (such as TV)
- Multiple audio switch



Access Control for Authorized Use

Embedded IC card reader provides authorized card access to the Touch Panel. Teacher can lock the Touch Panel after class to prevent students from misuse.



Self-developed Software with User-friendly Design

- The Touch Panel software keeps optimizing and supports OTA update.
- Home page functions are customizable to meet specific user needs.

CPL20



Control Box (CBX100)

As the wireless control module of Q-NEX Networked Media Processor, Q-NEX Control Box (CBX) easily realizes the remote control of campus electric devices (e.g. air conditioners, lights, electric curtains, projectors and monitors) through 2.4GHz wireless transmission.



Wireless Connection

Connect to Q-NEX Networked Media Processor through 2.4G wireless transmission. Convenient installation without wiring or change of existing electric lines.



Multiple Control Interfaces

Wireless control of various devices with RS232, IR, and Relay interfaces.



Unified Control

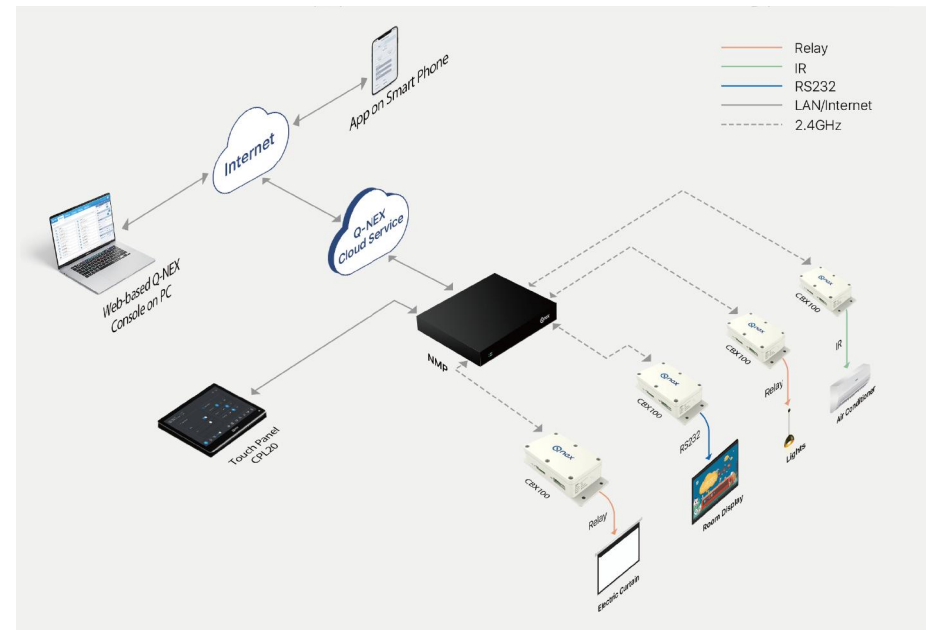
Remote control anytime and anywhere on unified Q-NEX Console through the Internet.



Device Control Extension for Q-NEX NMP

CBX is an extension of control interfaces of NMP, and each NMP can be connected to 4 additional CBXs.

CBX100



Networked Digital Podium



Device control at one stop

Converges multiple multimedia devices for simplified and seamless control at one stop. Making all the device control near at hand.



Unified Connectivity

The Q-NEX Networked Digital Podium NDP100 offers abundant interfaces, including AV and control ports. Notably, NDP100 features a full-functioned Type-C port, delivering charge, network connectivity, and smooth transmission of audiovisual data to connected laptops, ensuring effortless connectivity for presenters, and allowing seamless integration regardless of the type of computer they bring.

NDP100



Effortless AV contents switch

3X3 AV matrix switch and seamless touch-following to the big screen. Better engage and ignite students learning enthusiasm with continuous flow of enriched audiovisual resources with timely annotation.



Stay connected with whole campus

Reliable and automatic playing of the campus-wide AV broadcasting and live streaming for school announcement, important notification, lectures, special events and so on. Always stay connected with the whole campus. (Media server required)



Easy device integration and upgrade

Easy integration with various types of multimedia devices, allowing continuous classroom hardware upgrade or expansions.



Hybrid learning across campus and beyond

Convenient live streaming of lectures across the classrooms throughout the campus and to those online remote learning students. Maximize the teaching resources, teaching efficiency, and education equality.



Maximized efficiency

Support automation schedule for the device to power on or off at predefined time. Saving energy and reducing workload.

● Inside the Q-NEX Networked Digital Podium

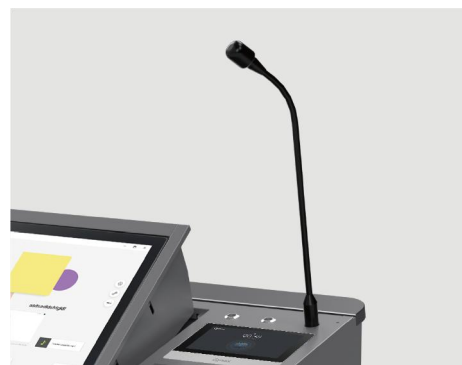
Q-NEX Networked Digital Podium NDP100 incorporates Network Media Processor (NMP), Touch Panel for control, Wireless Mics, Interactive Pen Display for annotation, Built-in PC, Document Camera, Wireless Charging Area, Gooseneck Microphone and abundant AV and control interfaces in a stylish lectern. It is capable of integrating with in-room multimedia devices with its universal AV ports, LAN switch, AV matrix switch, wireless mic system, AV decoder, power relay, serial control module, digital amplifier, electrical lock module and so on for a centralized and remote-control management.



