

झारखण्ड केन्द्रीय विश्वविद्यालय Central University of Jharkhand

Brambe, Ranchi, Jharkhand, 835205

Ref. No. CUJ/CEVS/YSS/2016/01

Dated: 13th May, 2016

Sealed Quotations without any erasures and overwriting are invited for Supply of Plant Canopy Analyser and UV-Visible Spectrophotometer with Computer, Printer and 1KVA online UPS, Flame Photometer and Kjeldahl Distillation Unit for soil analysis as per following details:

Sl. No.	Required Item	Quantity
1	Plant Canopy Analyzer	01 no.
2	UV-Visible Spectrophotometer with computer, printer and 1KVA online UPS	01 no.
3	Flame Photometer	01 no.
4	Kjeldahl Distillation Unit	01 no.

Quotation may be submitted keeping in view, the terms and conditions otherwise quotations will be rejected.

Terms and Conditions

- 1. The specifications for the items quoted should be explicit, clear and all available technical literature, catalogues and other data in support of the specifications of the items should be furnished along with the quotation. Quotation should be valid for a minimum period of 3 months from the due date.
- 2. The sealed quotation should reach on or before 24/06/2016 at 5:00 PM to Dr. Purabi Saikia, Principal Investigator, SERB-YSS Project, Centre for Environmental Sciences, Central University of Jharkhand, Brambe-835205, Ranchi. The envelope should be super scribed with name of the item (s) to be supplied. Tender/ quotation should be sent through Post/ Courier/ By Hand.
- 3. Bids will be opened on 27/06/2016 at 11:30 A.M. in the Office of the Head, Centre for Environmental Sciences, Central University of Jharkhand, Brambe-835205, Ranchi in the presence of tenderers or their representatives who would like to be present.
- 4. The rate quoted should be inclusive of all packing, forwarding, commissioning & installation, sales tax, freight and insurance charges. VAT or other duties and levies where legally liable and intended to be claimed should be distinctly shown separately in the quotation. VAT/CST Registration No. and validity date should be indicated.
- 5. Incomplete/Conditional/Optional quotations will not be accepted.
- 6. Maximum delivery period will be 30 days from the date of issue of the work order.
- The Tender Document for items will be Two-Bid system consisting of Technical Bid (Annexure-I) and Price Bid (Annexure-II). The Tender Document will be submitted item-wise in two separate sealed covers clearly mentioning on the envelope the details of items for which Bid is submitted.
- 8. The Tender Documents comprising of Price-Bid, Technical Bid and **Earnest Money Deposit** of 2% of the value of the equipment (**refundable**) in the form of Bank Draft in favour of "Central University of Jharkhand" payable at Ranchi kept in the separate envelope super- scribed with the name of the same. The Tender Document must be enclosed with Earnest Money Deposit otherwise the tender document will be rejected. All the documents must be enclosed in a bigger size envelope super-scribed with the tender number and item name.
- 9. The Bidder must enclose point wise compliance of the technical specifications of each item.
- 10. The Central University of Jharkhand takes no responsibility for delay, loss or non-receipt of quotations/ documents sent by post and reserves the right to accept or reject the quotation without assigning any reason.
- 11. Corrections if any must be attested. All rates shall be indicated both in words as well as figures. Where there is a difference between the rates quoted in words and figures, rate quoted in words will prevail.

