Indota Multi-group Interactive Smart Classroom

Solution Overview and Introduction

1. Indota Introduction

Indota originated in Europe and created global innovative smart classroom solutions. As a provider of smart classroom solutions, Indota commits to continuous improvements. It has devoted significant R&D expenditure to this already and will continue to do so to bring new rich classroom solutions. We, Indota, serve the global teaching and training market.

"Indota" introduces rich classroom solutions that it first developed for the local market and then adapted for international use. It provides intelligent, flexible, and easy-to-use products for any teaching environment. Indota goes beyond traditional classroom furniture and introduces intelligence and clever IoT tools and creates the future for industry users. As a manufacturer of smart classrooms, Indota commits to continuous updates to its product lines and devotes significant R&D to assure leading and innovative products and complete classroom solutions are ready for implementation anywhere in the world.

2. Solution Overview

In Indota we divide classroom solutions in 3 categories, which are:

1. dynamic smart classroom,
2. multi-group interactive smart classroom and
3. collaborative interactive smart classroom.

The Indota Smart Classroom uses modern multimedia technology to create an ideal campus environment where "Students can find and meet good teachers and watch discussions everywhere on campus".

Diverse teaching scenarios: The tables and chairs are movable, collaborative and multi-type. Students can be grouped into different size groups according what suits a course best in any discipline, either by the ease of regrouping the students within the

classroom or by having different classrooms designed to the most relevant types of solutions.

Smart teaching environment: Teachers can use a variety of media such as text, images, sounds and animations, etc. to vividly show the formation and application of knowledge, to stimulate the senses of students and to let students "participate" in the classroom. Information flows between any students within a group and between the groups and the whole class using the individual computer tool, linked to the groups own displays and to the class as a whole. This transforms passive acceptance of knowledge into active discussion and sharing of knowledge.

It changes the role of students: They can take the initiative of learning the best way.

3. Introducing each of the 3 solutions.

3.1. Main Products for Multi-Group Interactive Smart Classroom

The multi-group interactive smart classroom includes the entire system of group discussion, the display system and the sound reinforcement system with interactive all-in-one touch PC.

Key product within this solution (Standard Configuration): The Intelligent Conference Table (For 5 persons) solidifies the formation of student-centered teaching. Students see the teaching content clearly and the intensive involvement creates a good atmosphere of mutual motivation and active exploration. Teaching becomes interactive and flexible and each student is an active member and may be nominated

the group's spokesperson in the classroom. The table is recommended for college campuses and it presents the best group level learning and discussion mode.

3.1.2. The Solution's Significance and Problems Solved

The multi-group interactive smart classroom provides comprehensive support for a series of group discussions such as group grouping, group discussion exchange, group results display. It builds a smart teaching environment with communication and discussion, multi-screen interaction and results display functions and therefore, it becomes easier to organize group discussion, workshop and seminar activities by visualizing the discussion process and the details.

Classroom tables and chairs can be moved quickly and flexibly to form an independent seminar space. Each group is equipped with an all-in-one PC with interactive functions, compatible with various operating systems and suitable for connection of various sizes of screens and different resolutions of computers, tablets and mobile phones. With intensive teaching, it is not only convenient for students from different directions to watch the teaching content nearby, but also enables each group to conveniently present and display the content, the discussion screen and the results of the discussion.

3.2 Individual Product Information

3.2.1 Intelligent Conference Table (Standard Configuration)

Product General Information:

The intelligent conference table can be widely used in the education system as an effective teaching aid. Modern teaching focuses on practice, sharing, interaction and inspiration. Teachers can use tablet computers, laptops, etc. to share slides, pictures, videos to large screens and they can encourage participants to master the knowledge actively and intuitively. The table is used for micro-classroom teaching where participants/students can share the micro-learning videos in the same space at the same time. After sharing, they can communicate with classmates and teachers in a timely manner and as a result, teaching is improved greatly. Students can also display their practice results on the big screen in the classroom to give feedback on what they have learned. The teaching content can be seen clearly during the concentrated lectures and the students of each group can demonstrate separately during group discussions.

The intelligent conference table can accommodate up to 5 people at the same time for discussion and learning, effective communication and knowledge sharing. Product elements, colors and materials can be customized.