Interactive Pen Display



Touch Panel



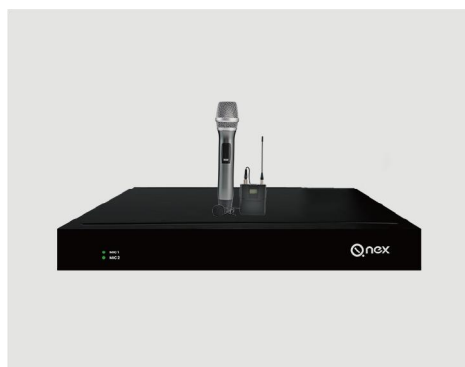
Gooseneck Microphone



Wireless Charging



Abundant Interfaces



Networked Media Processor



Document Camera(optional)



Built-in PC

*A Lite Media Server is required for pushing AV broadcast and live streaming to the Networked Digital Podium.

Desktop Digital Podium



Capacitive & Electromagnetic Dual Touch

Q-NEX NDP500 supports both finger and pen writing, fostering eye contact between presenters and audience.



Dual Screens with Optical Bonding

Featuring two screens for annotation and local device control. With optical bonding technology, teachers enjoy a comfortable visual, and writing experience.



0°-45° Screen Adjustment

Providing adjustment angle from 0° to 45° for switching between sitting and standing positions, bringing the lecturer comfortable experience during class.



3x3 AV Matrix Switch

The 3x3 matrix switch allows teachers to flexibly switch input and output devices in the classroom, no matter presenting identical or different content on multiple screens.



Unified Device Control from Local and Network

Enabling seamless one-click activation of classroom devices (lights, interactive flat panels, projectors, etc.).



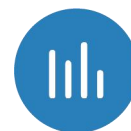
Remotely Control from Anywhere

Allowing remote control from local Touch Panel or remotely from anywhere globally, ensuring accessibility from any location.



AV Broadcasting and Live Streaming

Facilitating audiovisual broadcasting or live streaming over the network, offering extensive possibilities within campus.



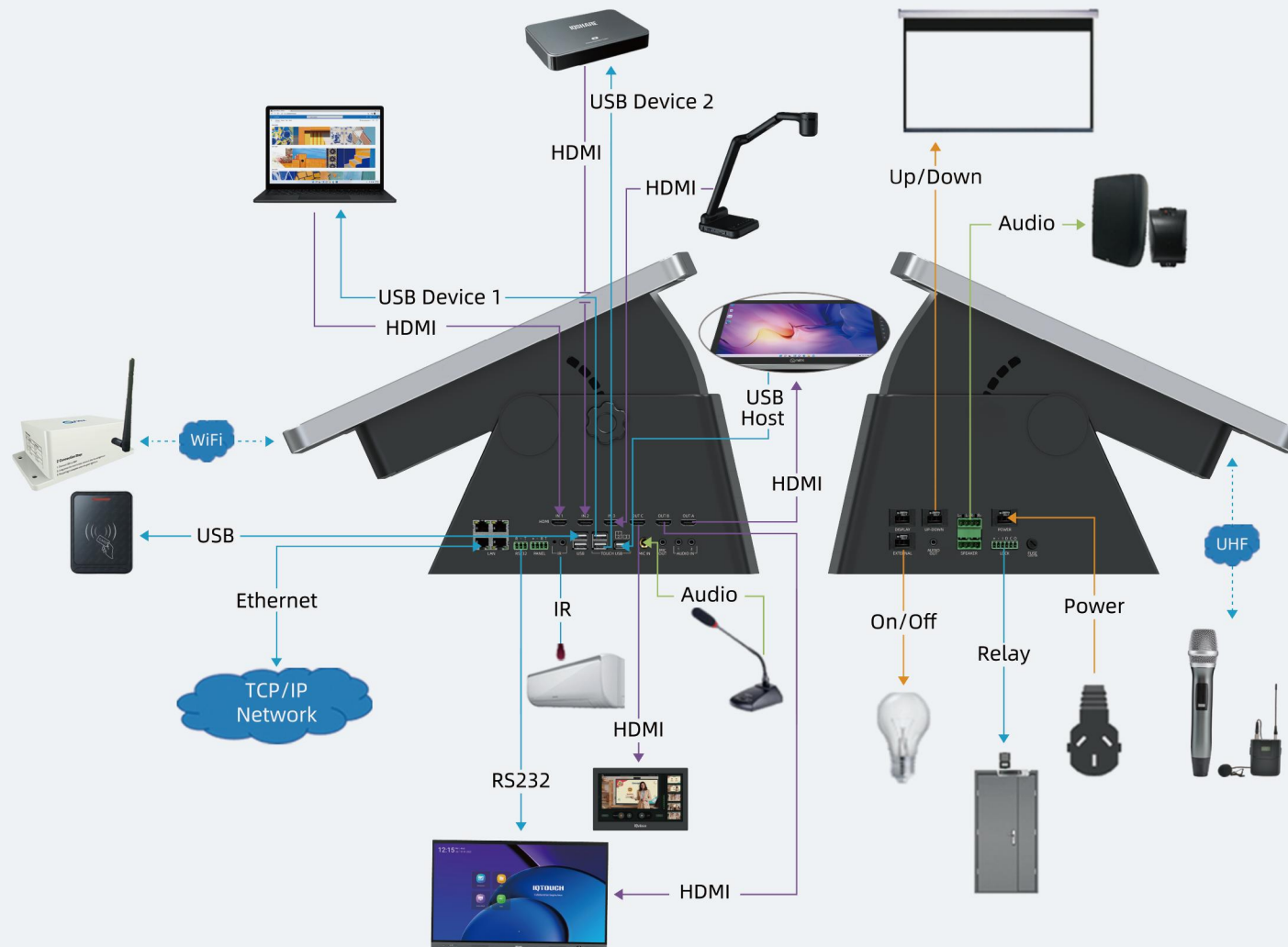
Wireless Microphone & Sound Amplification System

