

Comparative Statement for procurement of equipment for Mobile Drug Testing Labs 2021-22

Serial No.	Item Description	Model	Firm Name & Other Details	Total Technical Score	Offered unit Price Inclusive of all taxes (PKR)	Lowest Offered Price	Financial Score	Total Score (Technical Score + Financial Score)
1	Fourier-transform infrared spectroscopy (FTIR)	<p>BRUKER ALPHA-II with platinum Diamond-ATR,</p> <p>Made in Germany by Bruker Optics Germany</p> <p>Spectrometer Operation</p> <p>1) The spectrometer system shall be laptop based that shall be provided with the equipment as per the specifications mentioned in SBDs. A built-in touchscreen will be an additional feature.</p> <p>a. The operation workflow should completely cover all analytical steps of background & sample measurement, spectrum evaluation, result display and report generation.</p> <p>2) The software must include a spectra comparison function for the verification of material identity:</p> <p>a. The spectra comparison function shall provide a clear result stating if a tested spectrum is identified, or if it may be mixed up with other reference spectra, or if cannot be identified.</p> <p>b. The spectra comparison function shall provide the option to verify an expected identity of a measured spectrum against a user-selected reference compound in the method</p> <p>c. The spectra comparison function shall provide an identification option to identify a measured spectrum without defining any expectation.</p> <p>3) The software should provide an overview about the status of the overall system and of individual system components.</p> <p>4) The Interferometer:</p> <p>a. Must be permanently aligned. Interferometer designs that require alignment (either manual or automatic) are not acceptable.</p> <p>b. Should be capable of acquiring data in both scanning directions to ensure the maximum signal-to-noise ratio in the shortest possible time.</p> <p>c. Bearing mechanism must be wear-free (frictionless) design to ensure unlimited lifetime. Bearings with wear are not acceptable as they require frequent maintenance and costly exchange.</p> <p>d. Must have ability of correction of instability due to mirror tilt. Systems employing electro-optical actuators (dynamic alignment) with flat mirrors to correct for interferometer instability are acceptable only if the frequency of correction is four times the Fourier frequency of the highest wavelength to be measured using the maximum scan speed of the instrument.</p> <p>5) The detector should be temperature-controlled to provide a high stability against variation of the external temperature.</p> <p>6) The IR-source should feature technology that aligns the area of IR-light emission in the center of the source over the complete lifetime of the source; thereby preventing decrease of light throughput (= decrease of measurement sensitivity) over time.</p> <p>7) The lifetime of the spectrometer should be extremely long. The warranty period is expected to be 10 years for the interferometer, 10 years for the Laser and 5 years for the IR source, respectively.</p> <p>8) The FTIR spectrometer should include ZnSe beam splitter and ZnSe windows should be available to cover the spectral range from 6,000 – 500 cm-1 or better spectral range.</p> <p>9) All mirrors should be gold-coated to maximize optical throughput in the Mid-IR spectral range.</p> <p>10) The wavenumber accuracy should be better than 0.05 cm-1.</p> <p>11) The wavenumber precision should be better than 0.0005 cm-1.</p> <p>12) The interface of the spectrometer to the data system should be Ethernet. Wireless LAN should be optionally available</p> <p>13) The optics should be sealed. No purge with dried air or nitrogen should be required.</p> <p>14) The spectrometer should contain an electronic sensor to measure the humidity in the device. An automated alert should inform the operator if the humidity is above the threshold.