- 12. The University will not entertain requests for revision in prices once quoted for whatever reason after the tenders are opened during the period of contract.
- 13. Minimum One (01) years Guarantee / warranty period at site will start from the date of acceptance of stores in full and final quantity in satisfactory condition, after due inspection and/ or successful installation and commissioning as applicable
- 14. Full payment will be made within 30 days of the receipt and acceptance after inspection of supplies at destination, quotations containing different payment terms are liable to be ignored.
- 15. All goods must be delivered at our university at Brambe, Ranchi (Centre for Environmental Sciences) after confirmed order. The University will not be responsible for issuing any Road Permit.
- 16. Only Manufacturer/ Authorized dealer/ firms of repute dealing in the items listed in the quotation having experience in sale and repair/ maintenance, need apply.
- 17. Only latest models/ mentioned models of items need to be quoted.
- 18. Only those Manufacturers liable to participate having ISO 9001 and ISO 14001 certification.
- 19. All legal disputes shall be under the jurisdiction of Jharkhand High court, Ranchi.
- 20. The University reserves the right to accept or reject any Bid, without assigning any reason thereof. No correspondence in this regard will be entertained.
- 21. All the participating firms should attach supporting documents in favour of:
 - a) Have at least 5 years of experience in the field.
 - b) Have an annual turnover of at least Rs. 50 Lakh per annum for each of the last 3 years (i.e. 2011-12, 2012-13 & 2013-14) (Agency should produce a certificate from their Audit Firm in respect of turnover for the mentioned period)
 - c) Be registered with Directorate of Industries or Small Scale Industries or any other appropriate authorities.
 - d) Have valid TIN Number for registration under VAT/CST
 - e) Have PAN for Income Tax. Supporting documents for Income Tax return for the last Two years (i.e. 2012-13, 2013-14).
 - f) Documents as proof in respect of Technical bid along with supporting documents.
 - g) Profile and Track Record of the agency. (3 years)
 - h) Copy of signed Balance Sheets of last three years.
 - i) Detailed terms & conditions regarding performance/ warranty/ bank guarantee/ Inspection/ LD/ penalty for delayed supplied will be elaborated in purchase order.
 - j) For proprietary items/ single manufacturers or Government manufacturers, proper certification in original is to be attached along with the Technical Bid.
- 22. Details specification of the equipment annexed as Annexure-III.
- 23. Bidders can supply all the items or selected items as per their convenience. But, EMD should be provided separately for separate item.
- 24. University reserves the right to issue the purchase order to a single firm or may be divide it into more than one firm.

Purabi Saikia (Principal Investigator, SERB-YSS Project)



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Brambe, Ranchi, Jharkhand, 835205

Annexure-I

TECHNICAL BID

The tenderer must submit the following information against every serial number as under:-

I. General Particulars to be provided by the Tenderer (The bidder should provide the following particulars along with relevant supporting documentation)

1. Name of the firm
2. Mailing address with contact Number:
3. Name of the Proprietor
4. (i) Tel. No (ii) Mobile No
(iii) Fax No (iv) E-mail address
5. Whether the firm registered firm (Yes/No), if Yes please mentioned registration no
(i) VAT No (ii) TIN No (iii) PAN No
6. Name and designation of the person authorized to make commitments to CUJ, Brambe, Ranch
7. Year of establishment of firm.
8. Whether the firm has enclosed the Bank Draft/Pay Order/ Banker's Cheque as EMD
9. Whether the Firm/Agency has signed each and every page of Tender/NIT (Yes/No)
10. Any other information, if necessary

Place:	Name:
Date:	Business Address:
	Signature of Bidder:
	Seal of the Bidder:



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Annexure-II

PRICE-BID

DETAILS OF ARTICLE

Sl. No.		Description of the Items		Rate quoted (in Rs.)
1.	Pla	nt Canopy Analyzer		
	Spe	cification		
	i	LAI-2270C Control Unit		
	ii	LAI-2250 Optical Sensor	01	
	iii	Integrated GPS		
	iv	6 AA Batteries		
2.	UV	-Visible Spectrophotometer		
	Spe	cification		
	i	Tungsten-Halogen lamp (320-1100nm) Deuterium lamp (200-340nm)	01	
	ii	Double beam Czerny-Turner monochromator		
	iii	UV-Vis Wavelength resolution: 0.1 nm (200-1100nm)		
	iv	Work Station PC, 19" TFT-LED Monitor with Printer		
	v	1 KVA Online UPS		
	Digital Flame Photometer		01	
	Specification			
3.	i	Microcontroller based	01	
	ii	With Na, K filter		
	iii	Air compressor with built-in air regulator and air filter		
	Kjeldhal Distillation Unit			
4.	Spe	cification	01	
	i	Kjeldahl distillation assembly with complete borosilicate glass for soil analysis	01	

Name:
Business Address:
Signature of Bidder:
Seal of the Bidder:

