

Virtual Classroom

"Ideal for Video conferencing, virtual classrooms, training rooms and classrooms"



Cabinet

Operating System	Preload Windows 10
OS Compatibility	Windows / Linux
CPU	8 th generation intel core i3 processors, 3.1 GHz processing speed
RAM	4 GB (scalable up to 8 / 16 GB)
Hard Disk	1 TB
Mouse and Keyboard	Wireless
Wifi and Wireless Lan	Inbuilt Wifi and Wireless LAN card
Cabinet	1.2mm CRCA steel sheet with 2 litre capacity, wall mounted with lock facility.
Multimedia Controller	Touch pad keys, power on/off, PC on/off, Projector on/off, volume control, Mute.
Controller I/O Ports	USB 3.0 x 2, VGA In x 1, computer Audio In x 1, HDMI In x 1, LAN Port, Power socket
OS Compatibility	Windows / Linux

Smart Rostrum

Built in devices

Amplifier	100 Watts amplifiers with built-in wireless microphone receiver
Speakers	50 x 2 Watts
Wireless Microphone Units	Lapel and handheld mic x 1 with 15 meter range
Gooseneck Microphone	Cardioids/Lobar directivity Gooseneck Microphone 21.5cm with XLR output, permanent polarized, condenser, Phantom powered (no batteries required), ON/OFF Switch, ON/OFF LED light indicator.
Sliding Trays	Provision for keeping Keyboard mouse and Laptop
Power Supply	AC Supply, 180 -240V, 50Hz
EMC and Safety (for safety & display)	Password protection and physical key for secure access to system integrated authentication system having RFID
Fans	Suitable cooling fans to be provided in the lower body.
Power Consumption	120 Watt Maximum
Lan Connection	RJ45 Lan port at the panel to connect network
Construction/Exclusive Chassis	<ol style="list-style-type: none"> a. Wheel and floor mounted metallic made of polymer coated CRA steel body (MS sheet of 1.6 mm thick) with locking facility b. Wooden top has a Lock and Key with and a smooth sliding cover for opening/closing. No Port is visible/exposed. Wheel Mounted with wooden top panel. c. Rostrum has housing and construction for visual presenter. d. Rostrum body with nil screws visibility.

Touch Display

Capacitive touch with adjustable motorized tilt mechanism, antiglare scratch resistant vandal resistant screen with stable platform: -

Screen	Backlit LED, 21.5 Inches
Resolution	1920 x 1080 Full HD
Interactive Resolution	4000 LPI (Lines per Inch)
Brightness	350 NITS
Aspect Ratio	16:10
Touch Capability	Touch via finger and stylus.
Reading Accuracy	±0.5 mm (centre)
Viewing Angles	160 vertical and 170 horizontal
Response Time	Rapid response time of 5ms
Computer Interface	1 VGA/DVI Port, 1 USB, 1 HDMI

Video Conferencing Camera

Camera Type	PTZ Control Protocol
Sensor	1/2.8-inch HD CMOS sensor, 5MP
Video System	1080 p-30fps/60 fps
White Balance	Manual / Auto
Iris	Manual / Auto
Electronic Shutter	Manual / Auto
BLC	Manual / Auto
Noise reduction function	WDR 3d noise deduction
Focus	Manual / Auto
Optical Zoom	10x
Digital Zoom	12x
Image flip function	Available
Auto Gain Controller	Available
View Angle	6.3° (wide)~70° (tele)
Pan Rotation Angle	-172° ~ + 172°
Tilt Rotation Angle	-30° ~ + 90°
Pan Rotation Speed	0° ~120°/s
Tilt Rotation Speed	0° ~90°/s
Presets	128
SNR	50db
Control Port	RS232/RS485 / USB2.0
Video Port	USB 2.0
Minimum Lux	0.1 lux

Input Voltage	DC12V
Net Weight	0.8 Kg
OSD Menu	Available
Remote Control	IR Remote Control with Presets
OS	Android
Wireless communication technologies	Bluetooth
Connectivity	Wireless
Special features	Bluetooth connection to mobile devices, headset and PC.
Inbuilt Speakers (2X5 W)	Available
Inbuilt Mic	Available
Range of Mic	10 meters

IFPD

Technology	Touch LED (Light Emitting Diode) Backlit Display
Display size	80 inches Diagonal
Resolution	1920 X 1080
Contrast Ratio	15000:1
Brightness	500 cd/m ²
Aspect Ratio	16:9
Display colour	8 bit-16 million colours
Bezel Width	6cm
Dimension	1554 x 924 mm
Weight	58KG
Mounting Arrangement	Wall Mount
Panel Technology	IPS
Audio	20 watts x 2 Front throw inbuilt speakers
Input Ports	VGA IN x 1, VGA Out x 1, HDMI x 3, USB port for android x 2, LAN Port for Android x 1, SDIF, USB B Type for Touch x 1, Video IN x 1, Video Out x 1, RS-232
Ports accessibility	Accessible from front side of panel
Communication port	RS 232C and LAN
Multi Touch	IR Sensor based Touch technology with 10 touch capability.
Viewing Angle	178 x 178
Response Time	5ms
Power supply	230V AC +/- 10%, 50 Hz
Operating Humidity	95% RH

Operating temperature	5 deg. C - 40deg.C
Power consumption	380 Watts (Min.) Standby Mode 1 Watt.
Software Features	Annotation software with features erase, shapes, sizes, Edit, fonts, stamp, choose, move, capture, colour, pens, picture, video, annotate, save, Rotate, undo, image gallery, print, text, background and floating keyboard. Network classroom feature to conduct remote teaching by having interaction through all the three types of media Video, Audio and Text.
Special Features	USB Plug & Play in android supported files like document, audio, video, pdf, ppt, smart eye protection (brightness control as per light ambient), writing mode, android background change option, usb port lock for android, screen shot in single click, scheduled power on/off, energy saving ideal to standby time, support wireless and wired printer, child lock setup
Accessories	Wall mount bracket, cables and connectors, AC Power cord, Remote control, User Manual

Virtual Classroom

Virtual Classroom Software

- Shared virtual whiteboard.
- Encrypted video streaming, playback and record videos up to HD 720p
- Effective assessment analytics and reports

User Interface (UI)

Admin can manage users, roles and permissions, monitor teacher activities, brings faculty and teachers onboard.