Equipped with a wireless microphone system and built-in amplification makes it easy for teachers to amplify their voice locally, ensuring an effortless teaching experience.

NDP500



- Device Application Connection





Media Box

Q-NEX Media Box (MBX) is made for creating the network broadcasting of smart campus, which applies to audio and video distribution outside classrooms: corridors, canteens, libraries, etc. MBX can receive not only scheduled broadcast task for audio, video and message broadcast, also live streaming audio or video content in every corner of the campus.

MBX100



● Features



Cooperate with Media Server to form a converged system with broadcast function and low cost in implementation.



Support up to 1920*1080 HD audio and video broadcast signals as well as text broadcast with low latency.



Support receiving audio live announcement and video live streaming smoothly without stuttering.



Support scheduled tasks for audio and video broadcast; support broadcasting different audio and video content to selected zones.

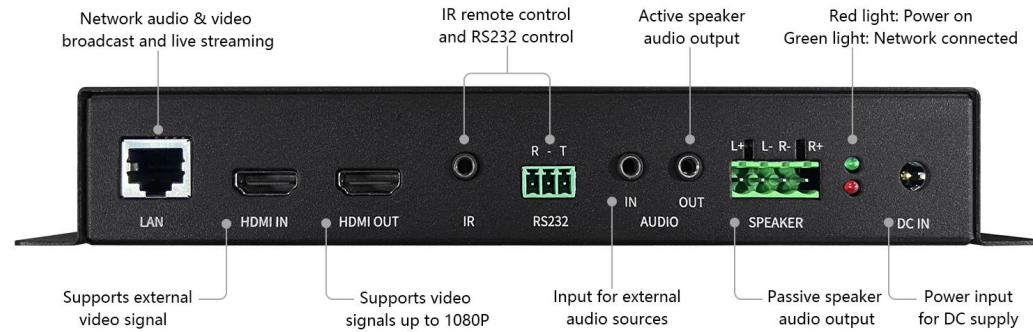


Support automatically turning on the display device when broadcasting; support power control of the display device through App/Web.

