



कृषि विज्ञान केन्द्र, गुमला
(भारतीय कृषि अनुसंधान परिषद्, नई दिल्ली)
विकास भारती बिशुनपुर, गुमला. 835231



KVK

KRISHI VIGYAN KENDRA, GUMLA

(Indian Council of Agricultural Research, New Delhi)
Vikas Bharti Bishunpur – 835231

No.: KVK Gumla/2025/ 294

Date: 25.10.2025

Limited Tender Enquiry

Invitation of quotation with technical specification and financial bid for establishment of Honey Testing Laboratory with other accessories.

Quotations are invited from reputed **Manufacturers/ Marketing partner (India)/ Indian Agents of foreign principals**, if any/Authorised distributor for installation and delivery of the following items at Krishi Vigyan Kendra Gumla, Vikas Bharti Bishunpur campus.

Details component wise break-up of the sanction is as follows:

Sl. No.	Particulars	Quantity (nos)	Remarks
1	HPLC with accessories	1	
2	AAS with accessories	1	
3	Spectrophotometer UV-VIS with accessories	1	
4	Digital balance	1	
5	Centrifuge	1	
6	Polari meter	1	
7	Refractometer	1	
8	Hot air oven	1	
9	Muffle furnace with accessories	1	
10	Densitometer	1	
11	Deep freezer	1	
12	Tintometer	1	
13	pH & EC meter	1	

Terms and conditions:

1. The preferred technical specifications for instruments are given in annexure.
2. Separate quotation is required for each instrument.
3. All the components with 2 years warranty.
4. Quotation should be made as per the specification.
5. The last date of submission of quotation is **03.11.2025, 04:00 PM**
6. The quotation received either in incomplete form or after the due date will not be considered and treated as cancelled.


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Vikas Bharti Bishunpur

Krishi Vigyan Kendra, Gumla; Vikash Bharti Bishunpur; PIN- 835231 (Jharkhand)
Contact: Senior Scientist & Head, Mob. – 9430955950
Website : gumla.kvk4.in; e-mail: kvk.gumla@gmail.com, vikasbharti1983@gmail.com

किसानों की सेवा में समर्पित

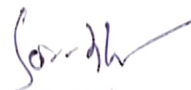
7. Execution of orders shall be carried out within the stipulated time as mentioned in specification. Any other term and condition mentioned in specification shall be applicable to bidder.

8. The bidder must have executed 5 projects of similar in nature for Govt. department/organization Proof of execution of such orders to be enclosed along with quotation.

9. Interested firms may submit their quotations through email at: kvk.gumla@gmail.com or submit in hard copies to The Secretary, Krishi Vigyan Kendra, Gumla, Vikas Bharti Bishunpur, Gumla, PIN-835231.

10. Advance payment can be made in case of imported goods only, against Bank Guarantee from nationalized or scheduled banks only.

11. The organization reserves the right to accept or reject any bid or accept bids either in part or in full or to split the order, or to annul the bidding process without assigning any reasons therefor.



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Specifications for Quaternary Gradient HPLC System

Solvent Delivery System-HPLC Pump

Individual programmable free standing pumps should be quoted for Quaternary gradient operation.

Parallel type double plunger mechanism.

Plunger capacity 10 μ l with increment of 0.0001 ml/min.

Flow Rate Range: 0.0001ml to 10.0000 ml/min or better must be achieved with each pump without adding and external hardware/pump head etc.

Max. Pressure: 40 MPa (pressure Unit can be changed to psi, bar & kgf) or better

Flow rate accuracy: $\pm 1\%$ or better .

Flow Rate Precision: 0.06% RSD or better.

Gradient accuracy: $\pm 1\%$ or better.

Gradient precision: $\pm 0.1\%$ RSD or lesser

There must be constant pressure solvent delivery with documentary evidence in support to be submitted.

Automatic plunger rinsing kit must be quoted

Built-in Leakage Sensor, auto purge, Low pressure and High-pressure gradient up-gradability must be there.

