

eLearning Lab

“Revolutionising your classroom into a funfilled interactive learning centre”



eLearning Lab**All in one Student Computer (Twenty)**

21.5" diagonal FHD anti-glare IPS LED Backlit LCD Display with integrated PC

CPU	8 th Generation intel core i3 processor, 2.20 Ghz base frequency
Operating System	Windows 10
Native Resolution	1920 x 1080 (Full HD)
Contrast Ratio	1000:1
Brightness	250 nits
Aspect Ratio	16:9
Viewing Angle	178 ° / 178 °
Backlight lamp life	30,000 hours
RAM	4 GB
Hard Disk	Minimum 1 TB HDD with 256 GB SSD
Wi-Fi / Wireless LAN Card	In-Built
Audio I/O	Integrated HD audio card & stereo speakers, microphone / headphone combo jack.
Webcam	Integrated HD camera (1280 x 720), 30 FPS, with Mic and privacy shutter.
Ports (I/O)	LAN Port x 1, USB 3.1 ports x 2, HDMI x 1, 3 in 1 Card Reader (SD, SDHC, SDXC), USB 2.0 ports x 2
Optical Drive	8x optical DVD slim writer drive In built
Keyboard & Mouse	Wired keyboard & Mouse
Headphone with microphone	3.5 mm wired headphone jack, input impedance: 32 Ohms, frequency response (Headset): 20Hz to 20kHz, frequency response (microphone): 100 Hz –16kHz, Cable length: 1.8m, working with common calling applications
Power Adapter	65 W external power adaptor with 90% efficiency

Furniture (Twenty)

Students Chair	Gas lift nylon base medium back chair with spring back, PU moulded seat & back cushion, PP back cover, fabric tapestry in blue/ black colour.
Students Desk	Linear type sharing student desk, size (750 x 600 x 750HT), table top - 25mm thick pre-laminated particle board finished with 2mm PVC edge banding. Partition - 18mm thick pre-laminated particle board. Under-structure - 18mm thick pre-laminated particle board. Wire Management - Wire manager hole per workstation. Seating capacity – 1/2 students.

Online UPS (One)

Liquid crystal display - charging current, load level, output voltage, bypass mode, charging voltage, AC / battery mode, fault indicator, various beeping frequencies for indicating different modes / faults.

Rating	5.5 KVA / 4.4 KW
Transformer	Built in Step up & Isolation transformer on output.
Generator compatible	Generator compatible
Hot Standby	Connection facility for hot standby
Bypass	In built bypass switch
Input Sources	Dual source input

Power factor	0.8
Compatible Battery	Charging at 2/4/8 Amp, 16 nos. Batteries Tubular Battery / SMF / VRLA /
Output	208V AC ~ 230V AC, frequency 50Hz ± 0.1Hz, voltage regulation maximum 1% in battery mode.
Ventilation	Proper and effective heat dissipation
Input	Single Phase, 170V AC ~ 280V AC, 40Hz ~ 55 Hz @ 50 Hz System
Monitoring & Scheduled	Lock monitoring with scheduled shutdown controlled

Networking (One)

Electrical connectivity with Network Rack	19" Wall mount 4u rack with PDU 19", horizontal 6-way, universal socket 5 amp with on/off switch and indicator and 2.5 metre cable and 3 pin plugs. Single section with front toughened glass door, 400mm depth, strong steel end, frame embedded at top and bottom with cable entry provisions with lock & key.
Network Switch	24-Port Gigabit Smart Switch, Gigabit Ethernet connections on all ports provide full speed of data transferring, L2+ Feature, Static Routing, helps route internal traffic for more efficient use of network resources, Integrated security strategy including 802.1Q VLAN, Port Security and Storm control help protect LAN area investment, L2/L3/L4 QoS and IGMP snooping optimize voice and video applications, IPv6 support, MLD snooping, IPv6 neighbour discovery, WEB/CLI managed modes, SNMP, RMON and Dual Image bring abundant management features.
Cat6 23AWG UTP Cable	4 Pairs Unshielded Twisted Pair (UTP) Cable Solid Bare Copper Conductor Metal, Conductor Diameter: 0.560mm (23 AWG), Insulation: 0.970mm Diameter in HDPE, Cable Diameter: 6mm, with PE Central Cross separator.
Accessories	Cables, screws, fasteners, switch board, sockets, I/O face plates, connectors, electrical accessories, conduit, baton, flexible pipes, etc.

Digital Board

Frame	1.2 mm CRCA Steel Sheet with wall mounted sliding structure with 65 inches diagonal of writing board
Capacity	Provision to house Computer, Controller, Visualizer & attendance device with wall mounted locking facility.
Operating System	Preload Windows 10
OS Compatibility	Windows / Linux
CPU	8 th generation intel core i3 processor, 3.1 GHz processing speed in 2 litre volume body.
RAM	4 GB (scalable up to 8 / 16 GB)
Hard Disk	1 TB
Mouse and Keyboard	Wireless/Wired
I/O Ports	Display port x 2, USB x 6, LAN x 1, HDMI x 1
Wifi and Wireless Lan	Inbuilt Wifi / Wireless LAN card
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

System Audio 100 watts rms amplifier, 50 watts rms x 2 housing array speakers.

