

GRF-AC-00-01			الجمهورية التونسية
07 PAGES			وزارة التعليم العالي والبحث العلمي
FINANCE ACH			جامعة المنستير كلية الطب بالمنستير

طلب أثمان عدد 2023/PAQ/11

إلى السيد وكيل:.....
العنوان:.....
الفاكس:.....
المعرف الجبائي:.....

في إطار استشارة، المرغوب منكم مدّنا بأفضل أسعاركم للحاجيات التي تعتمز المؤسسة اقتناءها والمبيّنة بالجدول أسفله. ترسل العروض في ظرف مغلق يحمل عبارة "لا يفتح طلب أثمان عدد 2023/PAQ/11 عن طريق البريد أو تُسلّم مباشرة إلى مكتب الضبط بالكلية وذلك في أجل أقصاه

المنستير، في 08 جوان 2023

يوم 16 جوان 2023

الصكايب العام

مبروك بن نرايد



الفصل	بيان الحاجيات	الكمية	العلامة المميّزة و المرجع	الآمن باحتساب الأحياءات	
				الآمن الجملي	الآمن الفردي
01	Portable Multi Gas Detector : EX O2 H2S NO2 CH4 NO SO2 CL2 NH3 PH3HCL O3 CO CO2 (Annexe 1)	1			
02	Dust particules counter 6-channel ParticleSize: 0.3µm, 0.5µm, 1.0µm, 2.5µm, 5.0µm, 10µm (Annexe 2)	1			
03	MultiGas detector 1. PM2.5 (air quality) 2. PM10 (air quality) 3. CO2 (carbondioxide) 4. HCHO (formaldehyde) 5. TVOC (volatile matter) 6. Air (atmospheric pressure) 7. CO (carbonmonoxide) 8. CH4 (methane) 9. Smoke 10. TEMP (ambient temperature) 11. Humidity (ambient humidity) 12. AQI (Air Quality Index) 13. Body Temp (Annexe 3)	1			
04	GAS METER type:O/EX/CO/H2S (Annexe 4)	1			

			1	Air Quality Monitor (Annexe 5)	05
			1	Professional Digital Sound Level Meter Designed to IEC61672 (Class 2) and ANSI S1.4 (Type 2) Standards (Annexe 6)	06
			1	Noise Sound Pressure Level Calibrator (94dB & 114dB) Type Class 2 (Annexe 7)	07
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			1	Infrared Thermometer -50~550 Celsius Heat Temperature (Annexe 12)	12
			1	EMF Meter Handheld Radiation Detector Magnetic Field Detector (Annexe 13)	13
	المبلغ الجملي				



ملاحظات هامة:

- يتم فرز المواد حسب الفصول

- أجل التسليم:

- أجل صلاحية العرض:

في

إمضاء وختم المزود

1-Portable Multi Gas Detector

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
Detection gas type	EX O2 H2S CO NO2 CH4 CO2 NO SO2 CL2 NH3 PH3 HCL O3	
Detection principle	Electrochemistry/Catalysis/Thermal Conductivity/Infrared Spectrum	
Measurement error	≤3%FS	
Display	Color LCD	
Alarm	Sound/light/vibration, three level alarm	
Working time	Combustible gas 8h, toxic gas 200h	
Environment temperature	(-20~60)°C	
Environment humidity	5-90%RH	
Power	>1500mA Lithium-ion rechargeable battery	

2- Dustparticlescounter

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
6-channel Particle Size	0.3µm, 0.5µm, 1.0µm, 2.5µm, 5.0µm, 10µm	
Record 999 groups and data groups can be output through the computer	OUI	
PM2.5 Range	0~1000µg/m3;	
PM2.5 Precision	±10µg/m3; (0~100µg/m3;) ±10% (100~1000µg/m3;)	
Number of Particles Output Range	≤2,000,000 Granule/L	
Cleanliness Standard	Meets the ISO 14644-1 ISO5 Level-ISO9 Level	