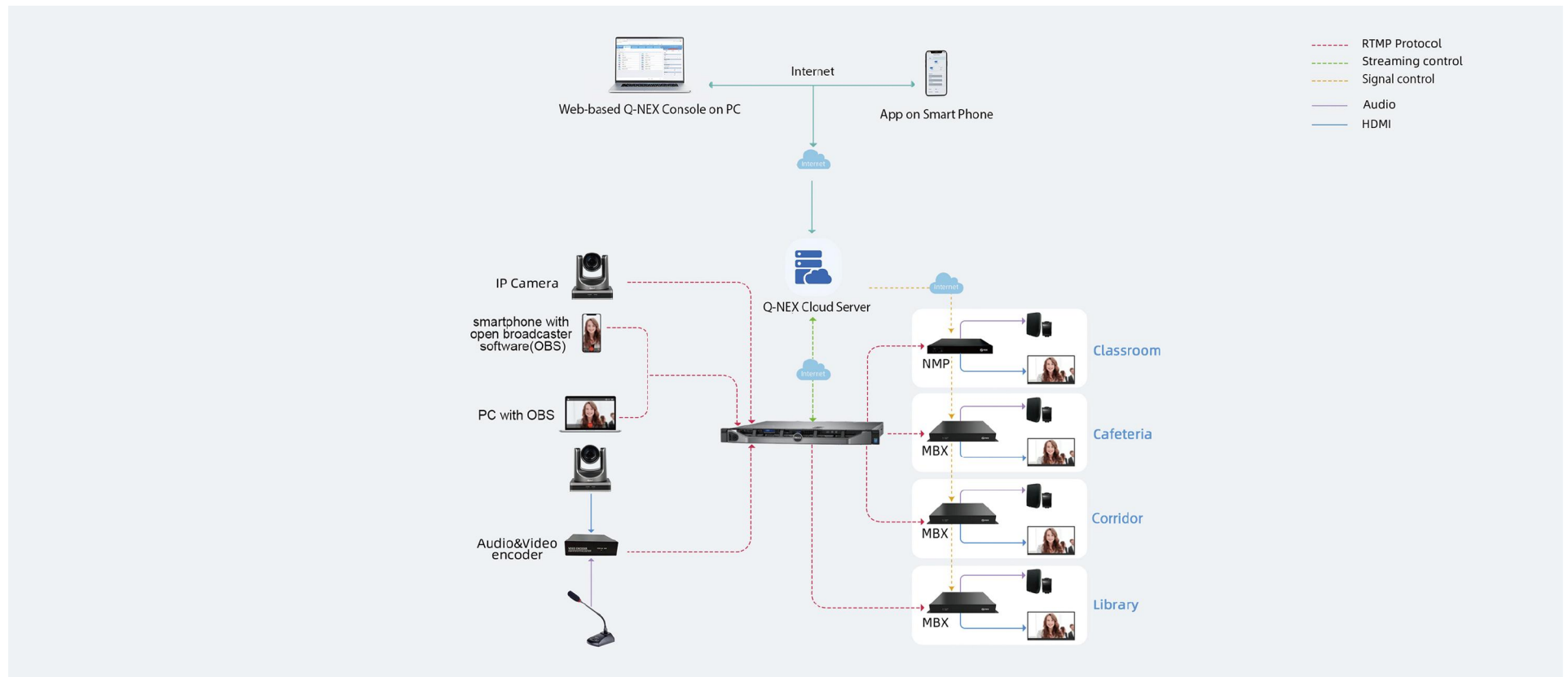


Support unified remote management and control on the Q-NEX Console through the Internet without restrictions of time and place.

● Rear View Interfaces



● Connection Diagram



Networked Presentation Switcher



BYOD&BYOM for Enhanced Collaboration

Enabling plug-and-play screen sharing for local conference and utilizing cameras and microphones for online conferences.



4K AV Matrix Switcher with KVM Functionality

Featuring a 2x2 matrix switcher with high-resolution capabilities up to 4K@60Hz 4:4:4 in HDMI format with KVM functionality.



Intuitive Smart Control with Touch Panel

Integrate in-room devices such as lights, air conditioners, electric curtains, interactive flat panels, PTZ cameras ,etc. easily, all controlled through a user-friendly Touch Panel.



Remote Control Anywhere, Anytime

Remote control is accessible through Web-based Console or APP, enabling pre-meeting setup of conference room devices and efficient post-meeting power management.



Centralized Conference Room Control & Management

Through Q-NEX platform, enterprise IT administrators achieve centralized control of multiple meeting rooms, allowing for unified management across the organization.