</p> <p>15) The FTIR spectrometer should not have a sample compartment in which different accessories may be placed but should consist of a basic spectrometer including the electronics and the interferometer. Modules for ATR, transmission or diffuse and specular reflection are attached to the spectrometer module to result in a dedicated spectrometer.</p> <p>16) Each spectrometer module should automatically be recognized by electronic coding.</p> <p>17) Each spectrometer module should individually be calibrated to guarantee highest wavenumber accuracy for each spectrometer configuration.</p> <p>18) After any change of a spectrometer module a self-test of the spectrometer should be performed automatically.</p> <p>19) After any change of a spectrometer module appropriate measurement settings should be loaded and applied automatically.</p> <p>20) Electronic recognition of all different crystal plates for ATR should be implemented. The system should automatically load the appropriate parameter set for measurement upon the exchange of an ATR crystal plate.</p> <p>21) Diamond-ATR module:</p> <p>a. The ATR module should include a very robust diamond crystal. The diamond crystal should be mounted in the plate by soldering. The fixation of the crystal by glue does not assure the required stability and will therefore not be accepted.</p> <p>b. The lifetime of the diamond ATR module should be extremely long. The warranty period is expected to be 10 years.</p> <p>c. The diamond-ATR crystal should be monolithic to allow the measurement over the full Mid-IR spectral range according to the optical configuration of the spectrometer. No optical components should be used which limit the spectral range.</p> <p>d. Another version of the ATR diamond crystal plate with a dish-like form for the analysis of fluids should be available. This version should also include a pressure applicator to measure solid samples.</p> <p>e. Another version of the ATR diamond crystal plate with a dish-like form and temperature control for the analysis of fluids should be available, too. The controller for the temperature regulation should be fully included in the spectrometer.</p> <p>22) A multiple reflection ATR-module with at least 6 internal reflections should be available.</p> <p>23) For external reflection a module with video option should be available</p>	<p>KAMSTEC INTERNATIONAL, OFFICE NO. 3-5, 11TH FLOOR Rimpa Plaza office tower M.A Jinnah Road Karachi. Contact No. 021- 32767521, 021-32737981, Focal Person: Malik Umair Latif, Cell No. 0302.8888920, Email Address: contact@kamstec.com, umair@kamstec.com Website. www.kamsstec.com</p>		6108958	6108958		

		<p>24) The FTIR spectrometer should be able to be used in mobile lab and must be able to maintain its performance during long travelling. For mobile use a rechargeable battery pack, car and truck battery connectors (12 V and 24 V) and a transport case should be available. A mounting plate with a hand grip should be available holding the spectrometer and battery as one mobile unit.</p> <p>25) The FTIR spectrometer should be produced in Europe, US, Canada, Japan.</p> <p>PERFORMANCE CONTROL & VALIDATION</p> <p>1) Remote operation of the FT-IR spectrometer must be possible.</p> <p>2) Remote diagnostics of the spectrometer must be possible.</p> <p>3) All components of the spectrometer like source, laser, electronics and interferometer should be permanently monitored for correct operation. Any failures should be indicated instantly to the user.</p> <p>4) The FTIR spectrometer should be equipped with fully automated instrument performance tests (OQ, PQ). These automated test series should determine if the spectrometer is operating within specification.</p> <p>5) The FTIR spectrometer should be equipped with an integrated certified reference standard and fully automated instrument performance tests fulfilling Ph. Eur., Ph. JP and USP.</p> <p>6) The operating software must be validated.</p> <p>7) The spectrometer software should be equipped with all necessary routines to assist laboratories that must confirm GMP standards. Extensive user management with multiple user levels, non-editable data files and complete audit trails should be provided by this software. It further should support the demands of the 21 CFR Part 11 regulation (electronic records, electronic signatures) issued by the American FDA.</p> <p>SPECTROSCOPIC SOFTWARE</p> <p>Must be FDA 21 CFR compliant and must be able to run on any windows/Mac operating system.</p>
