



Ministry of Health
Directorate of Biomedical Engineering
Technical Specifications



Item Description:

Automated Clinical Chemistry Analyzer
(Health Centers - Medium Load)

Quantity (95)

No	Technical Specifications	Min MOH Requirement
1	Manufacturer	Please specify manufacturer, country of origin and country of manufacture of the offered equipment
2	Model Number	Please specify model number of the offered equipment
3	Safety Standard	FDA approval or CE marking or EC-IVD
4	Starting Production Year (Hardware)	Not more than 8 years
5	Reference Centers	Please specify reference centers in Jordan and Middle East
6	Configuration	Bench top type
7	Application	Random access analyzer
8	Method	Photometric
9	Throughput, test / hour	Photometric only not less than 300 tests / hour
10	Measurement Tests	See attached annex 2
11	Sample Compartment	<ul style="list-style-type: none">• Not less than 20 position with continuous loading ability• Serum and plasma• Primary tubes with different tube size• STAT functionality required• Liquid level and clot detection• Sample identifications
12	Reaction Compartment	Reusable reaction cells or cuvettes (please specify replacement period)
13	Reagent Compartment	<ul style="list-style-type: none">• Refrigerated• Not less than 30 positions with continuous loading ability• Liquid level and air bubbles (foam) detection• Reagent identifications
14	Optical Unit	<ul style="list-style-type: none">• Monochromatic and biochromatic modes• Multiple wavelengths
15	Auto Wash	<ul style="list-style-type: none">• For Sample / reagent probes• Reaction cells or cuvettes
16	Dilution	Auto sample pre-dilution (when needed)
17	Calibration and Quality Control	<ul style="list-style-type: none">• Automated• Calibrators / controls identifications
18	Barcode Reader	Must supplied external hand-held barcode reader
19	Control Unit	PC control with screen and original software
20	Analyzer Software	<ul style="list-style-type: none">• Friendly and easy to use• Reagent management (lot number, expiry date, volume level (number of tests), inventory data...)• Quality control monitoring• Ability to hold abnormal results and if there is QC issue• Full control and data processing• Administrator (supervisor) password• Ability to export results• Sample tracking• Real time patient result• Errors log

No	Technical Specifications	Min MOH Requirement
21	Alarm System (audible or visual)	<ul style="list-style-type: none"> • Hardware failures • Reagent expired • Reagent low / high temperature • Sample / reagent volume level • Water level (ready to use wash) • Reagent air bubbles (foam) • Sample clot
22	Printer	High quality external laser printer, (A4 paper)
23	Uninterruptible Power Supply	Required on-line and minimum enough for 30 minutes
24	RO System with Softener or Ready to use wash reagents	<ul style="list-style-type: none"> • Any brands RO system whether international or national (locally) Must be approved by manufacture (official letter from manufacturer) • If used ready to use wash reagents must be provided (FOC) for all period of contract
25	Startup	Minimum one kit for all tests for each analyzer and must be provided (FOC) with enough consumables, controls and calibrators
26	Interfaces	<ul style="list-style-type: none"> • Bidirectional HIS/LIS interface and must be compatible and connected with Hakeem system • USB ports • Network interface
27	Power Supply	220 V / 50 Hz