Quaternary Gradient Mixer

Dynamic Mixing for analytical, semi-micro & semi-prep modes.

Mixing volume can be user selectable in 3 or more steps

Auto sampler:

Total volume/ Variable volume sample injection system.

Injection volume setting range – 0.1 μ l to 100 μ l

Must have built in sample cooler with dehumidifying function for 4°C to 40°C

Capable of holding minimum 170 numbers of 1ml vials.

Option for 1.5 ml vials, 4ml vials, 96 well MTPs/DWPs and 384 well MTPs/DWPs

Injection volume accuracy: 1% or better

Injection volume precision: 0.3% RSD or better.

Carryover: not more than 0.0025% to 0.005%

No. of repeated injection: 30 / sample or better.

Column Oven:

Column oven with electronic cooling mechanism.

Temperature setting range: 4 °C to 85 °C

Temperature control range: 10 °C below ambient temp to 85 °C.

Temperature control Precision: 0.1 °C maximum


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Dual Wavelength UV-Vis Detector

Wavelength range 190-700 nm or better,
Accuracy +1 nm or better
Wavelength precision 0.1 nm
Drift Less than 1×10^{-4} AU/Hour or better
Noise levels: $+0.5 \times 10^{-5}$ AU or better
Linearity of 2.5 AU (ASTM method) or better
Flow cell must be temperature controlled upto 50° C or better for superior baseline stability.
Cell capacity 12 μ L, withstand pressure: 12 Mpa,
Optical wavelength 10mm
Simultaneous Dual wavelength detection.
In built mercury lamp must be provided for automatic wavelength calibration over long use.

RID Detector

Suitable for Analytical, small scale, semi prep and preparative
Refractive Index Range: 1-1.75 RIU
Prep. Upto 20 ml/min flow
Suitable for Large Scale Prep upto 150ul/min with optional flow selection block
Automatic Cell Temperature control facility from 30°C to 60°C for superior Baseline stability
Noise Level: Less than 2.5×10^{-9} RIU
Drift: Less than 1×10^{-7} RIU/hour
Response: 0.05 - 10 seconds, 10 step selection
Polarity Selection: With a switch
Zero point adjustment: Auto, Auto optical and fine
Flow cell volume: 9ul
High Sensitivity refractive index detection in 3 modes without compromising linearity

Column: C18 Amino Column-GIST NH2-250mm*4.6mm*5um(1no) and Carbohydrate column-GIST -250mm*4.6mm*5um(1no) for separation of complex sugar including simple sugar.

Chromatography software

It must be a 21 CFR Part 11 compliant software built upon SQL database.
Operation of the system should be very easy and intuitive via a state Windows based software
Complete system control software all parameters should be computer controlled
Compatible chromatography software, which can acquire and process data from HPLC system.

The system should be upgradable easily in the future to LC-MS Hyphenated techniques without any hardware modifications.

Installation accessories:


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- Branded computer with corei-3 processor, 1 TB HDD, Suitable monitor of 19 inch or more,
- 3 KVA online UPS with 30 minutes back up and minimum three years warranty,
- sample and solvent filtration kit with vacuum pump
- Sonicator with minimum 3 litre capacity for sonication of solvents

Warranty: minimum 2 years for entire system & accessories supplied

Delivery and installation must be completed within 5 week of purchase order.

There must be dedicated filed service engineers and application support person available in nearest service centre with contact details of those service engineers and application support person.

Training on application must be provided for 3 days after installation of the system free of cost.

The service, training and application support required must also be supported without any charges **during two year warranty** period for as many number of times as required.

It should be a leading company in this field having experience of sales and strong service of the HPLC in India for minimum 10 years. The launched model must not be more than 5 years old. Performance certificates from 3 Government institutes must be submitted.

The quoted model should be upgradeable as and when needed and printed brochures and published specification sheet should support the quoted specifications and the same should match with the manufacturer's website information.