List of Instruments with Specification

Item name	Descrip	Description of items	
	Feature	Specification	
UV-Visible	Source	Tungsten-Halogen lamp (320-1100nm)	01
Spectrophotometer	Monochromator	Deuterium lamp (200-340nm)	
	Detectors	2 silicon photodiodes	
	Optical design	Double beam Czerny-Turner	
	UV-Vis Wavelength resolution	0.1 nm (200-1100nm)	
	Wavelength Range	200–1100 nm	
	Wavelength Accuracy	±0.05 nm	
	Wavelength Repeatability	±0.02 nm	
	Photometric Accuracy	±0.005 Abs at 1.0 Abs	
	Photometric Range	- 2.5 to 2.5 Abs (±0.4 Abs)	
	Photometric Repeatability	±0.002 Abs at 1.0 Abs	
	Baseline flatness	200 to 1100 nm, baseline corrected ±0.003 Abs	
	Spectral bandwidth	Variable	
	Accessories	a) USB cable and power cord.	
		b) Softwares	
		c) Work Station PC, 19 th TFT-LED Monitor with Printer	
		d) 1 KVA Online UPS	
	LAI-2270C Control Unit		
	Sensor Inputs	Two 6-pin connectors for LAI-2250 Optical Sensors; Two BNC connectors for Light Sensors	
	Data Storage Capacity	128 MB of FAT16 memory	
	Display	128x64 graphics display	
	Keypad	22 button tactile response keypad.	
	Communications	USB	
	Integrated Global Positioning System	Horizontal position accuracy: 2.5 m CEP (50% Circular Error Probability, Open-Sky, 24hr Static,	
Plant Canopy Analyser		good view of the sky). Maximum position update rate: 1 Hz. GPS receiver sensitivity, autonomous acquisition: -148dBm. Time to first fix (TTFF), hot start: 1	01
		second; warm start: 6s (typical); cold start (with good view of the sky): 37 seconds at 90% probability.	
	Clock	Year, Month, Day, Hour, Minute.	
	Power Requirements	4 "AA" (alkaline, NiMH, lithium) batteries.	
	Battery Life	90 hours based on 4 "AA" alkaline batteries without optical sensor attached and without GPS enabled	
	LAI-2250 Optical Sensor	1	
	Sensor Inputs	One 6-pin bulkhead connector for control unit interface	

