

**Specifications for Touch panel Tablet,USB Hub,Headset and Stand**

Sl. No	Description of the Specifications	Parameters	Vendor Compliance Yes/No	Vendor remarks / offered parameters
<b>1.0</b>	<b>Over all Features of System</b>			
1.1	System requirement	: It is required for configuring the system for Voice communication over IP by using in-house software. All specified items shall work as Voice communication unit with open source and in-house developed software.		
1.2	Requirement of Processing / Tablet system	: Required Processing systems with Android based Operating System as indicated in the detailed specifications.		
1.3	Mode of operation	: The unit will be in Listen mode and enabled to transmit / talk mode with PTT (press- to talk) switch through Handheld microphone or GUI software based touch button.		
1.4	Peripherals (USB Hub, Power adapter with USB-C)	: Offered & supplied peripheral should be interfaced with Processing system / Tablet touch display for enabling the talking and listening the voice. The drawing attached indicates the required configuration of the peripherals.		
1.5	USB Hub	: USB hub is required to enhance the number of ports required to connect Microphone, Headsets ( more than 1 No.), external speakers, Ethernet, charger, Keyboard, Mouse and spare port.		
1.6	Power adapter with USB-C	: It is for powering the Processing system along with other peripherals devices.		
<b>2.0</b>	<b>Specifications of Processing / Tablet system with ANDROID Operating System</b>			
2.1	Details of Product	: Make & Model		
2.2	Website details of product	: URL link / website link of the product		
2.3	Features of Processing system			
2.3.1	Form factor	: Compact / Tablet 2-In- 1 Multi-Touch Screen		
2.3.2	Storage media	: RAM, ROM, SD Card		
2.3.3	Graphics Card	: Mali-G71 mp2 or equivalent or better		
2.3.4	Audio	: Internal Speakers and 3.5 mm Audio Jack		
2.3.5	Functions & Interfaces	: Power Button, Volume Up/Down Keys, USB connector (Type-C)		
2.3.6	Operating System	: Android 10 OS or latest version		
2.4	Device Primary Interfaces			
2.4.1	Touchscreen	: 10 point multi-touch		
2.5	Display			
2.5.1	Type	: LED / TFT		
2.5.2	Resolution (Pixels)	: 1280 x 800 or Higher		
2.5.3	Display Size (Inch)	: 10.4 (+/-0.3)		
2.6	Processor and Graphic Card			
2.6.1	Processor	: Exynos 7904 or equivalent or better		
2.6.2	Processor Speed	: 1.60 to 1.80 GHz or Higher		
2.6.3	Processor Core	: 8 core or more		