3- MultiGas detector

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
ULTRA PRECISION SENSOR AUTO CALIBRATION FUNCTION	OUI	
Test items	1. PM2.5 (air quality) 2. PM10 (air quality) 3. CO2 (carbon dioxide) 4. HCHO (formaldehyde) 5. TVOC (volatile matter) 6. Air (atmospheric pressure) 7. CO (carbon monoxide) 8. CH4 (methane) 9. Smoke 10. TEMP (ambient temperature) 11. Humidity (ambient humidity) 12. AQI (Air Quality Index) 13. Body Temp	

<i>Connect</i>	TYPE-C interface for human body temperature measurement module/standby 5V power supply	
<i>MicroUSB interface</i>	spare 5V charging and power supply	
<i>USB5V output interface</i>	charge other devices	
<i>This product adopts the principle of laser scattering, can detect the number and quality of 0.3um, 0.5um, 1.0um, 2.5um, 5.0um, 10um particle size dust, the detection of clean room and below clean room levels, temperature, humidity and AQI Grade detector.</i>	OUI	

4- GAS METER

<i>Désignation</i>	<i>Caractéristiques techniques minimales demandées</i>	<i>Caractéristiques techniques proposées</i>
<i>Detection gas type</i>	O/EX/CO/H2S	
<i>Rechargeable battery</i>	< 8h	
<i>Battery life</i>	> 8h	
<i>Workingenvironment</i>	T° -20 à 50°C	
<i>Reponse time</i>	<45s	

5- Air Quality Monitor

<i>Désignation</i>	<i>Caractéristiques techniques minimales demandées</i>	<i>Caractéristiques techniques proposées</i>
<i>Total control of air quality</i>	OUI	
<i>Formaldehyde(HCHO)</i>	0-1.999 mg/m ³	
<i>Volatile Organic Compound(TVOC)</i>	0-9.999 mg/m ³	
<i>PM2.5</i>	0-999 µg/m ³	
<i>CO</i>	0-2400 ppm	
<i>CO2</i>	0-5000ppm	
<i>Temperature(in °C)</i>	0~50°C	
<i>Humidity(in %)</i>	20~90%RH	
<i>Display</i>	color LCD	
<i>Charging</i>	DC 5V Type-C USB	
<i>Battery life</i>	> 5h	

6- Professional Digital Sound LevelMeter Class 2

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
Fulfills Standards	IEC 61672 Class 2, IEC 61260 Class 2, IEC61252:2002, IEC 60651:2001 Type 2, IEC 60804: 2000 Type 2, ANSI S1.4: 1983 Type 2, ANSI S1.4A:1985 Type 2, ANSI S1.43:1997 Type 2, ANSI S1.25:1991	
Microphone + Preamplifier	1/2" prepolarized condenser microphone+ Preamplifier	
Correction Function	Diffusion field correction in order to comply with standards ANSI S1.4	
Preamplifier	removable preamplifier	
Frequency Range	20 Hz ~ 12.5 kHz $\pm$ 1 dB	
Total Measurement Range	28dB-133dB	
Self-generated Noise	<23 dB(A), 28 dB(C), 35 dB(Z)	
Frequency WeightingParallel (simultaneous) A, C, Z	OUI	
Display	color screen, adjustable brightness, backlight can be closed	
Data Storage	> 16 Mb FLASH RAM	
AC Output	1.0V AC RMS; Output Impedance: 1k Ω ; Connector: ϕ 3.5 mm stereo plug	
DC Output	20mV/dB; Output Impedance: 1k Ω ; Connector: DB-9 plug	
RS232 Interface	To computer for output some measurement results instantaneous values , also to mini-printer for printing	
Transmission speed	4800, 9600, 115200 bps	
USB Interface	available and no need device drive. Allow USB to be controlled via communication commands	
Battery Life	Longest time of 30 hours continuously with 4 $\times$ LR6 alkaline battery	

