

TECHNICAL SPECIFICATIONS FOR WIRELESS INTERACTIVE AR-VR HMD VISUALIZER WITH APPLICATION FOR SCIENCE COMMUNICATION

Quantity : 16 lots (Each Lot comprising with four wireless Head Mount Device (HMD) units with specified chargers and accessories)

A.1 The vendor should supply the AR-VR system with application as per following specifications:

- i. The virtual reality HMD hardware should be supplied in a ruggedized portable storage unit with a maximum of 4 VR/AR headsets with built-in charging facilities for all four headsets simultaneously with a built-in efficient cooling system to be placed inside a hard plastic molded rugged case having auto pressure release function and with built-in customized molded soft packing to accommodate each headset separately for safe transportation.
- ii. The HMD unit is having built-in integrated display resolution of not less than 2560x1400 UHD display with minimum refresh rate of 70Hz on 5.5-inch integrated screen permanently fitted inside the headset and should not be removable.
- iii. Externally display fitted with the HMD will be rejected.
- iv. Quad-Core ARM Cortex-A17 processor only with 2 GB DDR and 16 GB built-in internal storage.
- v. Built-in stereo speakers and internal microphone with built-in minimum 4,000mAh Lithium-Ion Battery for charging the headset.
- vi. Each headset should have integrated controls on the side of the headset for ON/OFF toggle and volume control function. No external clicker/handheld control device will be accepted.
- vii. Integrated AR/VR headset should have a minimum 8 MP Auto-focus Front-Facing camera for integrated AR functions and should have built-in Fresnel/Aspherical lens with adjustable distance with just a control.
- viii. Dimension will be not exceeding 185mm x 155mm x 102mm with weight not more than 500 gms.
- ix. The AR/VR Headset should have built-in light and proximity sensor /G-sensor/Electronic Compass and a minimum 9 Axis Gyroscope system
- x. Inbuilt 802.11 a/b/g/n Dual band 2.4/5 Ghz. Wi-Fi and Bluetooth connectivity with built-in 3.5mm stereo jack out for headphone
- xi. Inbuilt both USB port and Micro USB port for charging/connectivity in the HMD
- xii. Service &Warranty: 1 Year or more and service and support will be on-site.
- xiii. Standard certificate: UL or equivalent, FCC Class "A" or equivalent, Energy Star 6.0 or equivalent
- xiv. Lockable Interface facility and facility to view remote cache content.

- xv. The HMD should have the following teacher/instructor control facility and features allowing browser based portal/real time multiple headset view/focus tracking/teacher/instructor guided control/customizing and creating play list/saving and sharing play list with other instructors/ facility to create dynamic point of interest/ with a minimum 100GB clouds storage facility.
- xvi. **The system should be provided with a more than 800 VR activities** comprising of minimum 360 images covering titles of Air Transport/Animals/Ancient Societies/Aztecs/Forests/Glaciers/Deserts/Eclipse/Coasts&Islands/Hot&Cold places/Mountains/Nuclear disasters/Natural disasters/Rain forests/Natural environments/physical Geography/Space/Rivers/Rocks & Caves/Sculptures etc as per detailed list attached and videos covering titles like Animal Videos/Natural environment/Arts&Culture/Science& Technology/Geography etc.
- xvii. **More than 90 3D AR** topics/content covering subjects of History/Physics & Space/Earth Science/Geography/ Chemistry/Mineralogy/ Life science & Biology/Engineering/English/Mathematics/Arts & Culture etc as per list attached, with facility for curriculum alignment, facility to create lesson plans, facility to create worksheets with built-in AR app and facility to create AR worksheets.
- xviii. **For the AR application if any tools or props is required, the bidder must submit the requirement list with details to run the AR application.**
- xix. The above systems should be offered by the OEM directly or only by his authorized partner to qualify for this tender, the letter from OEM, authorizing the partner, to bid for this tender, should be submitted along with the tender.
- xx. **The bidder should provide the list of VR and AR applications on various topics in a separated sheet as mentioned above.**
- xxi. **The application may be updated free of cost during the five years' time.**
- xxii. The VR and AR application should be relevant to the STEM curriculum/syllabus meant for the consumption of school children.
- xxiii. A training may be provided as per requirement of the council if required.
- xxiv. Installation and Commission is to be done free of cost.
- xxv. Product support will for a period of five years.
- xxvi. Compliance sheet must be submitted from the bidders.

Item :

Date:

Firm Name:

Detail (Extract from the scope and specification)	Compliance (Yes/No)
Scope & technical specification	
a) Acceptance of our scope, Technical specification and meeting to end specification	