

# VIRTUAL CLASSROOM

## for an Interactive Learning environment

Hugo Techno presents Virtual Classroom **HT VC-Exclusive** having camera and **USB Mic**. An exquisite & symmetrical in design includes 80 inch Display, Amplifier, Speakers housed in array, Video Conferencing Camera with USB Mic for a highly interactive Virtual Classroom.

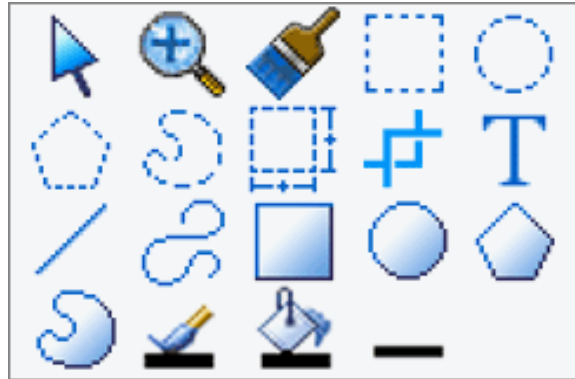


We work closely with each of our client to provide them the finest products & solutions by mapping out their ethos & exact requirements to help them to achieve their goals.

**hugo**  
TECHNO

Model: HT VC-Exclusive

In addition to provide the best meeting/conference and classroom environment we offer some additional software & feature.



ANNOTATION SOFTWARE - Annotate, Edit, Print, Email, Save, Delete, Copy, Paste, Color, Choose Pen, Floating Keyboard etc.



NETWORK CLASSROOM FEATURE - Conduct sessions without any demographic limitations, through all types of media files.

## Product Specifications:

### Computing Cabinet

|                             |   |
|-----------------------------|---|
| Cabinet                     | Powder coated CRCA Steel Sheet of minimum 1.2mm thickness Wall Mounted Lockable Enclosure to house Computer, Controller, Visualizer & Biometric attendance device |
| I/O Ports                   | HDMI x 1, Display Port x 2, USB ports x 6, LAN Port x 1   |
| CPU                         | Intel Core i3, 3.1 GHz, 8 <sup>th</sup> generation, CPU cabinet with 2 ltr volume   |
| Wifi                        | Inbuilt   |
| RAM                         | 4 GB  |
| Hard Disk                   | 1 TB  |
| OS Compatibility            | Windows / Linux   |
| Wireless Keyboard and Mouse | Provided  |
| Operating System            | Windows 10 Pro Academic   |

### Display Screen

|                              |   |
|------------------------------|---|
| Special Features             | 24 x 7 operation, Energy Saving Setup, Single Click Screen capture and source selection on remote control, Audio only feature Scheduled Power On/Off, Child Lock Setting, USB Port Lock for Android, Smart Eye Protection: - Eye protection in writing mode, eye protection brightness, control mode change screen brightness based on ambience of light, Auto select new source when detected, Background setting for Android, |
| Size of Display & Resolution | Diagonally 80 inches & Full HD 1920 X 1080  |
| LED Backlit Technology       | Yes   |
| Display colors               | 8 bit-16 million colours  |
| Touch Technology             | IR  |
| No. of Touch                 | 10 Touch capability   |
| Brightness                   | 500 cd/m <sup>2</sup>   |
| Aspect Ratio                 | 16:9  |
| Contrast Ratio               | 15000:1   |
| Input Ports                  | HDMI x 4, HDMI Out x 1, USB 2.0 x 2 ( One for PC and One for Android), USB B-Type x 4 for touch, VGA x 1 (shared with HDMI 4), Audio In for VGA Port, Micro SD Card Slot, USB 3.0 x 2 (one for PC and One for android), DP Port x 1, AV x 1, Ear phone x 1, SPDIF x 1, LN Port IN x 1,for Android, LAN Port Out x 1, Wireless LAN Support with dongal   |
| Inbuilt Speakers             | Yes   |
| No. of Speakers & Power      | 2 speakers, 25 Watts RMS each   |
| Communication port           | RS 232C   |
| Power supply                 | 230V AC +/- 10%, 50 Hz  |
| Power consumption            | 450 Watts   |
| Network Classroom Feature    | Available   |
| Annotation Software          | Available   |
| Accessories                  | AC Power cord, User Manual, Remote control, Wall mount bracket necessary cables and connectors  |