Product Specifications:

Standard external dimensions: 1800 mm (front to rear), 1400 mm (left and right), (upper and lower without bracket).

Interface box size: 266 * 130 * 135 ㎜. (Connectivity, charging sockets are found here and configurable).

Capacity: 5 seats. Optionally 7 seats

Material: Table surface material (two options): 18mm laminate board or 25mm multilayer solid wood board.

Body: High-quality cold-rolled steel plate.

Interface box: high-quality brushed aluminum;

Other features: The display side supports a touch all-in-one display system, up to a maximum of 65 inches.
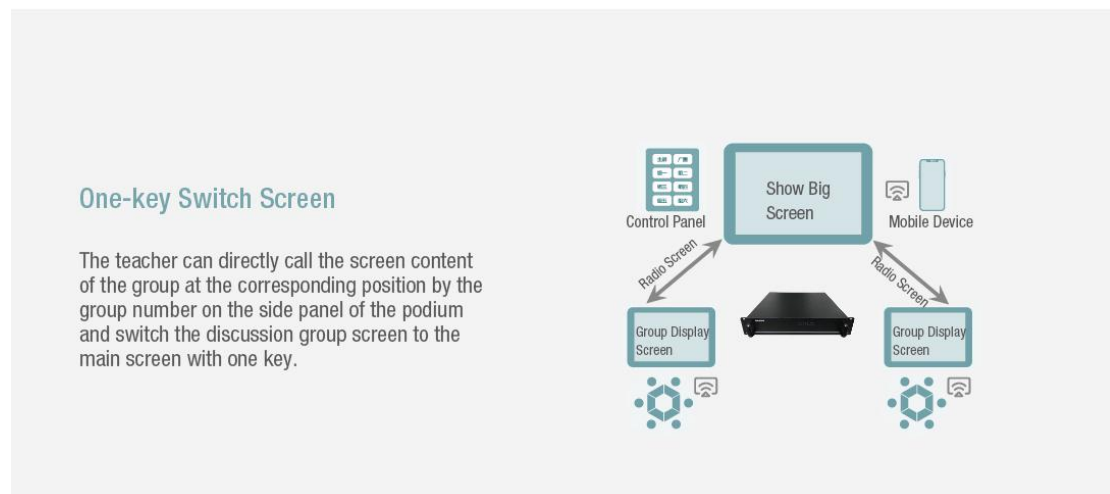
3.2.2. Smart Classroom Seminar Teaching System (Standard Configuration)
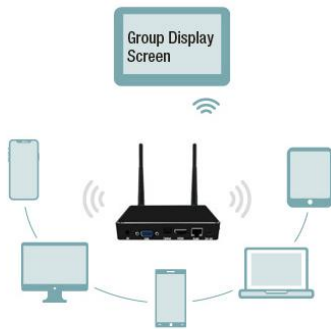
One-key Broadcast

Teachers can press the "Broadcast" button on the side panel of the podium to broadcast the main screen to the display screen of each group in real time so that students can clearly see the teacher's explanation.

The smart classroom teaching system includes a touch panel for interactive communication between teachers and students. The matrix switcher handles how and where teaching information displayed on the classroom screen and on the group screens. In other words, it is possible to broadcast the content of the teacher in real time to the desktop display of each group of students. The information of a group can also be shared to the main screen in the classroom.

One-key Switch Screen

The teacher can directly call the screen content of the group at the corresponding position by the group number on the side panel of the podium and switch the discussion group screen to the main screen with one key.

The system provides support for multi-screen interaction between teachers and students. Teachers can freely access the screen content of any group and can also synchronize the large screen of the classroom to the student's screen through a screen broadcast.

Wireless Screen

The content on mobile devices such as mobile phones and PADs can be linked via WIFI to realize small screen and large screen interaction, making the classroom environment more free and easy.

01 Teachers can teach anywhere in the classroom, free from the constraints of the podium or whiteboard.

02 It gives teachers more freedom in teaching and fully interact with students on teaching content.

03 No need to install any plugins. Support wireless screen projection for ios and andrid devices.

04 Wirelessly transfer your phone's screen to the big TV screen. No need to connect touch, VGA or HDMI cable.

3.2.2.1. Smart Classroom Central Controller for Smart Classroom

This system uses a 7-inch LCD all-in-one touch panel as the interactive video platform to teachers and students. Two video modes are available: one, to broadcast the teacher's teaching content to the display devices of each group in real time and, two, the group teaching mode where the teacher controls switching the display devices of each group at any time to share resources among groups.