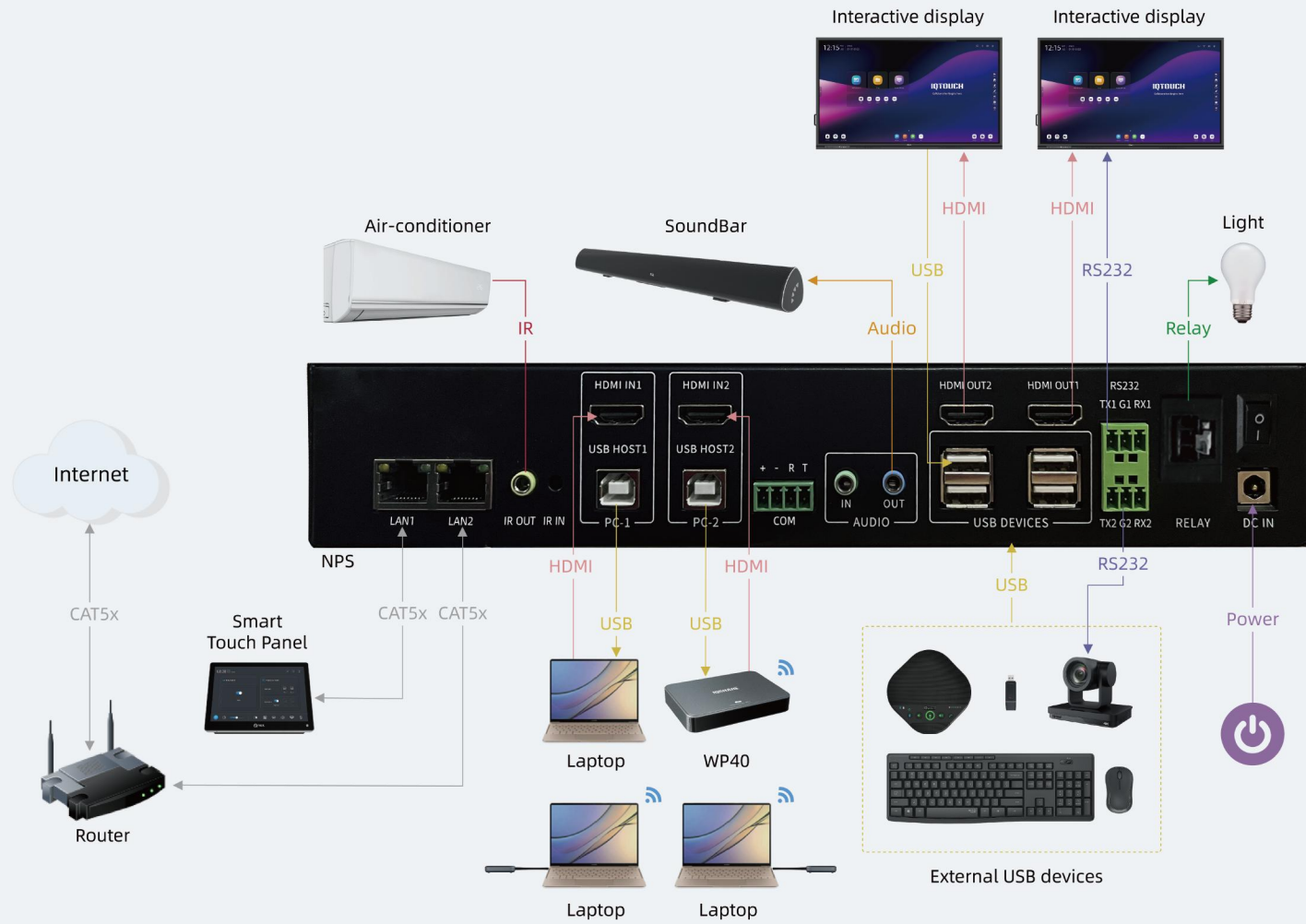
Elegant Size for Easy Installation

With its compact and elegant dimensions, Q-NEX Networked Presentation Switcher NPS100 ensures easy installation into racks, making it ideal for under-table installations.

NPS100



• Device Application Connection





04/

CASE STUDIES

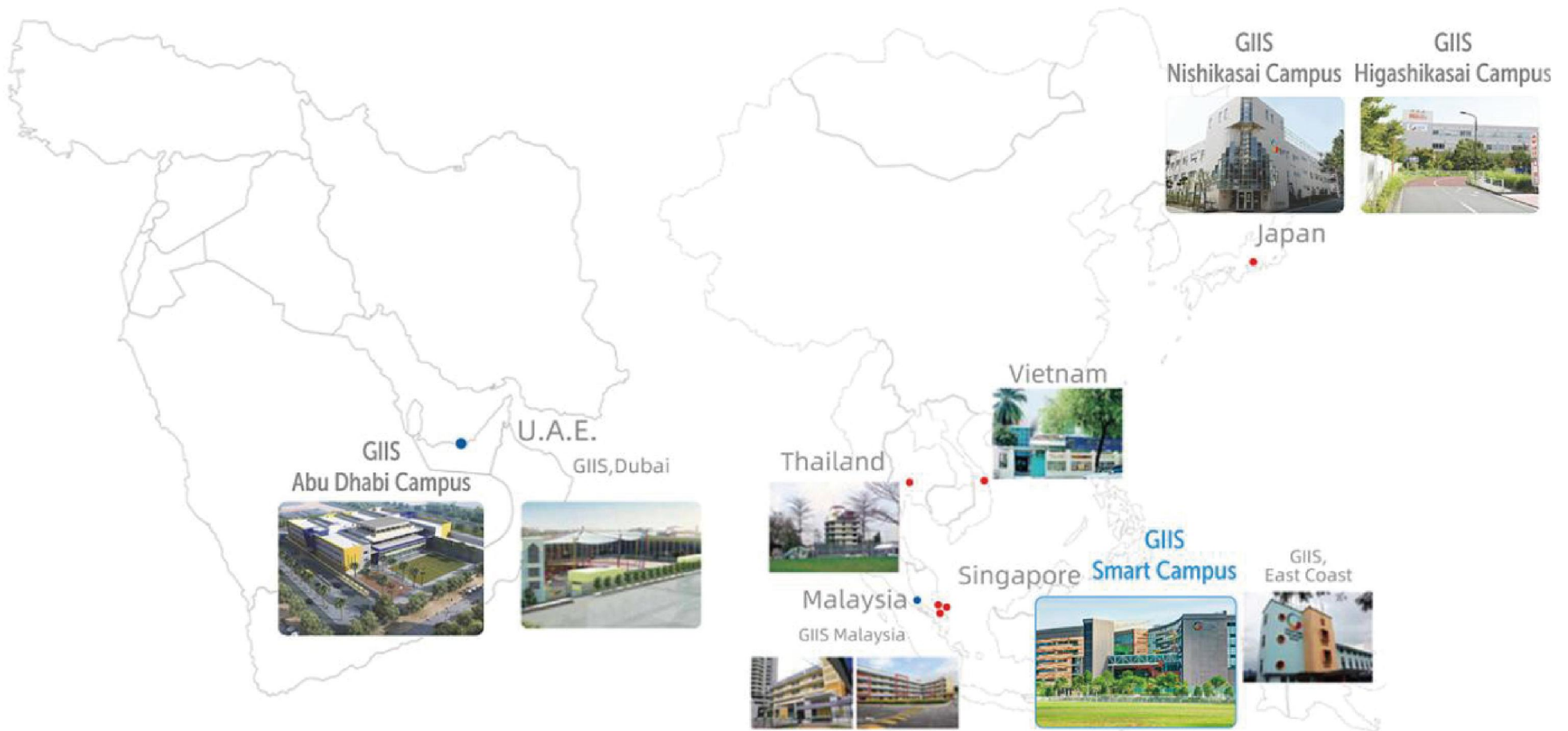
Global Adoption of Q-NEX's Smart Solutions in Education and Conference Scenarios