	Optional Touch Panel.	<p>The multitouch panel PC for Alpha II of industrial class permits the highest level of soft and hardware integration. An elegant mount connects the touch computer interface and spectrometer to an intimate unit and fully integrates the cabling. The Complete footprint of Alpha II IR-System is reduced to the one end of a laptop.</p> <p>Integrated touch panel PC for Alpha II spectrometer, CS86-A+, 10.1" WXGA (1280 x 800) color TFT LCD Display. 2GB Ram, Robust Aluminium Housing, p-CAP Multi touch (2-point), Fan-less operation, IP65 compliant front bezel, Ports: Ethernet Connector (RJ-45), USB 2.0 Type-A x 3, USP 3.0 Type A x 1</p> <p>Included OPUS Spectroscopic software, additional workstation license, WiFi Stick for USB port.</p> <p>Required OPUS-Touch Software</p> <p>Options- C231-W wireless key board and mouse c217-CS NAS smart cloud storage device (Only available with order of spectrometer)</p>
	Optional Warranty Extension beyond mandatory warranty.	Warranty extension by 12 months for Alpha (with order of instrument only / parts only)

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	Laptop	A) Laptop Hardware Specification (Branded) Processor Intel® Core™ i7 10th Generation 4.0GHz or better RAM 16 GB Hard Disk 1TB-SSD Display 15.6" FHD LED Operating System Pre-installed Genuine Microsoft Windows 10 Pro (64 bit) Graphics Intel HD Graphics Warranty NOTE: 03 Year Parts/Labor Local warranty for all components on site.		56	234000	192000	24.615385	80.61538462
	Laptop	A) Laptop Hardware Specification (Branded) Processor Intel® Core™ i7 10th Generation 4.0GHz or better RAM 16 GB Hard Disk 1TB-SSD Display 15.6" FHD LED Operating System Pre-installed Genuine Microsoft Windows 10 Pro (64 bit) Graphics Intel HD Graphics Warranty NOTE: 03 Year Parts/Labor Local warranty for all components on site.	AURSOFT Pvt Ltd. UG 4 and 5, Shiekh Yaseen Trade Center University Road Peshawar.	56	192000	192000	30	86
2	Raman Analyzer (1064nm) for Materials Testing:	Progeny LT-1064 Rigaku - Made in USA Raman Analyzer (1064nm) for Materials Testing: Handheld Raman spectrometer with 1064nm laser excitation which delivers the greatest benefits with features. IP-68 Certified rugged dust and water proof aluminum chassis, Li-ION rechargeable batteries >5 hours life ,Laser Power 30-300mW or better, Standard onboard library of 12,000 compounds or more. The library should be up gradable. Integrated Instrument software 21 CFR Part 11 Compliant with True electronic digital signatures and Password protected log-in, administrator assigned user privileges, application creation to optimize settings for specific materials, batch mode for analysis of multiple containers of the same material Integrated 20 barcode reader and camera WiFi, Vial sample holder, adjustable focal point nose cone AC power supply unit, External Battery Charger, Flash drive containing: User Manual (PDF), and other unit specific documentation, Quick Start Guide Specifications: Interface: 1064 +/- 1 nm (0.3 nm line width, stability < 0.1 cm-1) laser excitation to minimize fluorescence interference Spectral resolution: 8-11cm-1 Spectral range: 200-2500cm-1 Detector: Single/dual laser excitation detector that can cover all the range of pharmaceuticals/drugs in finished form. Certifications: US-FDA 1040 21 CFR, CE (Quality assurance certificate), CE Declaration of conformity. Battery: Li-ion Battery, 3000mAH or above that can provide a minimum of 5 hours backup. (Preferably with a spare backup