Keypad 2 button, tactile response keypad Clock Year, Month, Day, Hoar, Minute, Accurany of 4-3 minutes per month. 2 *AA* (alkaline, NMH, lithtum) Batteries Battery Life 180 hours of typical operation (based on 2 *AA* (alkaline, NMH, lithtum) Batteries Optics 1.00° maximum deschering, error as measured from center of mass of ring 4. 0.50° maximum magnification error as measured from center of mass of ring 4 Radiation Rejection > 50% from 400-650 nm; > 99.9% abvee 650 nm Wavelength Range 32-240 nm Nominal Angular Coverage Ring 1: 0.0-12.3°; Ring 2: 10.7-28.6°; Ring 3: 32.4-41.34°; Ring 4: 47.3-58.1° Ring 5: 62.3-74.1°. Lens Coatting Merip for improved transmission at oblique angles (esternal admineral lenses). View Caps Previde azimuthal masking of view inne quadrants of 10°, 45°, 90°; 180°, and 270°. Diffuser Cap .0. Light sensor logging b. File View Software (FV2200 software) Accessories a. Light sensor logging b. File View Software (FV2200 software) Controller Minimum Detective Limit Na 6*AA* batteries, j. belt clip Filter 10 nm Typical for Na and K. Compressor Air Compressor with built-in air regulator and air filter to deliver stable and moisture' of If eair supply Photometer Approva 3 ml per element (at Avg. Time) of 4 ecc.) Operating Air Pressure 0.45 k* cm² (typical) Operating Air Pressure 0.45 k* cm² (typical)		Memory	1 MB flash memory for record storage	
Clock Year, Month, Day, Hour, Minate, Accuracy of 3 minutes per month. Power Requirements 2"AA" (alkaline, NiMH, lithium) Batteries Battery Life 180 bours of typical operation (based on 2"AA" alkaline batteries). Opties 1.00" maximum decentering error as measured from eater of mass of ring.4. Acadiation Rejection >99% from 490 650 nn: >99.9% above 650 nm Wavelength Range 320-490 nm Nominal Angular Coverage Ring 1: 0.0-1.2.3"; Ring 2: 16.7-28.6"; Ring 3: 52.4-43.4"; Ring 4: 47.3-58.1" View Caps Provide azimuthal masking of view into quadrants of 10", 45"; 90", 180"; and 270". View Caps Provide azimuthal masking of view into quadrants of 10", 45"; 90", 180"; and 270". Diffuser Cap Used to cover the lenw when measuring sky radiation properties for scattering corrections. Accessories a. Light sensor logging b. File Viewer Software (FV2200 software) Controller Minum Detective Linit Filter 10 mm Typical for Na and K Compressor Air Compressor with built-in air regulator and air lifter to deliver stable and moisture / oil free air supply Minimum Detective Linit Na: 0.2 ppm and K: 0.1 ppm Minimum Sample Q4 Sk / cm² (typical) Operating Air Pressure 0.45 k / cm² (typical) Operating Air Pressure 0.45 k / cm² (typical) Operating Air Pressure </th <th></th> <th>Keypad</th> <th>2 button, tactile response keypad</th> <th></th>		Keypad	2 button, tactile response keypad	
Power Requirements 2**A* (alkaline, NiMH, lithium) Batteries. Battery Life 100 maximum decentering error as measured from center of mass of ring 4. Optics 100 maximum decentering error as measured from the center of mass of ring 4. Radiation Rejection > 99% from 490-650 mm; > 99.9% above 650 mm Wavelength Range 320-490 mm Wavelength Range 320-490 mm Nominal Angular Coverage Ring 1: 0.0.1.23*; Ring 2: 167-28.6*; Ring 3: 32.4-43.4*; Ring 4: 47.3-58.1* Ring 5: 0.23*74.1*. Lens Coating Melly for improved transmission at oblique angles (external and internal lenses). View Caps Provide azimuthal musking of view into quadrants of 10; 45*; 90°; and 270°. Diffuser Cap & Light sensor logging Accessories a. Light sensor logging b. File Viewer Software (FV2200 software) c. Two 1.A1-2250 Optical Sensors with duta cables. d. one LA1-2270C Control Unit, e. Carrying case, f. USB cable, g. view-restrictors, h. diffuser cap, i. 6. "AA* batteries, j. helt (chp Filter 10 nm Typical for Na and K Compressor Air Compressor with built-in air regulator and air filter to deliver stable and moisture / oil free air supply Photometer Hill Scale Sensitivity Na : 2 npm and K: 0.1 ppm Min		Clock	Year, Month, Day, Hour, Minute.	
Battery Life Battery Battery Life 180 hours of spical operation (based on 2 * A* alkaline batterics). Optics 1.00° maximum decentering error as measured from the center of mass of ring 4. Radiation Rejection > 99% (from 490-650 nm; > 99.9% above 650 nm; > 99.9% above formating above above for site of above for site of site of s		Power Requirements	2 "AA" (alkaline, NiMH, lithium)	
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Digital Flame Controller Accessories 0.3% maximum magnifications, built built-in air regulator and air filter to deliver stable and mosture / 90.9% from 490.450 nm; > 99.9% from 490.450 nm; > 90.9% from 490.450 nm; > 90.450 nm; >		Optics	1.00° maximum decentering error as	