NOTE: The offer needs to be accompanied with all required supporting technical literatures, which are also to be available in the website of OEM , ISO Certificate of the manufacturing works, at least details of five users in East India from Government, Semi Government & Reputed Institutes (IIT'S , IISER, Universities, ICAR/ CSIR Labs) with contact nos, email i.d other than performance certificates from the users, Authorization certificate of the Principal Companies, details of service facilities available with the contact nos of the service persons responsible for the product in East along with their experience on the servicing of the instrument. Bidder/OEM should have Official Service support facility in respective region. Regional Service personnel and service canters details must be provided at the time of bid participation. Else bids will be rejected.


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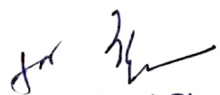
Specification for double beam Atomic Absorption spectrophotometer

The system should have minimum following specification:

- **Optics**-True double beam optics with aberration corrected Czerny-Turner monochromator mounting
- High resolution grating with 1800 lines/mm and 300 mm or more focal length for high energy throughput
- **Wavelength Range**- Complete measuring wavelength range from 185 nm to 900 nm
- **Bandwidth selection**: 6-step or more bandwidth selection with automatic switching from **0.1 to 2 nm (0.1,0.2,0.4,0.7,1.0,2.0 nm)**
- **Detector**- High sensitivity Photo-Multiplier Tube (PMT) detector for complete wavelength range or Solid state Detector
- **Motorized turret**: 8 lamps or more turret, controlled through software with 2 lamps simultaneously lit, one for measurement and other for warm up for the next measurement
- In built power supply for minimum 2 numbers of High-performance boosted lamp/ Super lamp/EDL must be there in the system
- Dual background correction as standard - High speed dual frequency simultaneous measurement D2 background correction and high-speed Self Reversal background correction.
- **System must be supplied with 100 mm Air-C₂H₂ solid Titanium as standard for automatic ignition and extinction of flame**
- There must be future upgradation provision with single Auto sampler for Flame, Furnace, and Hydride Vapour Generator with auto sampler having auto dilution facility for furnace operation.

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- Instrument must have provision for Graphite furnace field upgradation later stage. The flame to furnace change over must be automatic (computer controlled). No manual intervention is required.
- High efficiency nebulizer with chamber made of engineering plastic, Platinum-Iridium orifice and Ceramic impact bead resistant to strong acids including HF Fully computerized gas flow control system with automatic setting of optimum fuel and oxidant flow rates
- **System must provide PERFORMANCE GUARANTEE: Greater than 0.9 abs for 5 mg/L copper solution** with an RSD of less than 0.5%.
- All the safety functions must be provided as standard including Leak Check; Flame Monitor; Gas Pressure Monitor; Interlock for wrong burner head use; Auto switch-over between Air-C₂H₂ / N₂O-C₂H₂ flame with flow rate monitoring using optical sensor; Drain Tank Level Monitor, Automatic flame extinction during power sudden power interruption, Vibration sensor for auto flame extinction; Internal fan stop sensor and flame retardant body
- **Automatic Gas flow Control:**
The system must have automatic searching for optimal fuel gas flow rate which optimizes the gas flow rate by measuring the changes in absorbance between a blank and a standard sample. The difference between the two must be displayed on the screen. The gas flow rate achieving the highest sensitivity must be detected and this value must automatically set as the gas flow rate value.
- **Software operation** on Windows 7 for complete instrument control, data acquisition and processing Software includes strengthened QA / QC functions; 21 CFR compliance; Hardware Validation functions and Comprehensive data management system as standard
- **Single Hollow Cathode Lamps or coded Hollow cathode lamps for the following elements** must be supplied along with the system Zn, Cu, Mn, Fe, Co, Cd, As, Pb, Ni, Hg, Mo and Cr.


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- **Hydride vapour generator:** party must offer Automatic Hydride vapour generator alongwith main system. Used with the AAS, Hydride vapour generator permits the rapid and accurate quantitation of elements such as As, Se, Sb, Sn, Te, Bi and Hg at several-ppb levels.