As Q-NEX products and solutions are known widely in the global markets, more and more schools and educational institutions start to adopt Q-NEX's complete solutions in their smart campus projects. Shared below are some successful cases related to education and conference scenarios that Q-NEX has done around the world.



Global **Indian International School** (Singapore SMART Campus)

Global Indian International School (GIIS) is an international network of award-winning schools with 64 campuses across 11 countries. They include Singapore, Malaysia, Japan, Thailand, UAE, Vietnam, and India, offering Indian and international curricula to students from diverse backgrounds.

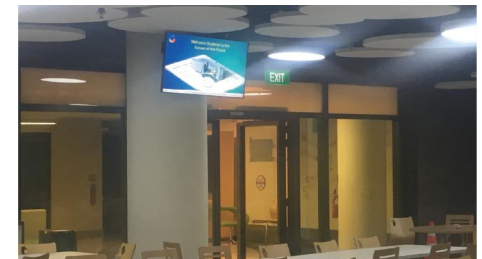
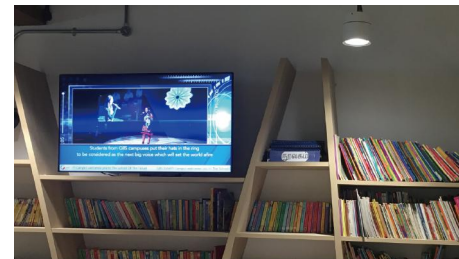




GIIS Singapore new campus has started construction work of two main buildings since 2016. With the aim of building a school with state-of-the-art technology, the school IT team came to us. We offered them a proposal for the smart classroom and smart campus development.

Customized System for GIIS New Campus

- IQTouch Interactive Flat Panel & IQ Interactive Education Platform Software for interactive teaching environment.
- Q-NEX Networked Media Processor & Q-NEX Console for centralized and remote control of classroom devices.
- Easy management of classroom devices.
- IT admin can set scheduled task to power on / off classroom devices for auto management.
- To broadcast different video content to different areas like libraries or corridors.
- The school IT admin can also customize the school bell tone and schedule the ringing time, or even make a playlist of school music to be broadcasted to different groups of classrooms during lunch break.





Uttaradit Rajabhat University of Thailand

Uttaradit Rajabhat University (URU) is one of the prestigious universities under the Rajabhat system, which is located in north of Bangkok, Thailand. With the continuous development of the university, URU has built a new 5-story teaching building in 2021 with over 50 classrooms, seminar rooms and computer labs for expanding teaching and learning spaces.

Start for transforming URU into a smart campus with digital integration and system automation.

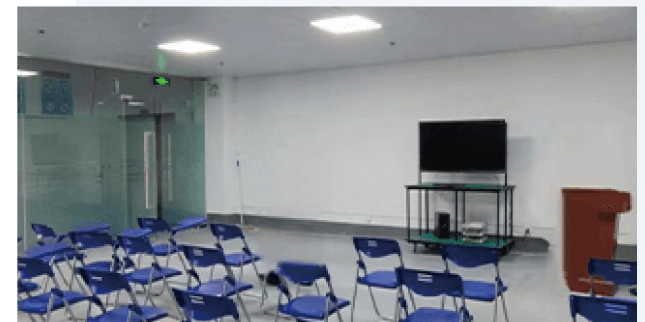
Realize central device control in classroom as well as AV broadcasting and real-time live streaming throughout the campus.





SCUD Group

SCUD Group is a high-tech enterprise offering comprehensive battery solutions for mobile and digital products. Along with the growing enterprise, SCUD Group plans to upgrade the offices with more efficient and intelligent environment for working and training. Expanding a number of conference rooms, huddle rooms and training rooms for business negotiation, recruitment interviews, and skill training.



Transformation Begins Here



Equipped with UHD display in conference room - IQTouch interactive flat panel supports intelligent whiteboard presentation, wireless multi-screen sharing for seamless flow of multi-interactive information which meets the needs of team discussion and collaboration.

Transform the traditional training room that relies on physical whiteboards, pens and erasers into smart one. Offer online and offline blended training mode and centralized control system to manage the devices in the room.