For all room control functions, there is a chip card authorization: when the card is inserted, lighting, curtains, air conditioners and other environmental facilities are turned on according to the presets. At the end of the class, the teacher can just take out the card to turn off all classroom devices safely.

Group level and individual level sharing:

1. In the smart classroom environment, the class screen information can be broadcast to any group screen and the discussion process of any group can be synchronized to the group screen and/or to the classroom screen. Teachers can easily step into the student discussions, evaluate each group and each student's active involvement and learning and understanding of the topic at hand; differential teaching is thus realized.

2. Wirelessly link and share teaching/project content of any student device to the big classroom screen.

Comprehensive IOT management functions make the teaching environment even smarter with one-key control of PCs, lights, curtains, air conditioners, projectors, large screens and speakers.

3.2.3 Intelligent Lifting Table

Product Specifications

Size: Tabletop 1300 * 700mm (L*W); Bezel Length: 1300mm; Width: 420mm.

One-button lift: The height can be adjusted at 700-1200mm with 40mm/s lifting speed. The adjustment is silent and stable. High memory of one-touch restoration of the preferred height. There are 3 levels of high-memory keys for easy use.

Material:

Table legs are made of high-quality steel. The surface has undergone anti-corrosion oxidation treatment and high temperature curing treatment of pure epoxy resin powder with strong corrosion resistance and load bearing. It is added beveled arc design to prevent kick injury. 120KG safe load-bearing and easy to lift.

Table top is melamine/laminate and board of thickness: ≥18mm. Tabletop is equipped with a professional monitor stand, which can be stretched back and forth to adjust the viewing distance. It is possible to lift up and down, which helps to relieve cervical fatigue. You can also adjust the tilt and the elevation as you like.

Wires: Tank chain at the bottom for easy storage of wires.

3.2.4 Training Chair

Product Specifications:

Size: 890 * 440 * 450 ㎜ (chair height * seat width * back width).

Seat Cushion: A shaped cotton seat cushion with a seat shell.

Backrest Mesh: High-quality imported mesh fabric.

PP handrail, silver coated square tube stand, 1.5 ㎜ thick tube wall electrostatic surface treatment.

Optional: Caster / writing pad.

Product Advantages: It can be folded and stored without taking it apart.

3.2.5 HJ-CM28 Mobile Tablet & Laptop Charging Cart

Product Specifications

Dimensions: 660x580x953mm (without casters – dimensions for 36 bay cart).

Compatibility: Laptop & Tablet

Material: Steel + ABS. The left and right sides of the charging cabinet are made of ABS material and metal parts grounded to ensure safety from electric shock.

Charging Type: AC or USB charge.

Casters: 4 inch mute casters with brake

Lock: 2 sides lock handles with key lock.

External option: External metal switch with indicator light and power cord holder

Device Trays: ABS plastic separator with neat cable management integrated in the edges of the separators. The tray is tilted inward to prevent the equipment from slipping out. The separator distances are adjustable.

Power management system: Integrated leakage protection, overload protection, time control management and constant power supply. Multiple charging management modes (timer, cycle, constant, etc.) are available and can be set and managed.

Cooling: Multiple air flow holes for natural heat dissipation

Optional: Ultra-quiet cooling fan, timer and temperature control

4. Classroom configuration list

Multi-group Interactive Smart Classroom					
No.	Product Name	QTY	Unit	Brand	Note
1	Smart Group Discussion Table	4+	Set	Indota	Equipped according to the number of students
2	Multi-screen Interactive System for Smart Classroom	1	Set	Indota	
3	Intelligent Lifting Table	1	PC	Indota	
4	Training Chair	20+	PC	Indota	Equipped according to the number of students
5	Intelligent Blackboard	1	PC	Indota	Optional
6	All-in-one touch PC	4+	Set	Indota	Optional
7	HJ-CM28 Tablet & Laptop Charging Cart	1	PC	Indota	Standard Configuration