Specification:

Measurement method: continuous flow

Sample consumption: 0 to 7 mL/min, variable

Reagent consumption: 0 to 2.5 mL/min, variable

Atomizer: Heated absorption cell (heated by Air-C₂H₂ flame in standard system)

Carrier gas: Ar pressure: 0.32 MPa, consumption: 70 mL/min

Power requirements: 240 VAC, 50/60 Hz

absorption cell, Reagent bottles, gas hose, drain tube, etc. must be supplied with Hydride generator as standard

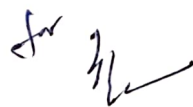
- **All Pre installation requisites (PIR) are to be supplied by the vendor.**

Utilities required for AAS operation like Branded latest PC, Exhaust hood assembly, Double stage SS C₂H₂ Regulator, SS Ar Regulator, one time filled Acetylene Gases Cylinder, Ar Gas cylinder, Gas control box for Acetylene, Argon and Air, 1/4" OD X 8 MM hose connector for Acetylene, Ar & Air, Oil free air compressor, line regulator for Air compressor, Air filters for moisture, dust, oil & moist removal and 5 KVA online UPS with 30 min back up and standards for all the elements, SS Tubing with Colour coded sleeves & PVC casing, Standard fittings

- **Warranty must be 24 months from the date of installation.**
- Installation & training should be provided at our lab free of cost
- Delivery & installation must be within 5 weeks after placing of Purchase order

There must be dedicated filed service engineers and application support person available in nearest service centre with contact details of those service engineers and application support person.

The service, training and application support required must also be supported without any charges during warranty period for as many number of times as required reasonably.


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It should be a leading company in this field having experience of sales and strong service of the AAS in India for minimum 10 years. The launched model must not be more than 5 years old. Performance certificates from 3 Government institutes must be submitted.

The quoted model should be upgradeable as and when needed and printed brochures and published specification sheet should support the quoted specifications and the same should match with the manufacturer's website information.

NOTE: The offer needs to be accompanied with all required supporting technical literatures, which are also to be available in the website of OEM , ISO Certificate of the manufacturing works, at least details of five users in East India from Government, Semi Government & Reputed Institutes (IIT'S , IISER, Universities, ICAR/ CSIR Labs) with contact nos, email i.d other than performance certificates from the users, Authorization certificate of the Principal Companies, details of service facilities available with the contact nos of the service persons responsible for the product in East along with their experience on the servicing of the instrument. Bidder/OEM should have Official Service support facility in respective region. Regional Service personnel and service canters details must be provided at the time of bid participation. Else bids will be rejected.


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Specifications for Double Beam UV VIS Spectrophotometer

Microprocessor based UV-VIS Spectrophotometer with high resolution touchscreen display, for operation on 220V / 50Hz.