Visualizer

Technology Complementary Metal Oxide Semiconductor (CMOS)

Capture Size A4 Size Sheet (210mm x 297mm)

Scan Object Objects, Books, Documents, slides, any paper, etc..

Image Rotation Facility Rotating camera head, -180 Degree H and 180 V

Image Pick Up Device 1/3 CMOS

Digital Magnification 8x

Optical Zoom 12x

Type Portable

Resolution 1920 x 1080 Full HD

Focus Auto Focus

Focus Length 3.7mm

Video Frame Rates (fps) 30 Frame Per Second (fps)

Computer Interface USB

Light Source White LED

IFPD

Technology Touch LED (Light Emitting Diode) Backlit Display

Display size 65 inches Diagonal

Resolution 1920 X 1080

Contrast Ratio 15000:1

Brightness 500 cd/m²

Aspect Ratio 16:9

Duty Cycle 16 x 7

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.
Orientation	Landscape
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.
Power backup	1 KVA UPS with casing and batteries with 20 minutes backup time.
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
Air Conditioner	3-star 1.5 Ton Copper Split Indoor AC Indoor with remote control and digital stabilizer.
Electrical Fixtures and LED Lights	Six LED ceiling lights of 5watt each and electrical points for each work station.

Language Lab

- 1 Teacher licence terminal & 20 Students terminal.
- Assign homework directly to the student so they can do homework and submit files to instructor module for evaluation, teacher can assign home work to students – Online & offline
- Broadcast audio messages to one student or selected group, teacher can also view students through webcam.
- Intercom communication between teacher and students – two-way communication – through audio and text.
- Audio supervision is to listen any student and check their work progress.
- Send chat alerts directly to the students through chat text and audio.
- Create assignments and broadcast to the class.
- Report & Analyse generating various reports to analyse and check the progress report of students.
- Create personal Audio Video lessons content. Teacher can also assign the pre-recorded lesson for future dates.
- Broadcast messages to selected students, a group or to a whole class by instant audio chat and message.
- Supervision real time monitoring of student's activity. An incognito supervision of student's activities by listening discreetly to the voice of the selected students
- Student can call the teacher in case of any doubt.
- Paperless e-exam with automatic submission of answer sheets on completion of timelines.
- Audio modulation is generating graphical representation on the recorded audio of the learner as against the originals for self-assessment and evaluation.
- Create online exams or assessment exercises and conduct them based on the assigned audio and video lessons, having

option to create questions in the form of multiple-choice questions and should generate instant and simultaneous scores.

- Online circulation of integrated study material of multimedia media files of audio, video and text in English with option in UK, US and neutral accents.
- Life Time Perpetual License.
- Secured login main interface of the teacher with password protected login should have different options to teach effectively in a lively manner.
- Management with password protected login, having option to monitor the real-time activities of both teachers and students and view various reports of scores, grades, performance graph/bar/pie in exercises, answer sheets, teacher and student attendance reports. Supervisory features with real-time monitoring of students by activity indicator.
- Providing Parents with password protected login, enable them to view their children's reports on attendance, score/grades, activity, performance and examination.
- Audio communication to an individual student without disturbing others through audio/text and similarly, students should have the option to talk to the teacher personally.
- Broadcast messages to selected students, a group or to a whole class by instant audio chat and message.
- Supervision real time monitoring of student's activity. An incognito supervision of student's activities by listening discreetly to the voice of the selected students
- Assign work to teacher can create and assign lessons/works to whole class.
- E-Books to teacher can able to upload PDF files (e-books) for the students to read and able to provide writing assignments to the students.
- External Media for teacher to use any external storage device (USB, CD/DVD) to play or display the content files.
- Teacher feedback to conduct live language classes and the system should be able to record the feedback of all the students simultaneously.
- Compatible with multiple Languages, as content fed in to the platform in multiple languages.
- Online Assignments to view the assignments submitted by the students and respond to the students with the feedback.
- OS supported Software should support on LINUX, Thin Client
- Android & iOS supported mobile app so teacher can assign activities, Student can do the assignments and teacher can evaluate it.
- 3 levels of multimedia English content learning: Basic, Intermediate and Advanced with substantial content to hone the learner skills and it is based on the blended learning mechanism.
- English content frame work as per the common European frame work of reference (CEFR)
- Proper sound articulation for all 44 sounds of English
- Mother Tongue Influence (MTI) removal tool
- Self-assessment & send the exercise to teacher for evaluation at conclusion of every module / lesson plan.
- Illustrated images & exercises for more than 1000 English words to improve the understanding of words.
- Meaning & Usage by explaining meaning of different English words & their usages
- Pronunciation sample lessons, words, pronunciation sounds, videos, comparison & assessment tools for proficiency in English pronunciation.
- Comprehension lesson plan with focus on expressions, situational dialogues, comprehension, exercises with comparisons & assessment.
- Pre Recorded media audio / video recorded files from poetry masters, writers, speeches, lectures, documentary, movies, news, etc. to improve comprehension of language.