Digital Flame Controller Accessories a. Light scale Controller Controller Accessories a. Light scale Controller Accessories a. Light scale Accessories a. Light scale Light scale Bigital Flame Controller Microcontroller Microcontroller Filter 10 nm Typical for Na and K Conc.: + -12/200 Light scale Digital Flame Accuracy +2.0% of Full scale Accuracy Photometer Accuracy -2.0% of Full scale Accuracy -2.0% of Full scale Accuracy -2.0% of Full scale Approx 3 ml per clement + 4. Scc. Accuracy 2.0% of Full scale Approx 3 ml per clement + 4. Scc. Averaging 210 15 seconds, selectable			measured from center of mass of ring 4. 0.50° maximum magnification error as	
Pring 4 Radiation Rejection >99% from 400-650 nm; >99.9% above 650 nm Wavelength Range 320-490 nm Nominal Angular Coverage Ring 1: 00-12.3°; Ring 2: 16.7-28.6°; Ring 3: 32.4-43.4°; Ring 4: 47.3-58.1° Ring 1: 00-12.3°; Ring 2: 16.7-28.6°; Ring 3: 32.4-43.4°; Ring 4: 47.3-58.1° Nominal Angular Coverage Ring 1: 00-12.3°; Ring 2: 16.7-28.6°; Ring 3: 62.3-74.1°; Lens Coating MgF ₂ for improved transmission at oblique angles (external and internal lenses). Provide azimuthal masking of view into quadrants of 10°, 45°; 90°; 180°; and 270°. Diffuser Cap Used to cover the lens when measuring sky radiation properties for scattering corrections. Accessories a. Light sensor logging b. Frite Viewer Software (FV2200 software) c. Currying case, c. f. USB cable, g. view-restrictors, h. diffuser cap, i. 6'-AA' batteries, j. belt clip Filter 10 um Typical for Na and K Compressor Filter 10 um Typical for Na and K Compressor Air Compressor with built-in air regulator and air filter to deliver stable and moisture / oil free air supply Publical Flame Accuracy 2.0% of Full scale Publiscal Sensitivity Na : 2 ppm and K: 0.1 ppm			measured from the center of mass of	
Radiation Rejection > 99% from 490-650 nm; > 99.9% above 650 nm Wavelength Range 320-490 nm Nominal Angular Coverage Ring 1: 0.0-12.3°; Ring 2: 16.7-28.6°; Ring 3: 32.4-33.4°; Ring 4: 47.3-58.1° Lens Coating MgF, for improved transmission at oblique angles (external and internal lenses). View Caps Provide azimuthal masking of view into quadrants of 10°, 45°, 90°, 180°, and 270°. Diffuser Cap Used to cover the lens when measuring sky radiation properties for scattering corrections. Accessories a. Light sensor logging b. File Viewer Software (FV2200 software) c. Two LA1-2270C Control Unit, c. Carrying case, f. USB cable, g. view-restrictors, h. diffuser cap, i. 6 °1A" batteries, j. belt clip Filter 10 nm Typical for Na and K Compressor Air Compressor with built-in air regulator and air filter to deliver stable and moisture / oil free air supply Full Scale Sensitivity Na : 0.2 ppm and K: 1 ppm Minimum Detective Linit Na : 0.2 ppm and K: 1 ppm Minimum Detective Linit Na : 0.2 ppm and K: 0.1 ppm Accuracy ±2.0% of Full scale Photometer Reproducibility Na : 0.2 ppm and K: 0.1 ppm Accuracy Accuracy ±2.0% of Full scale Minimum Detective Linit Na : 0.2 ppm an			ring 4	
Wavelength Range 320-490 nm Nominal Angular Coverage Ring 1: 0.0-12.3°; Ring 2: 16.7-28.6°; Ring 3: 32.4-43.4°; Ring 4: 47.3-58.1° Ring 5: 32.3-74.1°; Lens Coating MgF ₂ for improved transmission at oblique angles (external and internal lenses). View Caps Provide azimuthal masking of view into quadrants of 10°, 45°, 90°; 180°, and 270°. Diffuser Cap Used to cover the lens when measuring sky radiation properties for scattering corrections. Accessories a. Light sensor logging b. File Viewer Software (FV2200 software) c. Two LA1-2250 Optical Sensors with data cables d. one LA1-2270C Control Unit, e. Carrying case, f. USB cable, g. view-restrictors, h. diffuser cap, i. 6 °AA° batteries, j. belt clip View Caps Controller Microcontroller Filter 10 nm Typical for Na and K Compressor Air Compressor with built-in air regulator and air filter to deliver stable and moistur / oil lice air supply Full Scale Sensitivity Na : 2 ppm and K: 1 ppm Minimum Detective Limit Na : 0.2 ppm and K: 0.1 ppm Photometer Accuracy ±2.0% of Full scale Operating Air Pressure 0.45 k / cm ² (typical) Operating Air Pressure 0.45 k / cm ² (typical) Accuracy ±2.0% of Jul scale		Radiation Rejection	> 99% from 490-650 nm; > 99.9%	