- Stand-alone operation as well as complete control through PC with PC software supplied as standard
- True double beam optics with aberration corrected concave blazed holographic grating in Czerny – Turner mounting for high energy throughput and high quality monochromatic light
- Wide wavelength range of 1,100 nm to 190 nm
- High resolution 1 nm spectral bandwidth over entire wavelength range
- Wavelength setting and display in steps of 0.1nm
- Wavelength accuracy of ± 0.1 nm for D₂ spectral line
- Wavelength repeatability of ± 0.1 nm
- Wavelength Slew rate: approx. 29,000 nm/min
- Variable wavelength scanning speed: $\geq 3,000$ nm/min to 2 nm/min
29,000 nm/min when survey scanning
- Ultra low stray light of $< 0.02\%$ T at 220nm with NaI filter
- Wide Photometric range of -4 to +4 Abs and 0 to 400 %T
- High Photometric Accuracy of ± 0.002 Abs at 0.5 Abs
- High Photometric Repeatability of Less than ± 0.0002 Abs at 0.5 Abs
- Baseline stability: < 0.0003 Abs/Hr (700 nm, one hour after light source turned ON)
- Baseline flatness: $< \pm 0.0006$ Abs (1100 to 190 nm, one hour after light source turned ON)
- Ultra low Photometric noise of < 0.00005 Abs (700 nm)
- Dual source – high intensity Tungsten-Halogen and Deuterium lamp with automatic changeover
- High sensitivity matched pair Silicon Photodiode detector
- 4 USB ports or more for high-speed PC and printer connectivity, data storage and transfer through USB pen drive
- Guaranteed compliance with all Pharmacopoeia requirements
- Built in validation program, diagnostic and security functions
- The instrument should provide network access via wireless connectivity. Data can be transferred to a PC via a network
- The instrument should have provision for Bar code reader and key board entry function: sample names and numerical values can be entered by a bar-code reader or from the keyboard
- The instrument should have Sleep mode and wake up function: Analysis can start the instant the user arrives at the laboratory. The instrument should require no time to warm up.
- All operational modes as standard – Photometric; Spectrum; Quantitation; Kinetics, Time Scan, DNA and Protein Quantitation in standalone and PC mode. Additionally Multi-Component measurement available in stand-alone mode.
- Large sample compartment compatible with wide range of accessories.
- Must supply one pair of 10mm path length Quartz Cuveates of 3.5 ml volume as a standard supply
- 24 months warranty from the date of installation
- Installation & training should be provided at our lab free of cost
- Delivery & installation must be within 5 weeks after placing of Purchase order


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There must be dedicated field service engineers and application support person available in nearest service centre with contact details of those service engineers and application support person.

The service, training and application support required must also be supported without any charges during warranty period for as many number of times as required reasonably.

It should be a leading company in this field having experience of sales and strong service of the Double Beam UV VIS Spectrophotometer in India for minimum 10 years. The launched model must not be more than 5 years old. Performance certificates from 3 Government institutes must be submitted.

The quoted model should be upgradeable as and when needed and printed brochures and published specification sheet should support the quoted specifications and the same should match with the manufacturer's website information.



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Technical Specifications of Analytical Balance

Range: 4digit

Capacity: 220G

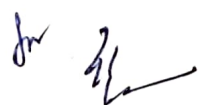
Readability: 0.1mg

Repeatability (standard deviation) : 0.1mg

Repeatability (for low Loads): 0.1mg

Calibration: Fully Automatic Internal

- Improved Sensitivity Stability when ambient temperature changes
 - Repeatability : 0.1mg
 - Linearity : $\pm 0.2\text{mg}$
 - Response time : 2 sec
 - Should comply with GLP protocols
 - Better weighing results PSC and Clock-CAL function
 - Operating temperature : 5 to 40°C
 - Sensitivity stability against temperature range : $\pm 2\text{ppm}/^\circ\text{C}$ (10-30°C)
 - Weighing Pan size : $\varnothing 91\text{ mm}$
 - Display: OEL display(dot matrix)
 - The balance should be compliant 21 CFR part 11
 - System should be required User id's and password
 - The Balance should be compact in design & have Windshield on 3 sides.
 - Password protection for date & time
 - Input/output Terminal:RS232
 - Piece counting
 - Percentage measurement
 - Response and stability settings can be changed during measurements
 - Password protection for date & time
 - Multiple Weighing Units
 - Connecting a USB memory device
 - Minimum Measurement Value (Warning Function)
 - Data Storage facility available
 - PC Connectivity available
 - Prevents unintended changes of time and date setting
 - LIMS Connectivity
 - Network Connectivity
- Warranty: minimum 2 years for entire system**
- Delivery & installation must be within 5 weeks after placing of Purchase order


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Specification-Tabletop/ Benchtop Refrigerated micro-centrifuge

