

List of Consumables

Consumables
Components, chemicals, raw materials, mechanical tools, software tools
<ol style="list-style-type: none"> 1. UHV Grade Material, Bracing alloys 2. Space grade cathodes, metalized ceramics 3. RF Passive Components, space grade potting materials and cables
Workstation, RAM, Printer cartridges etc.
SS Rod, Perspex Sheet, Rod, OFHC copper, Gaskets, Inert Gas, Vacuum Line Components, Attenuators, Computer parts, etc.
<p>SU8 Negative Photoresist</p> <p>Al Etchants (Techni Etch Al80 (MOS)) for Al etching, BHF (Buffered HF), Silicon on Insulator (SOI), Wafers, Positive Photo-resist (S1818) and its developer</p> <p>Double sided Polished P and N Type, <100> silicon wafers of different sizes (4 inch and 3 inch), Double sided polished glass wafers of different size (4 inch and 3 inch), Wafers holders with backside and edge protection for a 3" and 4" inch silicon wafers, TMAH (Tetra methyl ammonium hydroxide) solution, ZnO ink, ZnO nano powder, ZnO dispersion nano particles, AlN nano dispersion nano particles and nano-powder, device packages, headers and other consumables (Acetone, IPA, H2O2, H2SO4 etc.) conductive silver epoxy etc.</p>
USM drill rods of sub millimeter ranges, Highly doped silicon wafers, Nickel and Chromium UTMFs, CNT, Titanium dioxide, Barium Titanate, Quartz glass wafers, fused silica, vacuum components, chemicals etc. main consumables items and would be essentially required tu to regular use in the project.
<p>Electronic and electrical components, embedded boards, connectors, pipes, joins, wires etc.</p> <ol style="list-style-type: none"> 1. Smart system for RWH and smart irrigation electronic and electrical components (IoT platforms, embedded boards, integrated circuits, capacitors, resistance, connectors, wires, extension boards, electrical panels etc.) 2. Smart irrigation: for 16 hectares land mechanical components (Sampling chambers, boxes, pumps, pipes, panels, holding couplings, joints, filters, sprinklers, drips, plumbing material, valves etc.) 3. Materials for UV lamp development with dedicated power supply 4. TDS and pH sensor development material
<p>MOSFET/Controller/Sensors/Heatsink</p> <p>Battery</p> <p>DC Loads</p> <p>MCB, Protection devices and others</p>
Pulses, BP Sensors, Laser Printer Cartridges, Pen Drives, Computer Stationery, Antivirus Software
<ol style="list-style-type: none"> 1. Sensors for data collection (Microphone, gas sensors etc.) 2. Platform realization (Micro-controller, PCBs, components, solenoid valves, relays, external payments, etc.) 3. System packaging requirements (Packaging components, their housing, etc.)
<p>Silicon Wafers</p> <p>Chemicals for Processing PDMS</p> <p>Gold granules for electrodes</p> <p>Photoresist</p> <p>Developer etc.</p>
<ol style="list-style-type: none"> 1. Quad copter Frames 2. Electronic Speed Controller (ESC) 3. Flight Controller board 4. Radio transmitter and receiver (RC Module) 5. Propellers (clockwise and counter clockwise set) 6. Battery (2200 mah, 4400 maah) and charger 7. Charger module 8. Outlinder/external motors