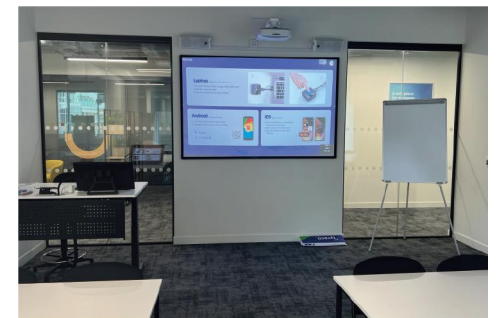
BPP University

With the increasing number of enrolments, BPP University has grown at a rapid pace. Meanwhile, it has greatly stimulated the demand for campus expansion, space construction, public infrastructure, and classroom ICT facilities.

For a large amount of complex school equipment, an IoT-based campus with digital transformation and cloud centralized device control is extremely required.

Q-NEX Solution to Build A Smart School

- Faculty-Friendly AudioVisual Sharing Environment
- IoT-Based School Device Management
- New Concept of “Divisible Classroom”
 - (1) One Classroom with Partition for Multipurpose Application.
 - (2) Multiple Classrooms with Device Independent Control / Full Control.
 - (3) AV Broadcast and Central Control in Divisible Classrooms.

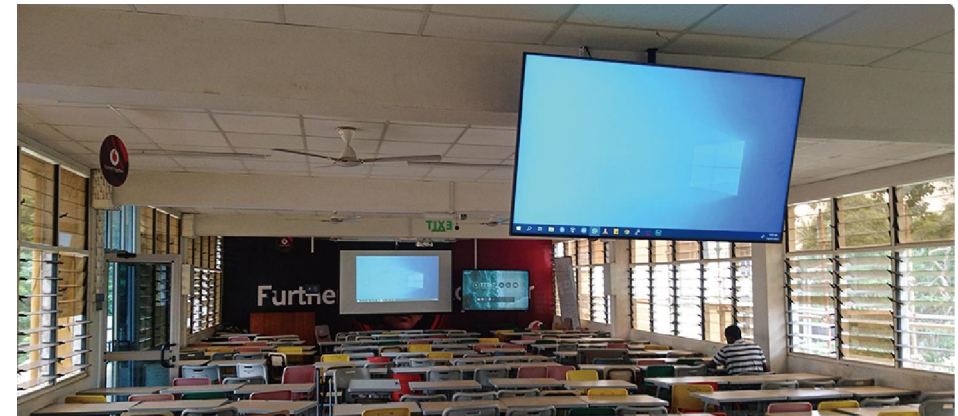
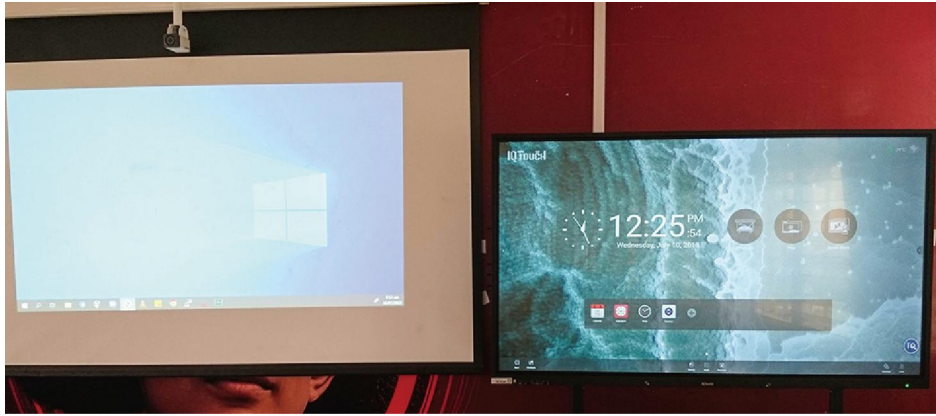




Kwame Nkrumah University of Science and Technology

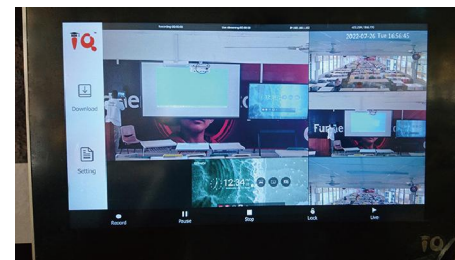
KNUST is a public university of Ghana that focuses on science and technology. As an academic center spearheading West Africa's pursuit of technological advancement, KNUST makes effort to improve its learning environment with state-of-the-art education technology, starting from the lecture hall to most of the classrooms.





Within the university, there's a special lecture hall sponsored by Vodafone. It has only one projector and a projection screen for presentations. However, this room can accommodate over 50 students, making it challenging for those in the back to see the teacher's content on the screen. Additionally, the KNUST administration aims to enhance teaching resources by recording excellent lectures and exploring hybrid learning. The Q-NEX solution offers the following features to address these needs:

- Multiple displays
- Interactive teaching
- AV matrix switch
- Comprehensive classroom audio
- Lecture recording and online teaching capabilities



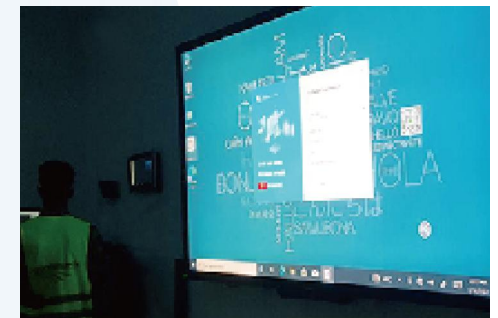


Mekdela Amba University

Mekdela Amba University was established as a result of the Ethiopian government's endeavor towards realizing the country's renaissance through educating the generation. It is one of the eleventh newly established public higher learning institutes in the country. Aspired to be the best university in Ethiopia by 2025, MAU has been under an ongoing construction of different building complexes and infrastructural development since its establishment. With the trend of education technology spreading to the Horn of Africa, MAU has decided to take its first step towards smart campus.