## Digital Podium

|   |  |
|---|--|
| <b>Type of podium</b>   | The enclosure is made of Polymer Powder Coated Steel Body with wooden top panels, designed to work in suitable environmental conditions. The construction of the podium is such that, while the podium is locked and not in use, there is no any port exposed/ visible on the outer body for breakage/mishandling. Wheel mounted capable of moving in all directions with lock facility while the Electronic podium is in use. The wooden top has lock and key and a sliding cover for opening/closing easily. The Podium has housing and connectivity for Visual Presenter while the visualiser is in use and not in use. At the time of using the Visualiser, drawer can be opened, and Visualiser can be used. Provision to keeping laptop and Keyboard & Mouse and suitable cooling fans provided in the lower body. |
| <b>Display</b>  | Built-in highly sensitive Interactive Panel with motorized adjustable tilt & a mechanism to make the Panel stable so that it does not shake while writing  |
| <b>Type of Screen</b>   | LED  |
| <b>Display Size &amp; Resolution</b>                          | 53.0 cm & 1920 X 1080  |
| <b>Aspect Ratio</b>   | 16:9/16:10   |
| <b>Response Time</b>  | 5 ms   |
| <b>Viewing Angle</b>  | 170 deg. (Horizontal); 160 deg. (Vertical)   |
| <b>Computer Interface</b>                                     | USB, VGA/DVI/HDMI Port   |
| <b>Type of Touch</b>  | Finger and Stylus  |
| <b>Reading Accuracy</b>                                       | +/- 0.5mm (Center)   |
| <b>Tracking Speed</b>   | 200 points / sec. (Approx.)  |
| <b>Pen Pressure Sensitivity</b>                               | 2048 Levels; 4000 Lpi Interactive Resolution   |
| <b>Inbuilt Speaker</b>  | Available  |
| <b>Software</b>   |  |
| <b>Annotation Software</b>                                    | Features like choose pen-pencil, color, edit, print, email, save, delete, fonts, shapes, size and many others with network classroom feature to conduct remote teaching by having interaction through all the three types of media Audio, Video and Text.  |
| <b>Built in Devices</b>                                       |  |
| <b>Audio System</b>   | Power: 100W rms Amplifier (inbuilt Wireless microphone receiver) and 50W rms x 2 Speakers  |
| <b>Gooseneck Microphone</b>                                   | 21.5cm Gooseneck Microphone with XLR output with ON/OFF switch and with LED light indicating ON/OFF status, Phantom powered (no requirement of batteries) permanently polarised condenser, highly directional featuring hypercardioid /lobar directivity.  |
| <b>Wireless Microphone</b>                                    | 1 Handheld Mic, One Lapel microphone and transmitter with a range of 10 mtr.   |
| <b>Front Panel Ports</b>                                      | Power supply socket Computer Audio IN, VGA IN, USB 3.0 x 2, HDMI IN  |
| <b>LAN connection</b>   | RJ45 LAN Port  |
| <b>Central Controller with Panel and video scalar feature</b> | Volume Control, Power on/off, Projector/ Display on/off, Mute, External PC input, VGA, Touch Key pads. Selection switch to toggle between various sources for the output on the projection screen through a touch panel  |
| <b>Security</b>   | Physical Key for secure access to system and Integrated authentication System having RFID, Password protection.  |
| <b>Podium Power Supply</b>                                    | 180 -240V, 50Hz, AC Supply   |
| <b>Podium Power Consumption</b>                               | 300 Watt   |
| <b>Weight</b>   | 94 Kg  |

|                  |  |
|------------------|--|
| <b>Dimension</b> | 134.62 cm (Width) x 124.46 (Height) x 63.5 (Depth) |
|------------------|--|

### Video Conferencing Camera

|                                  |                                |
|----------------------------------|--------------------------------|
| Sensor                           | 1/2.8 inch; 5MP HD CMOS sensor |
| Zoom                             | 10x Optical; 12x Digital       |
| Video System                     | 1080 p-30fps/60 fps            |
| Viewing Angle                    | 6.3 deg. wide; 70 deg tele     |
| PTZ Control                      | Available                      |
| PAN Rotation Angle               | -172° ~ + 172°                 |
| Tilt Rotation Angle              | -30° ~ + 90°                   |
| Tilt Rotation Speed              | 0° ~ 90° /s                    |
| Pan Rotation Speed               | 0° ~ 120° /s                   |
| Preset                           | 128                            |
| Signal to Noise Ratio            | >50db                          |
| Minimum Lux                      | 0.1 Lux                        |
| Image Flip Function              | Available                      |
| Auto Gain Control                | Available                      |
| Electronic Shutter               | Auto/ Manual                   |
| Backlight Compensation           | Auto/ Manual                   |
| White Balance                    | Auto/ Manual                   |
| Focus                            | Auto/ Manual                   |
| Iris                             | Auto/ Manual                   |
| BLC                              | Auto/ Manual                   |
| WDR, 3D noise reduction function | Available                      |
| Control Port                     | RS232/ RS485/ USB 3.0          |
| Video Port                       | USB 2.0                        |
| Remote Control                   | IR Remote Control with Preset  |
| Input Voltage                    | DC 12V                         |
| Accessories                      | Ceiling Mount Kit              |
| Net Weight                       | < 1 Kg.                        |

### Wireless Mic and speaker (USB based)

|                                     |  |
|-------------------------------------|--|
| Operating System                    | Android  |
| Connectivity                        | Wireless   |
| Inbuilt Microphone                  | Available with 10 meter range                            |
| Wireless communication technologies | Bluetooth (connection to Mobile devices, headset and PC) |
| Battery Life                        | 15 Hours   |
| Speakers                            | 5W x 2   |

