

تنويه
م/ المناقصة المرقمة 57/2025/35

أشارة الى المناقصة اعلاه نود اعلامكم ان المواصفات الفنية لجهازي (heart-lung bypass unit , blood gas analysis machine) هي كما مدرجة ادناه:

شاكرين لكم تعاونكم معنا...مع الاحترام

Notice
Subj/ Tender no.: 57/2025/35

Dear Sirs:

Reference to a/m tender, pls note that the technical specifications for (heart-lung bypass unit and blood gas analysis machine)as listed hereunder :

**Many thanks for your cooperation.
B.RGDS**

1. DEVICE NAME: HEART-LUNG BYPASS

- ❖ Application: Heart-lung bypass units are external systems that circulate, oxygenate, and filter the blood, acting as a temporary substitute for circulatory and pulmonary function. (often used for open-heart surgery).

Part I:

- ❖ **Configuration:** Modular/console.
 - Pump positions, max ≥ 4 .
 - ❖ **Pump Type:**
 - *Centrifugal*: Optional.
 - *Roller*: Yes.
 - Bidirectional: Yes.
 - Directional lock: Yes.
 - ❖ **Drive system:** Direct drive or Belt.
 - ❖ **Flow rate, L/min:** 0- ≥ 10 arterial.
 - ❖ **Head sizes, cm:** ≥ 8.5
 - ❖ **Tubing sizes, cm:** ≥ 0.3
 - ❖ **Occlusion adjustment method:** Any with lock.
 - ❖ **Master/slave:** Yes.
 - ❖ **DISPLAYS (CHANNELS):**
 - Flow rate: Yes.
 - Temperature: ≤ 8 .
 - Pressure: ≤ 8 .
 - Timers: ≤ 6 .
 - Cardioplegia monitor: Yes.
 - ❖ **ALARMS:** Yes, Audible and visual.
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❖ **SAFETY DEVICES:**

- Level detector: Yes .
- Bubble detector: Yes ,Ultrasonic.
- Roller pump-head covers: Yes.

❖ **FEATURES:**

- Pulsatile pumping: according to manufacturer.
- Venous flow clamp: Yes.
- Separated heater/ cooler: Yes.
- Writing table: Yes.
- Lamp: Yes.
- Accessory outlets: Yes.

❖ **CONNECTORS:** blood: inlet/outlet, others should be specified by manufacture.

❖ **PATIENT MONITOR INTERFACE:** Yes.

❖ **NETWORK CONNECTION TYPE:** Yes.

❖ **SELF DIAGNOSTICS:** Yes.

❖ **Line power:** (220 -240) Volt, 50 /60Hz, 3 pin Plug (G type).

❖ **AUX POWER SYSTEM:**

- Type: built-in Battery preferred or UPS
- Operating time, hr: ≥ 1 .
- Charging time, hr: ≤ 16
- Manual crank: Yes.

Part II

❖ **COMPATIBLE OXYGENATORS:** Yes.

❖ **TYPE** : Hollow-fiber membrane, other specified by manufacture.

❖ **Blood FLOW RATE, L/min:** ≤ 8 .

❖ **MEMBRANE**

- Material: Polypropylene or Polymethylpentene or better.
 - Surface area, m²: ≤ 2.2
 - Coating: according to manufacturer.
 - ❖ **RESERVOIR** (if needed)
 - Shell: Hard, other should be specified.
 - Capacity, mL: ≤ 4500.
 - ❖ **STATIC PRIMING VOLUME, mL: ≤ 400.**
 - ❖ **INTEGRAL HEAT EXCHANGER: Yes.**
 - ❖ **SIZES AVAILABLE:**(adult, pediatric type or infant) per user request.
 - ❖ **Environmental requirements:** The equipment suitable for working in the climate conditions of Iraq in terms of temperature & humidity.
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2- DEVICE NAME: Point –Of-Care Analyzer, Blood Gas/PH

Application	Analyzers used to measure blood gas, pH, electrolytes, and some metabolites in whole blood specimens. The turnaround time (TAT) for tests will be performed on POC analyzers should be short in areas where immediate test results are necessary such as ICU, PICU, ED and OR.
FDA clearance or CE mark	Yes ,FDA (preferred)
Configuration	Bench top or portable (with cart or carrying case according to manufacturer)
TEST MENU	
<ul style="list-style-type: none"> • Blood gases/electrolytes • Chemistries • Co-oximetry 	pH, pCO ₂ , pO ₂ , Na ⁺ , K ⁺ , Cl ⁻ , Ca ⁺⁺ and other glucose ,lactate and others ctHb , sO ₂ , FO ₂ Hb , FCOHb , FMetHb , FHHb , FHbF , ctBil
Sample types	Whole blood or others
Sample size, μL	≤ 200 (specific short probe position for low volume sample)
Analysis Time, Min	≤ 3
Reagents type	Cassette or Cartridge or Liquid or other type
Reagent preparation	No
Calibration	Automatic preferred
QC materials	According to manufacturer
Alert indicators	Yes

Display, type	Color LCD or other
Data displayed	Test results & patient ID or other
Data management Programmable Data stored Printer	Preferred Patient and QC data(preferred) , ≥ 250 test Yes
Bar-code reader Reagent Sample	Yes Yes
Computer interface • HIS • LIS	Yes Yes
Power Requirements Line power, VAC Backup	220-240, 50/60 HZ Preferred (Battery or UPS)
Environmental conditions	The equipment suitable for working in the climate conditions of Iraq in terms of temperature & humidity