2.6.4	Graphic Processor type	: GPU		
2.6.5	Graphic RAM type	: Shared		
2.7	RAM, ROM and Flash Storage			
2.7.1	RAM Size	: 4 GB or Higher		
2.7.2	ROM/Flash Type	: Internal Memory		
2.7.3	Internal Memory size	: 64 GB or higher		
2.7.4	Expandable storage type	: micro SD		
2.7.5	Expandable storage size (GB)	: 512 GB or more		
2.8	Hardware Interfaces			
2.8.1	USB	: 1 x Type-C USB 2.0 or higher and (Optional 1 x Type-A USB 2.0 or higher)		
2.8.2	Interface for keyboard	: Pogo type/ USB / Detachable Keyboard plus touchpad		
2.8.3	Ethernet	: Connectivity to Ethernet via USB Type-C to Ethernet adaptor (compatible with the USB Extender to USB Type-C adapter offered)		
2.9	Camera			
2.9.1	Rear camera	: 6-megapixel or Higher (optional)		
2.9.2	Front camera	: 4-megapixel or Higher (optional)		
2.10	Audio			
2.10.1	Speakers	: Loudspeaker with Dolby Digital or better. The loudness of the speaker should be clearly audible minimum up to distance of 5 feet with good fidelity.		
2.10.2	Headphones jack	: 1 x 3.5 mm Audio Jack		
2.11	Wireless Connectivity			
2.11.1	Bluetooth	: Bluetooth Wireless 3.0 technology or better		
2.11.2	Wi-Fi	: Wi-Fi: IEEE 802.11 a/b/g/n/ac compatible		
2.11.3	Wi-Fi enable / disable	: Preferably Should have a provision to disable the Wi-Fi option visibility from the Settings panel.		
2.12	Battery			
2.12.1	Battery Average Life	: 6 Hours (Min.) or Higher		
2.12.2	Battery Average Life standby	: 8 Hours (Min.) or Higher		
2.12.3	Battery Charge	: Through standard adapter (supplied along with unit) as well as through USB-C PoE adapter with 6100 mAh or better		
2.12.4	Battery Maintenance	: Replaceable Battery		
2.13	Dimensions and Weight			
2.13.1	Length x Width x Thickness (Max.)	: Not more than 260 x 160 x 15 mm		
2.13.2	Bezel width	: Should be narrow bezel width, preferably less than 15mm		
2.14	Accessories			
2.14.1	Charger	: Wall charger/ Adaptor with Suitable charging cable		
2.14.2	Charger Cable length	: 1 Meter or more		
2.14.3	Cover cum kick stand	: Suitable Tablet cover cum kick stand, foldable at any level / multiple angles		
2.14.4	Drivers	: All the hardware components / peripherals should compatible & functional with provided OS		
2.15	Magnetic Flip Cover cum Stand			
2.15.1	Cover	: Leather/ Fiber or better		

2.15.2	Locking System	magnetic Lock cum lock		
2.15.3	Size and Fit	Suitable and compatible for the offered Android Processing system		
<b>3.0</b>	<b>Specifications of USB Hub/ Docking Station (6-ports, USB 3.0) with cable</b>			
3.1	Details of Product	: Make & Model		
3.2	Website details of product	: URL link / website link of the product		
3.3	<b>Features and Specifications</b>			
3.3.1	Interface with Compact computer/ Offered Processing System	: USB Type-C		
3.3.2	No. of ports	: 6 (min.) with charging port		
3.3.3	Functional requirements of ports	: Ethernet (RJ-45)-1 No, USB type-A - 4 Nos (minimum), Charging port - PD (USB type-C) 3.5 mm Audio Jack and optional HDMI output		
3.3.4	Standard	: USB 3.0 or higher		
3.3.5	Interface connectors	: Ethernet RJ-45 (100Mbps or higher), Data USB-type-A 3.0 or higher, Charger port USB type-C (power input socket), USB type-C plug with cable (compatible with processing system interface)		
3.3.6	USB type-C cable length	: maximum 25cm or suitable to dimensions of the system		
3.3.7	Status indicators	: There shall be a indicators for Ethernet and Power		
3.3.8	Certifications / Approvals	: CE, FCC		
3.3.9	Size	: The Hub shall be compact in size and limited to maximum length of the offered system. The USB hub should be fixed on rear side of the processing system firmly to hide the interfaces.		
<b>4.0</b>	<b>Specifications of Headset With USB Connector</b>			
4.1	Details of Product	: Make & Model		
4.2	Website details of product	: URL link / website link of the product		
4.3	<b>Features and Specifications</b>			
4.3.1	Connector: USB 2.0/3.0, Type-A			
4.3.2	Headset Form Factor: On-Ear Headband			
4.3.3	Speaker Driver Size: Lesser than 30mm diameter			
4.3.4	Sensitivity: 62dBV/micro Bar, 42dBv/PA +/- 3dB or better			
4.3.5	Speaker frequency range: 20Hz to 20KHz			
4.3.6	Microphone frequency: 10Hz to 10KHz			
4.3.7	Volume Control Buttons : Shall Support Buttons for Volume Control up & down			
4.3.8	Cable length: Minimum 2 meter			
<b>5.0</b>	<b>Specification of Stand for Tab</b>			
5.1	Bottom plate	Bottom plate shall be made up of Miled Steel (MS) plate of thickness 6mm, size 150 x 120mm		
5.2	Tab Resting plate	Tab support / housing / resting plate shall be made up of aluminium plate of thickness 3mm, size 232 x 158mm		