## Virtual Classroom Software with Learning Management System

- Supports major operating systems like Windows, Mac and Linux
- Username and password authentication
- 10 TB of cloud storage to store session recordings.
- The management console supports personalized virtual classrooms. Access to virtual classrooms can be protected by username and password authentication so that before the Instructor/Co-instructor enters, participants are placed in a virtual waiting room. The management portal can sort the recordings by various parameters such as name and duration
- 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.
- Supports both 4:3 & 16:9 aspect ratios. Supports minimum bit rate of 250kbps per user connection for video connection.
- Register 5000+ users with multilingual interfaces including English and other languages.
- User interface and role management for Administrator, instructor and learner. Create/delete new and bulk users through a CSV file
- The administrator is able to provision a centralized directory of all registered users. Support registered users access based on administrator privileges.
- Instructor can annotate on top of shared content (like pdf, ppt and doc) in the session. Can also Upload and share multiple image formats like JPG, PNG etc. during the virtual classroom session [upload files with minimum of 1 GB file size or more with ability to add meta data (title, description, language) to each uploaded file]
- Instructor/Co-instructor has the ability to share desktop using screen sharing, access his or her Content Library, upload and share content from desktop, plot shapes like triangle, rectangle, cube, advanced Shapes like Flow charts, Chemistry, Maps and Grids, Emoticons etc. during the session
- Allows additional registered coinstructor, with sufficient permissions, to schedule a session at any time
- Instructor/Co-instructor has the rights to remove the unwanted attendee from the live session
- Co-Instructor can play a video file, conduct a poll during the session
- Scheduled sessions and ad hoc sessions mode at the same time
- Displays the time lapsed and time remaining, Option to extend the duration of the class from within the session.
- Support 720p live video stream @ 30 fps and four layout adjustment with different video sizes - Video with Whiteboard/Content, Multiple Videos in Tiled Layout, Full Screen Video Layout, Full Screen Whiteboard/Content. text tool inside the whiteboard



- Easy switching of virtual classrooms by the user, as easy as logging out from one and logging in into another session.
- Session can have authentication by the user over OAuth2.0, or other standard SSOs if desired
- The web app and mobile apps includes a feature that enables participants to text chat while in session (Supported on Android smart phones and tablets via mobile apps)
- The management application provides the Virtual Classroom admin with the ability to limit the maximum number of participants. The management application also support multi-tenant architecture where users are registered per person
- The virtual classroom application provides intuitive web-based UI to modify and adjust session invitation emails and also gives ability to restrict or authorize the recording capabilities to a definite set of users
- Completely cloud based solution supporting 720p live video stream with 30 fps.
- Upload different types of file formats viz. MS Word, MS PPT, MS Excel, PDF and videos in the dedicated cloud content library
- Schedule live session with web based scheduling interface
- The web app supports automatic NAT firewall traversal, ICE, STUN, TURN protocols for secure connectivity over internet. The media traverse over encrypted SRTP (Secure RTP).
- Live group and private chat
- SMS-invites, Email notifications about session scheduling, session reminder, etc. to all registered participants
- Share Word Doc, PowerPoint, PDF and videos without having to share screen within the live session
- Content library to create interactive, multimedia rich courses.
- Class recording automatically available for web and mobile streaming, support minimum of 20 concurrent recordings. Record all session content: video, audio, whiteboard and presentation.
- Record and playback High definition video and presentation, up to HD 720p. A built-in content management portal that allows easy user access to all recordings
- Support HTTPS Live Streaming of recorded sessions (audio/video) for higher security. Option of Instructor managed mute control for both audio & video. Media traverse over encrypted SRTP (Secure RTP)
- Support H.264 AVC/H.264 SVC or VP 8 based video compression
- Support AAC or Opus audio codec for audio
- Shared media player enabling the presenter or attendees to share any audio/video file (streamed directly from the cloud)

- REST Based API to schedule sessions, Manage Users, Get attendance Reports, Manage content.
- Connect any endpoint which is connected to the internet using IP v4 or IP v6.
- 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, the system make that endpoint fall back to pure audio maintaining the continuity of the session.
- Configurable, if a particular class requires the recording to start by default (On per class basis).
- In auto-recording of a class, configure whether the presenter should or should not have the permissions to pause and restart the recording. Store recording back in the content library automatically, download in mp4 format
- View attendee list in the live class and provide the presenter with the ability to remotely control their audio/video streams. Enable attendees to raise their hands during the live class.
- Users can view recording only when they access web app via password. They can fast forward, rewind and skip video of recording during playback.
- Session Recording can be streamed via HLS in Chrome/Firefox. The Admin/Instructor are allowed to save the recordings file on a local disk.
- Facility of Save to pdf option in the live class
- Exhaustive assessment options, reports and analytics
- Shared virtual whiteboard for real time view updates to all attendees. Participants can share their local screens (or any specific applications running on their local machines) within the live class
- Connected attendees to engage via Live Chat (Group & Private)
- Load content from Gmail, Google drive etc in to the library and play Youtube videos within live classes
- Course certificate for learners
- Extend the duration of the class from within the virtual classroom session with time lapse and time remaining options



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