MAU implemented an all-in-one solution to enhance teaching with Q-NEX tech. They've equipped each classroom with essential tools like interactive displays, teacher laptops, document cameras, and a lecture capture system. Moreover, to simplify user operation and centralize control, they've installed a Q-NEX Networked Media Processor (NMP) in each classroom, which offers these functions:

- AV Matrix Switching
- Integrated Audio System
- Centralized Power Control and Device Control
- Lecture Recording and Live Streaming
- AV Distribution over IP on Campus

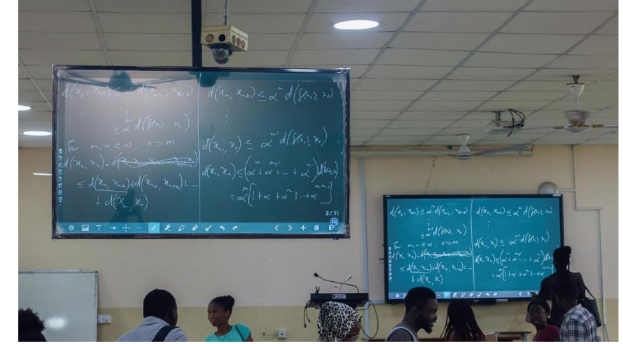




University of Ghana

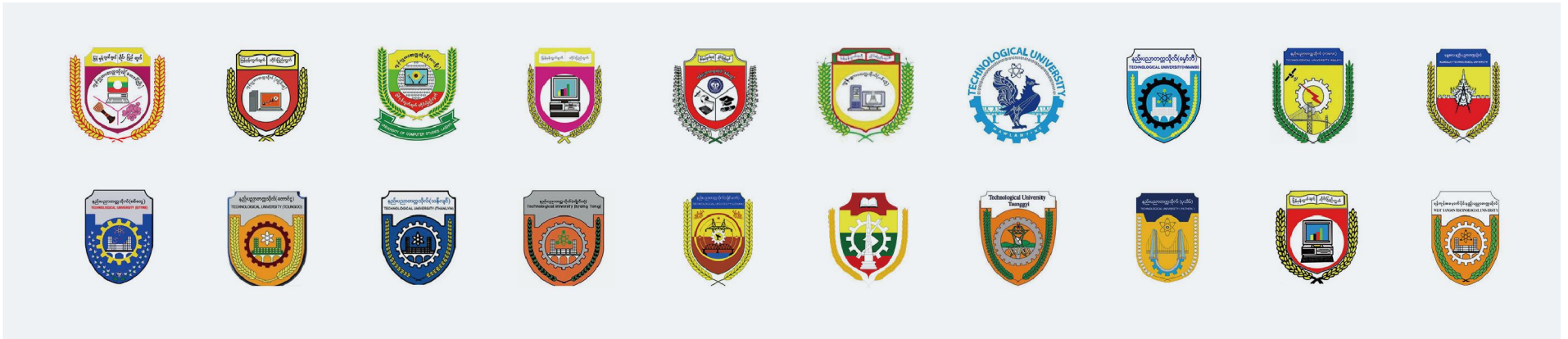
As Ghana's largest and oldest university, the management aims to enhance its hybrid learning offerings during the university's 75th anniversary. They plan to provide engaging and interactive hybrid classes, reaching both on-campus and online students, extending the benefits of hybrid learning across the campus and beyond.





The Q-NEX solution transforms the University of Ghana's hybrid learning, delivering an immersive and interactive experience for students, both on-campus and online, ensuring academic excellence and student success. The Q-NEX team provides the following functions to meet the school's needs:

- Centralized Device Control over the Internet
- Seamless Display of Diverse AV Contents
- Convenient and Immersive Hybrid Learning
- Control Room Devices by Schedule and Execute Automatically
- Campus-Wide AV Distribution and Notification Push



Myanmar MOE

Myanmar's Ministry of Education (MOE) is modernizing sixty top technical universities to enhance education quality. They aim to create highly automated campuses with improved interactions, teaching materials, and methods, working with Q-NEX to benefit students, educators, and staff, ultimately boosting the country's development with a highly educated workforce.

The Ministry of Education in Myanmar faces the challenge of modernizing its traditional teaching methods, which lack modern tools. The solution involves equipping universities with multimedia devices, centralized control, and automation to create a more engaging and fair learning environment. Q-NEX assists with smart classrooms, interactive learning, hybrid education, AV broadcasting, and automation, making Myanmar's education more inclusive and technologically advanced.



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