<ul style="list-style-type: none"> 9. GPS module 10. Connectors/ Servo cables 11. LIDAR Liler 12. Optical flow sensor 13. Landing gear/stand 14. Sterio camera 15. Antenna and wifi module, Bluetooth module 16. Expansion bay 17. Gimbal mounting 18. Frame arm 19. USB-TTL board 20. LED Units and displays 21. Passive components 22. Connectors and cables 23. Power management IC's 24. Amplifier and comparator 25. Microcontroller 26. Drivers and interfaces 27. IC Sensors 28. Switches, relays, multiplexer and demultiplexer 29. Integrated circuit 30. Transistors, diodes and power modules 31. RF Modules 32. Sensors and transducers 33. RF Development kit 34. Battery olders and contacts 35. Knobs accessories and shock absorbers 36. Glue guns and tapes
<ul style="list-style-type: none"> 1. Sensors 2. Embedded Development boards and software 3. Electronic, mechanical, wood and computers components 4. Other project related items
<ul style="list-style-type: none"> 1. Microcontroller, Display, Communication devices 2. Resistors, capacitors 3. PCB fabrication 4. 3D printing 5. Optical Devices 6. Li-ion Batteries 7. Miscellaneous
<ul style="list-style-type: none"> 1. Wafers/substrates 2. Laboratory chemicals 3. Other consumables items 4. Electronic Components 5. Labware, gloves, masks, etc.
<p>Silicon wafers, glass wafers, electronics components, targets, chemicals, labware, disphragm, headers, miscellaneous stationary items like printer cartridge, antivirus, files etc.</p>
<p>GaN Wafers, Ammonia Gas and Chemicassets, Susceptor with heater, MO Sources (TEGa, TMA, TMIN, CP2Mg), Sapphire wafers, hydrogen gas an purifier, chemicals, computer consumables, gases, electrical consumables, machine spare parts, MFCs, etc.</p>
<ul style="list-style-type: none"> 1. Epitaxial Wafer 2. Photoresis and chemicals
<ul style="list-style-type: none"> 1. Silicon on insulator wafers, Si-wafers

<ol style="list-style-type: none"> 2. Pyrex/Borofloat Glass wafers 3. High Purity chemicals/PR and developers 4. High purity gases – Nitrogen, Liquid Nitrogen, oxygen, argon, specialty gauges (CF4+, CHF3, SF6, C4F8) 5. Electronic components, cables and wafer handling items, glass/teflon wares, other miscellaneous items 6. Mechanical fabrication Around Rs. 0.50 lakh 7. Spare parts for the process equipment 8. Sputtering target – Aluminum, chromium, gold, titanium platinum etc.
<ol style="list-style-type: none"> 1. Silicon wafers (3") 2. Gold (AU) Granules 3. Chromium (Cr) Granules 4. PDMS 5. PFOTS 6. IO-PET (Area;100 cm2) 7. KOH Pellets 8. BOE 9. Photoresist (Positive) 10. Developer 11. Chemical (Acetone, Propanol, Methanol) 12. Acids (H2SO4, HCl, HF, Etc.) 13. Nitrile gloves, Lint Free tissue, Glassware, copper wire, copper tape, etc. 14. Display and UI screen, Bluetooth Module, ADC ICs, Microcontroller, Evaluation board etc. 15. Silver Epoxy 16. Copper tape and wires
<ol style="list-style-type: none"> 1. Chemical raw materials 2. Metal Raw Materials 3. UHV Analytical Chamber Accessories
<ol style="list-style-type: none"> 1. RF connectors, electronic components, sensors, circuit mounted devices 2. Low loss RF cables,, absorber materials for anechoic chamber/box 3. High Frequency laminates for antenna 4. PCB fabrication tools, 3D printer consumables 5. Computer consumables and IT related consumables 6. Screen mesh, screen forming and printing materials, LTCC tapes of different thickness and dielectric constants
<p>Vacuum Grade Raw material, Vacuum components, computer accessories, Stationary etc. as per proposal</p>
<p>SS, OFHC, Coper, Teflon, Perspex, wires ceramics etc. Capacitors, resistors, attenuators, electrical feed through, wires and cables, voltage probes, ICs, mosfet/IGBT, development boards, high frequency connectors, high frequency transmission cables & adaptors, attenuators, rogowski coils, CTs, Electronic boards microcontrollers etc., Vacuum grease, inert gas cylinders halide gases, vacuum and gas line components, metal flanges vacuum valves, gas line valves etc., VUV UV/ Visible mirrors, lenses, filters, photodiodes, and other optical accessories, etc, Quartz tubes suitable for VUV-UV radiations. Upgradation and AMC of plasma simulation software's (such as, console, etc) and other minor software's and their upgradation</p>
<p>Systems RAMs, Memory cards, Pen drives, hard disks, embedded boards, neural computer sticks, TPUs components (for embedded platforms, PCs and laptops), laboratory consumables like power banks for battery operated devices, keyboard/mouse battery and their charger, etc. plastic racks/ shelves/drawers, stationary ralted items for the lab, some other miscellaneous items need in the lab.</p>
<p>Optical Components, Filters, notch and detectors Light sources Embedded systems and electronic components Mechanical consumable items</p>

