### ATOMIC ABSORPTION SPECTROPHOTOMETER (FLAME MODEL)RIC-111



#### **FEATURES:**

High cost-effective flame AAS

Reasonable design, adopting the same key parts as in high end instruments, ensures basic functions but less automation to provide an economic model for users.

Reliable integration of main unit with microprocessor

Built-in microprocessor with necessary auto-control and data processing functions achieve high reliability of the instrument.

Simple and easy operation

Severatching digital display, multi-function data processing ability and fast function-key direct input realize easy and fast analysis.

#### **SPECIFICATIONS:**

Wavelength Range: 190-900nm, Wavelength Accuracy: ±0.5nm

Resolution: Two Spectral lines of Mn at 279.5nm and 279.8nm can be separated with the spectral bandwidth of 0.2nm and valleypeak energy ratio less than 30%

Baseline Stability: 0.005A/30min.

Background correction: The D2 lamp background correction capability at 1A is better than 30 times.

#### **Light Source:**

2 lamps are powered simultaneously (one preheating) Lamp current adjustment range: 0~20mA

Lamp power supply mode: Powered by 400Hz Square pulse

#### **Optical System:**

Monochromator: Single beam, CZurney-turner design grating monochromator Grating: 18001/mm Focal length: 277mm Blazed wavelength: 250nm Spectral bandwidth: 0.1nm, 0.2nm, 0.4nm, 1.2nm 4 steps Adjustment: Manual adjustment for wavelength and slit

#### Flame Atomizer:

Burner: 10cm single slot all-titanium burner

Spray chamber: Corrosion resistant all-plastic spray chamber

Nebulizer: High efficiency glass nebulizer with metal sleeve, sucking up rate: 6-7mL/min

Position adjustment: Manual adjusting mechanism for vertical, horizontal positions and the rotation angle of the burner

# Gas line protection: Fuel gas leakage alarm **Detection and Data Processing System:**

Detection and Data Processing System:

Detector: R928 photomultiplier with high sensitivity and wide spectral range

Electronic and micro-computer system: Automatic adjustment of light source power. Light energy and negative high-voltage autobalance

Display mode: LED display of energy and measurement values, concentration direct reading

Read mode: Transient, time average, peak height, peak area.

Integral time is selectable in the range of 0.1-19.9s.

Scale expansion: 0.1~99

Data processing mode: Automatic calculation of mean, standard deviation and relative standard deviation. Repeating number is in the range of 1-99

Measurement mode: Automatic curve fitting with 3~7 standards; Sensitivity auto-correction

Result printing: Measurement data, working curve, signal profile and analytical conditions can all be printed out.

Instrument self-check: Check current status of each function key

#### **Characteristic Concentration and Detection Limit:**

Air-C<sub>2</sub>H<sub>2</sub> flame: Cu Characteristic concentration≤0.025mg/L, Detection Limit≤0.006mg/L

Function Expansion: Hydride vapor generator can be connected for hydride analysis. Dimensions and weight: 1020 (L) X 490 (W) X 540 (H) mm, 80 Kg unpacked

## **RELIABLE INSTRUMENTS CO. (ISO 9001CO.)**

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