Centrifuge should accommodate the following: -

1. 12 x 15 ml centrifuge tubes

Fixed Angle Fastest RPM (18,000 RPM) and High RCF (30,536xg)
Should have Swing-out facility with RPM (13,000 rpm) and RCF (16,438 xg)
Equipped with inverter type compressor
Very quiet and ECO – operation
Small footprint (380 x 654mm) but high versatility
Fast cool function, Pre-cooling to 4°C for temperature-sensitive samples.
Bio-Safe Rotors ensure safe centrifugation of hazardous samples.
Controller Type: Microprocessor
Display: soft touch keypad
Drive System: Direct, Brushless motor
Temperature Range: -12°C to +40°C, per 1°C increment
Memory: Stores up to 100 events and programs
Profile (Acceleration/Braking): 9 Accel/10 Braking
Safety features: Imbalance detection & auto switch-off function, Lid drop protection, safety lid lock
PULSE" key for quick spin.
Patented anti-vibration system & air-cooling to minimize noise and heat generation.
Very quiet operation at less than 60 dB
Easy-Lock rotors for quick closing and opening
Fully Autoclavable rotor, lid and adaptors
Simultaneous display of all parameters : set and actual values
Selectable time mode of "from starting" and "At Set SPEED" to enable time counting when set speed is reached
Power: 220/230V, 50/ 60Hz
ISO / CE certified
Certifications/Compliance:
i) EN/UL/IEC 61010-1 (general safety standard for electrical equipment),
ii) EN/UL/IEC 61010-2-020 (safety requirements for centrifuges)
iii) EN/UL/IEC 61326-1 (EMC requirements for electrical equipment)

Fully Autoclavable Fixed Angle, Easy-Lock Rotor

- Max. RPM/RCF : 8,500 / 8,611 xg
- Capacity : 15 ml x 12 Conical tubes
- Hole angle from axis during rotation : 30°
- Hole dimension (Ø x L,mm) : 17.2 x 96.5
- Hole bottom type : Conical
- Max. height for tube fit (mm) : 125

Warranty: minimum 2 years for entire system

- Delivery & installation must be within 5 weeks after placing of Purchase order


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Specification for Polarimeter

Display	Touch screen
Measuring Mode	Optical Rotation, Specific Rotation, Sugar Degree, Concentration
Light Source	LED 20-30 mA 100,000 hr. avg. life
Wavelength	589.3nm
Measuring Range	$\pm 45^\circ$ (Optical Rotation)
Measuring Range – Sugar	$\pm 120^\circ Z$
Minimum Indication Value	0.001°
Repeatability – Optical Rotation	< 0.003°
Test Tube – Standard	100mm & 200mm
Transmission	10%
Interface	USB
Calibration	Automatic calibration via touch screen
Power Supply	220 V AC / 50Hz

USB Cable, Test Tube 100mm and 200mm, Test Tube Accessories, Software CD, Test Certificate must be included.

Warranty: minimum 2 years for entire system

- Delivery & installation must be within 5 weeks after placing of Purchase order


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Specification for Refractometer

Measurement range Refractive index nD	1.30000-1.72000
Measurement range dissolved solids Brix°	0-100%
Accuracy refractive index nD	< ± 0.00002
Accuracy Dissolved Solids Brix°	< ± 0.1%
Temperature Range (Min 0.1 °C)	0 – 50 °C
Brix°	0.01%
Power Supply	220 V AC / 50 Hz
Temperature Resolution	0.1°C
Display	Color touch screen
Interface	RS232C / USB
Data Storage	500 data sets
Protection grade	IP20
Light source	LED light

Warranty: minimum 2 years for entire system

- Delivery & installation must be within 5 weeks after placing of Purchase order


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Specification for Hot Air Oven

Temperature range	5°C above ambient to 250°C
Temperature accuracy	±0.2°C
Temperature uniformity	±5°C
Power Supply	230 V AC / 50 Hz
Heating System	SS tubular heating system
Quantity of shelves	2 – 5
Safety Feature	❖ Standby Thermostat to cutoff heater supply in case of overshoot of temperature. ❖ Automatic restart of operation when power is restored after sudden power failure

- ❖ **Microprocessor PID method for precise temperature control.**
- ❖ Safety digital temperature controller
- ❖ Timer
- ❖ Superior insulation of the chamber
- ❖ Inner chamber (mirror finish) and shelves must be made of stainless steel (SS304)
- ❖ Self-diagnostics function to check abnormal condition of temperature sensor.
- Provides notification/alarms when the door is open for an extended period of time.