Nominal Angular Coverage Ring 1: 0.0-12.3°; Ring 2: 16.7-28.6°; Ring 3: 32.4-43.4°; Ring 4: 47.3-58.1° Ring 5: 62.3-74.1°; Ring 5: 62.3-74.1°; View Caps Lens Coating MgF ₇ for improved transmission at oblique angles (external and internal lenses). View Caps Provide angles (external and internal lenses). Diffuser Cap Used to cover the lens when measuring sky radiation properties for scattering corrections. Accessories a. Light sensor logging b. File Viewer Software (FV2200 software) File Viewer Software (FV2200 software) c. Two LAI-2250 Optical Sensors with data cables d. one LAI-2270C Control Unit, e. Carrying case, f. USB cable, g. view-restrictors, h. diffuser cap, i. 6 "AA" batterics, j. bolt clip Filter 10 nm Typical for Na and K Compressor Air Compressor with built-in air regulator and air filter to deliver stable and moisture / oil free air supply Put Photometer Accuracy ± 200% of Full scale Put Minimum Detective Limit Na : 0.2 ppm and K: 0 1 ppm Olf Minimum Sample Approx 3 ml per element (at Avg. Time of 4 sec.) Olf seconds, selectable Olf		Wavelength Range	320-490 nm	
Bing 3: 32,4-33,4°; Ring 4: 47,3-58,1° Ring 5: 62,3-74,1° Wer Caps View Caps Provide azimuthal masking of view into quadrants of 10°, 45°, 90°; 180°, and 270°. Diffuser Cap Used to cover the lens when measuring sky radiation properties for scattering corrections. Accessories a. Light scnsor logging b. File Viewer Software) c. Two LAI-2250 Optical Sensors with data cables d. one LAI-2270C Control Unit, e. Carrying case, f. USB cable, g. view-restrictors, h. diffuser cap, i. 6 °AA° batteries, j. belt clip Filter 10 nm Typical for Na and K Compressor Air Compressor with built-in air regulator and air filter to deliver stable and moist up of lifts regulator and air filter to deliver stable and moist 0.1 ppm Minimum Detective Limit Na : 0.2 ppm and K: 0.1 ppm Minimum Sample Approx 3 ml per element (at Avg. Time of 4 sec.) Operating Air Pressure 0.45 k / cm² (typical) Operating Air Pressure 0.45 k / cm² (typical) Aspiration Time (5 Sec + Avg. Time) per element + 4 Sec.		Nominal Angular Coverage	Ring 1: 0.0-12.3°; Ring 2: 16.7-28.6°;	
Lens Coating MgF2 for improved transmission at oblique angles (external and internal leness). View Caps Provide azimuthal masking of view into quadrants of 10°, 45°, 90°, 180°, and 270°. Diffuser Cap Used to cover the lens when measuring sky radiation properties for scattering corrections. Accessories a. Light sensor logging b. File Viewer Software (FV2200 software) c. Two LA1-2250 Optical Sensors with data cables d. one LA1-2270 Control Unit, e. Carrying case, f. USB cable, g. view-restrictors, h. diffuser cap, i. 6 "AA" batteries, j. bett clip Filter 10 nm Typical for Na and K Controller Filter Filter 10 nm Typical for Na and K Compressor arit compressor with built-in air regulator and air filter to deliver stable and moisture / oil free air supply Full Scale Sensitivity Na : 2 ppm and K: 0.1 ppm Minimum Detective Limit Na : 0.2 ppm and K: 0.1 ppm Minimum Sample Approx 3 ml per clement (at Avg. Time of 4 sec.) Operating Air Pressure 0.45 k / cm² (typical) Operating Air Pressure 0.45 k / cm² (typical) Averaging 2 to 15 seconds, selectable			Ring 3: 32.4-43.4°; Ring 4: 47.3-58.1° Ring 5: 62.3-74.1°.	
bilique angles (external and internal leness). View Caps Provide azimuthal masking of view into quadrants of 10°, 45°, 90°, 180°, and 270°. Diffuser Cap Used to cover the lens when measuring sky radiation properties for scattering corrections. Accessories a. Light sensor logging b. File Viewer Software (FV2200 software) c. Two LAI-2250 Optical Sensors with data cables d. one LAI-2270C Control Unit, e. Carrying case, f. USB cable, g. view-restrictors, h. diffuser cap, i. 6 "AA" batteries, j. belt clip ible Filter 10 nm Typical for Na and K Compressor Air Compressor with built-in air regulator and air filter to deliver stable and moisture / 01 fifter at supply Photometer Minimum Detective Limit Na : 0.2 ppm and K: 0.1 ppm Accuracy +2.0% of Fall scale Poperating Air Pressure 0.45 k / cm² (typical) Operating Air Pressure 0.45 k / cm² (typical) Got Sec + Avg. Time) per element + 4 Sec. Sec.		Lens Coating	MgF ₂ for improved transmission at	
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Averaging 2 to 15 seconds, selectable		Aspiration Time	(5 Sec + Avg. Time) per element + 4 Sec.	
		Averaging	2 to 15 seconds, selectable	

	Fuel Gas	LPG	
	Power Supply	230 Vac +- 10%, 50 Hz.	
	Specification	Kjeldahl distillation with digestion for soil analysis	
Kjeldhal Distillation Unit		Soli analysisWith dropping funnel, coil condenser for Kjeldahl distillation unitGlass vessel to hold digested sample with trapFunnel to add distilled waterBoiler and Quart heater for KjeldahlOuter jacket for spent liquid	01