7- Noise Sound Pressure LevelCalibrator Class 2

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
Fulfils Standard	IEC 60942 Class 2	
Normal Sound Pressure Level	94 dB, 114 dB	
Sound level Accuracy	$\pm$ 0.5 dB	
Operation Frequency	1000 Hz $\pm$ 1 Hz	
Distortion(THD)	$\leq$ 2.5 %	
Operating Temperature	-10°C ~ +50°C	
Humidity	25% ~ 90%(RH)	
Microphone Type	1", 1/2", 1/4"	

8- Personal Sound Exposure Audio Hearing Dosimeter

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
Applied Standards	IEC 61252:2002, IEC 61672-2002, Class 2; ANSI S1.25:1991	
Microphone	1/4 inch prepolarized condenser field replaceable threaded microphone	
Channel	Dual channels	
Measurement Range	40-140 dBA	
Peak C Measuring Range	70 to 143 dBC	
Frequency Range	20 Hz to 12.5 kHz	
Frequency Weightings	Parallel (simultaneous) A, C, Z for each channel	
Time Weightings	Parallel (simultaneous) F, S, I, Peak for each channel	
Selectable thresholds	40 to 90 dB	
Exchange rates	3, 4, 5 and 6	
Selectable criterion	70 to 90 dB	
Dose exposure measurement range	0.01 Pa ² h ~ 99.99 Pa ² h	
Noise dose measuring range	0% ~ 9999%	
Integrating time	1 second ~ 24 hours	
Memory capacity	128k	
Data logging interval	1 min, 2 min, 5 min, 10 min and 20 min	
Calibration information	Calibration dates, times, and levels	
Internal software function	Integrating Function, Statistical Analysis	
Security	Lock via keys	
Power supply	Rechargeable lithium polymer battery	
Battery life	Over 36 hours run capacity	
Working Temperature	-15°C ~ 50°C	
Display	LCD	
Measure Parameters	LXyp, LXeq,T, LXymin, LXymin, LN,SEL, Lex,8h, Lavg, TWA, DOSE, SD, Lxpeak	

9- Nuclear Radiation Detector

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
Energy compensated GM tube	OUI	
Detection ray	B-rays, Y-rays, X-rays	
Range	20 keV ~ 3.0 MeV ± 30% (137Cs -)	

10- Personal Nuclear Radiation Detector

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
Sensor type	GM tube with energy compensation	
Detectable type	Hard beta ray (B), Gamma ray (γ), X-ray	
Sensitivity	80 cpm/uSV/(Co -60)	
Measuring range	9999 uSV/h	
Power supply	5V/USB 3.7V Lithium battery/800 mAh	

11- Personal Gamma Radiation Dosimeter nuclear

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
Monitor X-ray, Y-ray and β -ray	OUI	
Color	Black & White	
Detector	glass type G-M counter tube	
Measuring range	0.1 μ Sv/h-10mSv/h	
Dosage	0.00 μ Sv-10Sv	
Sensitivity	> 1cps/uSv/h (relative to 60Co)	
Sensitivity	> 1cps/uSv/h (relative to 60Co)	
Voice source	real particlesound / alarmsound /mute	
Alarm threshold	0.5 (Adjustable)	
The use of ambient temperature	-25 ~+45°C	
Relative humidity	less than 95%	
Energy response	48keV-1.5MeV	
Relative intrinsic error	< 10% (at 1mSv/h)	
Power supply	3 x AAA battery (Not included) or USB cable (included)	
Power consumption	< 150mW	
Temperature characteristics	-10°C ~+ 50°C	

12- Infrared Thermometer

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
Measurement range	-50°C~550°C(-58°F~1022°F)	
Storage temperature	-10~60°C(14°F~140°F)	
Work temperature	0~40°C(32°F~104°F)	

13- EMF Meter Handheld Radiation Detector Magnetic Field Detector

Désignation	Caractéristiques techniques minimales demandées	Caractéristiques techniques proposées
RF	mW/m ² (0.01~1800 mW/m ²)	
EF	V/m (1~1999 V/m)	
MF	mG (0.1~999.9 mG)	
MT	(0.01~99.99 μ T)	
Sampling Time	< 0.5 Second	
Operation Temperature	0°C~50°C	
Operation humidity	Relative Humidity Below 80%	