

**Model :**

**XMAS-A20**



**Atomic Absorption Spectrophotometer**

## FEATURES:

- ✓ Automatic wavelength alignment
- ✓ Adjustable spectral bandwidth
- ✓ Deuterium background correction
- ✓ Dual flame-hydride methods
- ✓ Explosion-proof atomizing chamber
- ✓ Titanium combustion head
- ✓ USB computer interface
- ✓ Software-based auto ignition

## Overview

Atomic Absorption Spectrophotometer XMAS-A20 supports a wavelength range from 190 to 900 nm. It ensures wavelength accuracy of  $\pm 0.15$  nm, with automatic turret for  $\leq 6$  lamps alignment. An adjustable spectral bandwidth of 0.1 to 2.0 nm enhances element-specific absorbance measurements. Automatic gas path protection and acetylene leakage alarms ensure operational safety during analysis. Ideal for metal element detection in environmental, food, pharmaceutical, and metallurgical laboratories

## SPECIFICATIONS:

| Model                    | XMAS-A20   |
|--------------------------|--|
| Wavelength Range         | 190 to 900 nm  |
| Spectral Bandwidth       | 0.1, 0.2, 0.4, 1.0, 2.0 nm (automatically adjustable)        |
| Wavelength Accuracy      | $\pm 0.15$ nm  |
| Wavelength Repeatability | $\pm 0.1$ nm   |
| Grating                  | 1800 lines/mm  |
| Baseline Stability       | $\pm 0.002A$ (static); $\pm 0.005A$ (dynamic) per 30 minutes |
| Light Source             | 6-lamp auto turret, automatic alignment                      |

|                                   |  |
|-----------------------------------|--|
| Detection Limits (Cu)             | 0.002 µg/mL                                    |
| Characteristic Concentration (Cu) | 0.015 µg/mL/1%                                 |
| Precision                         | RSD ≤ 0.5%                                     |
| Measurement Methods               | Flame method, hydride method                   |
| Background Correction             | Deuterium background correction                |
| Nebulizer                         | Efficient glass atomizer (customizable)        |
| Atomization Chamber               | Polymer explosion-proof spray chamber          |
| Burner Head                       | Full titanium, 50 mm or 100 mm combustion head |
| Ignition Type                     | Auto ignition                                  |
| Gas Control                       | Automatic system                               |
| Control System                    | PC control, auto alignment                     |
| Data Processing                   | Curve, addition, averaging                     |
| Output Format                     | WORD, EXCEL, data/graphic print                |
| Communication Interface           | USB, software-based control                    |
| Environment Temperature           | +15°C to +35°C                                 |
| Relative Humidity                 | 20% to 80%                                     |
| Power Requirement                 | 220V (+5% to -10%), 50/60 Hz, 5000 VA          |
| Product Dimension                 | 990 × 430 × 500 mm                             |

|                     |                     |
|---------------------|---------------------|
| Packaging Dimension | 1210 × 590 × 680 mm |
| Net Weight          | 75 kg               |
| Gross Weight        | 94 kg               |

## Applications :

Our Atomic absorption spectrophotometer XMAS-A20 is widely used for elemental analysis in scientific research, environmental studies, metallurgy, agriculture, and chemical industries. It ensures precise detection of metals in food, pharmaceuticals, mining, and petrochemical sectors.

## Standard Accessories :

| Accessory Name          | Quantity |
|-------------------------|----------|
| Desktop Computer        | 1PCS     |
| Printer                 | 1PCS     |
| Oil-less Air Compressor | 1PCS     |
| Hollow Cathode Lamp     | 3PCS     |
| Atomizer                | 2PCS     |
| Main Unit Dust Cover    | 1PCS     |
| 3A Fuse Wire            | 1PCS     |
| 1.5A Fuse Wire          | 1PCS     |
| Three Core Power Line   | 1PCS     |

|   |      |
|---|------|
| Main Unit Signal Line                                   | 1PCS |
| Plastic Pipe ( $\phi 6\text{mm}$ , $\phi 10\text{mm}$ ) | 2PCS |
| Screwdriver   | 1PCS |
| Acetylene Hose Clip                                     | 3PCS |
| Acetylene Gas Pipe (3 meter)                            | 1PCS |

### Optional Accessories :

| Accessory Name  | Quantity      |
|---|---------------|
| Hydride Generator   | 1PCS          |
| Flame Autosampler   | 1PCS          |
| Hollow Cathode Lamp – Standard Elements (Ca, Mg, Al, Na, Fe, Cu, Ti, Cr, Ni, K, Co, Mn, Sn, Pb) | 1PCS          |
| Hollow Cathode Lamp – Silicon (Si)  | 1PCS          |
| Hollow Cathode Lamp – Zirconium (Zr)  | 1PCS          |
| Hollow Cathode Lamp – Hafnium   | 1PCS          |
| Specially Coated Graphite Tubes   | 1box (10 pcs) |

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