5.3	MS strip to fix the tab plate	MS strip of 2mm thickness, size 100x32mm to fix the tab plate		
5.4	MS strip for connecting the base plate	MS strip of 6mm thick, 32.5x25mm for connecting the base plate & tab fixture (tilt mechanism fixture)		
5.5	MS strip thickness	MS strip of 2mm thickness, size 100x11mm		
5.6	Aluminium sheet	1mm, size 40 x 60mm		
5.7	M6 Hexagonal screws	Shall have M6 Hexagonal screws with SS bolt and SS washer		
5.8	CS SS screw and nut	Shall have M4x12mm CS SS screw and M4SS nut		
5.9	wing nut	Shall have M6 GI wing nut		
5.1	Rubber sheet and rubber gasket	Shall have Serrated / notched rubber sheet of 2mm thick, size 150x120mm and rubber gasket B10x2mm thick		
5.11	Tilt mechanism	Shall have Tilt mechanism, mild steel, size L-type size 72x32x28x2mm, I-type size 32.5x25x6mm		
5.12	Clamp	Shall have Clamps, U-type size 31x11x14x2mm (MS), B-type size 52x14x8x1mm (aluminium)		
5.13	Drawings	Tentative drawings are attached for the reference; however, Vendor should submit the actual design drawings along with offer including 3D design / rendering drawing. Vendor / Manufacturer shall provide stand designs based on the indicated specifications/ requirements for evaluation.		
5.14	Responsibility of manufacturer	The manufacturer shall be a fully responsible for the manufacture of product including all design services, metal work and mill work to ensure product consistency, quality and excellence finish.		
5.15	Modifications if required	Based on the designs submitted by the Vendor/manufacturer, ISTRAC may suggest modifications. Vendor/manufacturer should be willing to accommodate such modifications during the evaluation and /or at the time of final order.		
5.16	Colour	Colour shall be Smoke grey or equivalent with buffing & powder coating.		
5.17	Sample Unit	Vendor shall provide one sample unit for qualifications before actual supply of all the units.		
<b>6.0</b>	<b>General Instructions and Terms &amp; Conditions</b>			
6.1	Scope & Solution	:Vendor shall supply, integrate, test, qualify for professional voice communication before acceptable by user and commission the integrated solution to meet the requirements / specifications. The system shall be equivalent or better than the indicated specifications.		
6.2	Supply, Integration & Testing	: All elements integration (as per drawing in annexure-A), testing and qualifying is vendor's responsibility to achieve proper & high fidelity voice communication.		
6.3	Delivery location	: All the items to be supplied at ISTRAC, Peenya, Bengaluru and to be commissioned		
6.4	<b>Instructions for technical Compliances</b>			

6.5	Formats	: Attached the ISTRAC required technical specifications along with tender		
6.6	Compliance statement	: Vendor shall provide the compliance for all specifications along with offered parameters and it is mandatory. If not provided compliance and parameters against each specification, such offer will be treated as "Incomplete offer" and liable to reject technically		
6.7	Make & Model	: Vendor shall provide the make, model /part number of the offered product without fail otherwise the offer will be liable to reject technically		
6.8	Website (URL) link	: Vendor shall provide the website (URL) link details of the offered products to cross verify the technical specifications for ISTRAC technical evaluation.		
6.9	Evaluation criteria	:Technically suitable products with complete solution and L-1 criteria		
<b>6.10</b>	<b>Warranty</b>	:1 years for all the products.		
6.11	Maintenance of Processing System	: During Warranty period, vendor is responsible for the repair, maintenance and replacements at ISTRAC premises as per policy		
6.12	Maintenance of Peripherals and Accessories	: Vendor is responsible for repair, maintenance and replacements during warranty period		