battery). Accessories: Docking Station with AC power Adaptor & USB Cable, Instrument Carrying holster with Belt, Bottle Adaptor & Tablet adaptor, IQ, OQ, PQ Verification Kit including (Acetaminophen tablet standard, Polystyrene rod , and 4ml glass vials of the following: Certified, Certified Acetaminophen Powder (4ml), Cyclohexane (4ml), Certified Benzonitrile(2ml), Certified Naphthalene) Original IQ/OQ/PQ Documents. Applications: System must be suitable to analyze finish products and be helpful to identify the fake/spurious medicine available in the market. Standard Warranty 2 Years. Country of Origin: USA, Japan, UK, Europe		43	9705150	9705150	30	73
3	Analytical Balance	Electronic Analytical Balance Digital Microprocessor Controlled Advanced performance Unibloc balances. Schimadzu, Model AP135W Made in Japan Must have programmable multi-functional touch-free sensors for cleanliness, speed and safety Must have multiple applications modes plus library for storage of personal application settings External calibration Must support application: Weighing (Multiple units + custom units), parts counting, % weighing, filling, Differential weighing, Density determination, Pipette adjustment, Gross/Net/Tare weighing Display must be colored high Resolution. Construction must be of Metal Base, Acrylonitrile butadiene styrene (ABS) top housing, stainless steel pan, anti-static glass draft shield with flip door, replaceable in use cover Overload protection mechanism Must have fully automatic internal calibration system Must have four-digit measurement	RAYS TECHNOLOGIES, 7/1, Block-F, Near Main Market, Gulberg II Lahore, 54660 Pakistan. Tel. 0092-42-35753903, 35753904-5, Fax 0092-42-35753906, Email. sales@raystechno.com kpkraystechno@gmail.com, Website. www.raystechno.com Focal Person. Mr.Zahid Jamil 042-35753905-3. Phone 0333-9107865.		1047150	1047150		

		<ul style="list-style-type: none"> • Range 0.1 to 110g or better • Readability: 0.01 mg, • max Linearity: ± 0.2 mg • Adjustment: Internal • Warranty: 3 years preferably 5 years along with calibrated standards and parts • Service Warranty: 3 years preferably 5 years <p>Weighing Capacity 135g, Minimum Display 0.01mg, built-in calibration weight, ø91mm pan size, Repeatability 0.01mg, Response Time 2 Seconds, Interface. USB, RS232C, Linearity ± 0.1mg Complete Unit operated on 220 volts.</p>					43			30	73
		<p><u>Optional.</u></p> <p>Printer for Shimadzu Balance AP135W, OLED 128x64 Dot Matrix Display, 8-pin reciprocating impact dot matrix, Approx 1.7 lines speed</p>						174330	174330		
4	Micropipette	<p>Pipette with premium comfort- Pipetman G.</p> <p>P10G-1 to 10 uL, P20G- 2 to 20 uL, P100G- 10 to 100 uL, P200G - 20 - 200uL, P1000G- 100-1000uL</p> <p>Made in France</p> <p>3 years warranty after installation by engineer of the firm</p>					56.5	40950 each. All models P10G, P20G, P100G, P200G, P1000G	40950	30	86.5
6	Printer	<p>HP Laserjet Pro M15w Printer, Upto 19ppm speed, first page out black as fast as 8.1 sec, resolution black best upto 600 x 600dpi. Memory 16mb, Processor speed of 500mHZ and Monthly duty cycle of upto 8000 pages</p> <p>Warranty - 2 years</p> <p>Delivery- Within 90 days</p>					56	43400	43400	30	86
7	Printer	<p>HP Laser MFP 135w (PRINT, COPY, Scan, Wireless), Memory of 128mb / 600mhz, Monthly duty cycle of upto 10000 pages, with manual DUPLEX printing. Laser printing method, printing speed of 20ppm A\$, Resolution of Black (Best 1200 x 1200 dpi. Black normal 600 x 600dpi. Black A4 ready as fast as 8.3 sec, Black A4 sleep as fast as 18 seconds (15min). Copy Black Normal A4 upto 20 cpm, and resolution of 600 x 600dpi, copier reduce and enlarge upto 25%-400%. Flatbed Scan, Contact Image Sensor, Resolution Hardware 4800x4800dpi, optical upto 600x600dpi Max Scan Size flat bed 216x297mm.</p> <p>Warranty - 2 years</p> <p>Delivery- Within 90 days</p>	AURSOFT Pvt Ltd, UG 4 and 5, Shiekh Yaseen Trade Center University Road Peshawar.				56	53000	43400	24.57	80.57