

Ref No: CMEB-ZY-1444-19

Date: 08-05-2019

To: M/s \_\_\_\_\_

Fax No: \_\_\_\_\_

Subject: **Quotation for Material / Equipment**

We intend to purchase goods detailed as on attached annexure. Kindly send us your best offer in accurate with following General Conditions as stated below :-

**General Conditions:**

- a) Submission of Quotation: Quotation may be sent immediately through Fax or Courier but Original Proforma Invoice along with detailed technical brochures / literature must reach us by mail before the last date mentioned below.
- a) Currency: Quotation should be in **RMB**.
- b) Last Date of Quotation: 03-06-2019
- c) Validity: At least 90 days.
- d) Prices Basis: Firm and Fix C&F Prices
- e) Payment Mode:
- We accept payment through L/C with condition that all domestic bank charges will be borne by us while all bank in beneficiary's country including all L/C conformation (if desired by the supplier) charges will be borne by the beneficiary, OR payment may be made against shipping documents OR after delivery of goods ( in case of small value).
  - We accept Pre-payment only against unconditional & irrevocable Bank Guarantee through First Class Bank.

**Note: While arranging offer following must be complied with:-**

- a. Quotation must be accompanied with detailed technical literature/brochure, manufacturing drawings, operational manuals, repair / maintenance manual, circuit diagrams in English language.

Item # 01

**Electronic Pocket Dosimeter**

Quantity: 04 Nos.

2/3

**1. Physical Characteristics**

**Measurement and Display**

- X and Gamma Energy Range: 15KeV to 7MeV
- Energy response better than  $\pm 20\%$  (Typical  $\pm 10\%$ ) from 15KeV to 7MeV

**Accuracy Hp (10)**

$\leq \pm 5\%$  (Cs-137)

$\leq \pm 10\%$  (X-ray 16KeV)

**Dose Rate Linearity**

$\leq \pm 20\%$  up to 10Sv/hr (1000 rem/hr) (Co and X-rays 20Kev)

$\leq \pm 20\%$  up to 5Sv/hr (500 rem/hr) (pulse X-rays 1 msec. to 10sec. width)

**Measurement Range**

Dose: 1 $\mu$ Sv to 10 Sv (0.1 mrem to 1000 rem)

Rate: 0.10 $\mu$ Sv/hr to 20 Sv/hr (0.01 mrem/hr to 2000 rem/hr)

Saturation Indication: Above 10Sv (1000 rem) or 10Sv/hr (1000 rem/hr)

**2. Electronic Characteristics**

Battery: Standard AAA (LR03) 1.5 V Alkaline

**3. Mechanical Characteristics**

Case: Rugged, high impact polycarbonate-ABS

Dimensions: 87 × 60 × 21 mm (3.4 × 2.3 × 0.8 in) max. Without clip

Weight: <88 g (3.1 oz) with alkaline battery and clip

Replaceable Clip: two back clips and front facing clip

**4. Environmental Characteristics**

Temperature Range: -10 °C to 50 °C

Relative Humidity: < 90% @ 42 °C

Storage: -20 °C to 71 °C

Shock, vibration and drop resistant (1.5 m on concrete)

**5. Functional Features**

**Display Features**

- LCD display with high quality white back lighting;
- 8 alpha numeric digit display for full name display and fixed dose rate display format;
- 2 push buttons for an easy customized data and parameters display.

**6. Alarm Features**

- Adjustable dose and dose rate alarms;
- Adjustable and acknowledgeable dose and dose rate warnings;
- Configurable visual and audible alarm chip;
- Configurable latched dose rate alarm and warning;
- Remaining time before alarm and run time alarms.

Item # 02

**Contamination Monitor**  
(Technical Specifications)

Quantity : 01 No.

**1. Specification**

Detector type	Proportional Counter / plastic scintillator
Active area	Min. 100 × 100 mm
Effective energy range	0.2 – 2.5 MeV
Power supply	alkaline or rechargeable Batteries
Battery life	approx. 120 hours (without back illumination)
Temperature range	from -20 to +40 °C
Humidity range	Max. 90 % non-condensate.
Units	cps, cps/cm <sup>2</sup> Bq, Bq/cm <sup>2</sup>

**2. Model**

Capable of measuring alpha (α), beta (β) and gamma (γ)

**3. Example of Radiometric Parameters**

Radionuclide	Min. Efficiency [%]	Min. Detection threshold [Bq/cm <sup>2</sup> ]
α-Emitter	39	0.28
β-Emitter	50	0.16
γ-Emitter	43	0.17

→ Item No. 3

**Radiation Survey Meter**

Quantity : 01 No.

**Technical Specification:**

1. A mini, rigid stand alone portable multi-purpose dose rate meter with built-in probe must be capable of wide measurement range of 1 μSv/hr to 1 Sv/hr;
2. Energy range 45 KeV to 3 MeV;
3. The unit should be capable of measuring dose rate in Sv/hr as well as activity level in Bq/ cm<sup>2</sup>;
4. Analog & Digital display;
5. Automatic Range switching;
6. Non-volatile dose memory
7. Individually programmable dose and dose rate alarm threshold.