Warranty: minimum 2 years for entire system

- Delivery & installation must be within 5 weeks after placing of Purchase order

Specification for Muffle Furnace

- ❖ Temperature range : 1200°C (Continuous max 1150 °C)
- ❖ Safety digital PID temperature controller
- ❖ Timer
- ❖ Power Supply : 230V AC
- ❖ Switch-over 1°C/1°F as (optional)
- ❖ Volume: 2 Ltr.
- ❖ The heating elements must encased in quartz glass tubes
- ❖ Dual shell housing for low external temperatures and high stability

Warranty: minimum 2 years for entire system

- Delivery & installation must be within 5 weeks after placing of Purchase order


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Specifications for Density balance

Capacity	220g
Readability	0.001g (1mg)
Repeatability	0.001g
Linearity	±0.003g
Density & Weighing PAN Size	160 x 70 mm & 90mm
Tank Size	145 x 100 x 78mm
Operating Temperature	15 °C to 30 °C
Density Function	Solid/ Liquid/ Dust Powder/ Absorbent
Display	LCD
Unit	Mg, g, gsm, oz, ct. density D, %, K
Interface	RS232C
Power Supply	DC Adaptor using AC 220 V / 50 Hz

Warranty: minimum 2 years for entire system

- Delivery & installation must be within 5 weeks after placing of Purchase order

Specifications for Deep Freezer

Temperature Range	-20 °C / -40 °C
Temperature Accuracy	± 3 °C
Freezer Type	Horizontal / Vertical
Capacity (Liters)	170 – 200
Power Supply	230 V AC

- ❖ Automatic defrost system must be available.
- ❖ Microprocessor based Electronic Controller with LED temperature display.
- ❖ Interior lighting must be Mercury-free LED.
- ❖ Audible and visual alarms with service alarm and icon.

Warranty: minimum 2 years for entire system

- Delivery & installation must be within 5 weeks after placing of Purchase order


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Specifications for Tintometer

Wavelength Range	380 - 780 nm
Wavelength Accuracy	0.2 nm
Bandwidth	10 nm
Spectral Scope	< 15 nm
Photometric Range	0 - 100 % T
Photometric Linearity	± 0.01 % T
Repeatability	± 0.25 % T
Stray Light	< 0.01 % T
Interfaces	USB RS 232
Instrument Housing	Aluminium
Portability	Benchtop
Power	Universal via external power supply: Input range: 100 VAC to 240 VAC. 60 watts (24 volts) Frequency: 50 to 60 Hz
Warranty	1 Year
Certification	ISO, CE
Delivery Content	Instrument Should be supplied with Conformance Filter, W600/B/1" cell (Borosilicate, 1" path length); W600/B/5¼" cell (Borosilicate, 5¼" path length)

Warranty: minimum 2 years for entire system

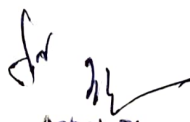
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Specifications for pH and EC meter

- ❖ pH range – 2.000 – 20.000 pH
- ❖ Resolution – 0.001, 0.01, 0.1 pH, Selectable
- ❖ ORP (mV) Range – 0 - ± 1999.9 mV
- ❖ Conductivity – 0 – 200 mS/cm
- ❖ TDS Range – 0 -10ppt
- ❖ Salinity Range – 0 – 80ppt
- ❖ Resistivity Range – 0 – 100 m ohm
- ❖ Real-time clock stamps stored data

Warranty: minimum 2 years for entire system

- Delivery & installation must be within 5 weeks after placing of Purchase order


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