Learner can schedule live classes, conducts exams, create distance learning courses,

Instructor can take test, enrolls in distance learning courses, pay online fees, share feedback.

Software

Supports multilingual interfaces, register multiple users, support concurrent sessions and multiple attendees in each session.

Display names for each participant connected in the session, supports multiple students in single virtual classroom session.

Web based scheduling interface to schedule live sessions

Server-side recording, Multiple simultaneous sessions, Interactive whiteboard Collaboration tools, Online course payment, SSL encryption.

Course builder: Built-in course creation template, Multiple course authors.

Exam builder: Multimedia-based questions, instant evaluation, test creation tool

Analytics & Reporting: Enrolment and attendance tracking, course completion tracking, test scores.

Mobile App: App Store, Android, you can get all notification and offline content.

- Video compression H.264 AVC/H.264 SVC or VP 8 based video compression
- Shared code editor enabling the teaching of software languages
- Participants can share their local screens or any specific applications running on their local machines within the live class
- Shared virtual whiteboard which can updates its view for all attendees in real-time

- AAC or Opus audio codec for audio
- Solution come with REST Based API to schedule sessions, Manage Users, get attendance Reports, Manage content.
- Attendee can view the list in the live class and presenter with remotely control them audio/video streams.
- Attendees to engage via Live Chat (Group & Private)
- Attendance report including total number of sessions conducted, each attendee's login/logout time, total number of minutes attended, absentees etc. The reports can be retrieved and downloaded as excel formats.
- Support 20 attendees concurrently in a live session supporting two-way live audio/video collaboration basis the available bandwidth with less than 300 milliseconds of latency for real time user experience showing five live videos at any stage.
- Web based (web app) and work in all the web browsers without any software downloads. It support major operating systems like Windows, Mac and Linux.
- The act of joining a session require authentication by the user over OAuth2.0, or other standard SSOs if desired
- Instructor/Co-instructor having the rights to remove the unwanted attendee from the live session
- Intelligent built in capability for dynamic bandwidth, resolution matching to give each user an experience for his available bandwidth. In case, an endpoint is unable to support video + audio due to lack of bandwidth, system make that endpoint fall back to pure audio maintaining the continuity of the session.
- Web based scheduling interface to schedule live sessions
- 720p live video stream with 30 fps or higher.
- Both 4:3 & 16:9 aspect ratios minimum bit rate of 250 kbps per user connection for video connection.
- Support various layout adjustment with different video sizes or no video at all. Display names for each participant connected in the session
- Record all session content: video, audio, whiteboard and presentation.
- Record and playback High definition video and presentation, up to HD 720p or higher
- Built in content management portal that allows easy user access to all recordings
- The management portal must support sort of the recordings by various parameters such as name and duration
- Allow users to view recording only when they access web app via password
- Fast forward, rewind and skip video of recording during playback
- Streamed via HLS in Chrome/Firefox.
- Allow additional registered co-instructor, with enough permissions, to schedule a session at any time
- Support scheduled sessions and ad hoc sessions mode at the same time
- Instructor managed mute control for both audio & video
- Stored Recordings back in the content library automatically
- Downloadable Session Recording in mp4 format.
- Multiple & minimum of 4 session layouts and presentation modes: Video with whiteboard/content, multiple
- Instructor/Co-instructor can annotate on top of the shared content (like PDF, PPT and DOC) in the session
- Co-Instructor can play a video file, conduct a poll during the session, text tool inside the whiteboard
- Allow for multiple image formats like JPG, PNG, JPEG etc. to be uploaded and shared during the session
- Display the time lapsed and time remaining, Option to extend the duration of the class from within the session.
- Instructor/Co-instructor can annotate on top of the shared content (like PDF, PPT and DOC) in the session
- supported on Android smart phones and tablets via mobile apps
- Web app and mobile apps has included a feature that enables participants to text chat while in session

- Administrator can centralized directory of all registered users.
- Registered users access based on administrator privileges.
- Email notifications about session scheduling, session reminder, etc.
- Management console can personalize virtual classrooms. Access to virtual classrooms can be protected by
- Restrict or authorize the recording capabilities to a definite set of users
- Web-based UI to modify and adjust session invitation emails
- Create/delete new users through a CSV file
- Role management of the users
- Each Instructor/Co-instructor can create their online content library for contents like videos and
- Upload different types of file formats, MS Word, MS PPT, MS Excel, PDF and videos in the dedicated cloud content library's
- Share Word Doc, PowerPoint, PDF and videos without having to share screen within the live session
- Add meta data (title, description, language) to each uploaded file
- Admin/Instructor can save the recordings file on a local disk.
- Facility of Save to pdf option in the live class in classroom
- Using data card (3G,4G), broadband, leased line or any other form of connectivity.