

# AAS500 Atomic Absorption Spectrophotometer Quotation



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Angstrom Advanced Inc.

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Quote Valid Period: 4 months from issue date

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# 1 Description

#### **Features:**

- Completely controlled by PC, can flexibly select the flame and graphite furnace atomizer (optional).
- Integrated floated optical platform design improves the optical system shock resistance stable.
- Eight light stands can be changed automatically and preheat the eight lights meantime as well as optimize the working condition of the hollow cathode lamp.
- Position adjusting: the flame burner can be set on the best position automatically.
- Fully automated wavelength scanning and peak searching.
- Complete safety chains protection equipment: warning and automatic safety protection for the wrong burner connection, leakage of the gas, under voltage of air and the abnormal flameout.
- Deuterium lamp and self-absorption background calibration.
- Measuring method: flame absorption method and emission method.
- Result printing: parameter, data result and diagram.
- Data processing: more than 500 data self-storage and cut-off storage, the analyzed result is stored in EXCEL format.

## 2 Specifications

#### **Technical Parameters:**

| Model                        | AAS500   |  |
|------------------------------|--|--|
| Wavelength Range             | 190 – 900nm  |  |
| Wavelength Accuracy          | ±0.15nm  |  |
| Wavelength Receptivity       | ≤0.04nm  |  |
| Base Line Stability          | ≤0.002A/30min (Cu)                                 |  |
| Characteristic Concentration | 0.02μg/ml/1% (Cu)                                  |  |
| Detection Limit              | 0.004μg/ml (Cu)                                    |  |
| Measurement Repeatability    | ≤0.5%  |  |
| Grating                      | 1800 lines/mm                                      |  |
| Inflamer                     | All-metal titanium burner                          |  |
| Atomizer                     | Efficient glass atomizer                           |  |
| Lamp stand                   | 8  |  |
| D2 background Calibration    | When the background is 1 A, the background ability |  |
|                              | should be deducted not less than 50 times; self-   |  |
|                              | absorption background deduction method             |  |
| Power Supply                 | 110/220V, 50/60Hz                                  |  |
| Packing Size (mm)            | 850*700 *750 (Main instrument)                     |  |
|                              | 950*620*1020 (Accessories)                         |  |
| Gross Weight (kg)            | 105Kg (Main instrument)                            |  |
|                              | 100Kg (Accessories)                                |  |
| Standard Accessories         | Oil free Air compressor                            |  |
|                              | Acetylene regulator                                |  |
|                              | Cu Hollow cathode lamp                             |  |

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| Optional Accessories | onal Accessories Graphite Furnace                       |  |
|----------------------|---|--|
|                      | Hollow cathode lamp (Ag, Au, Ba, Ca, Cd, Cr, Fe, Hg, K, |  |
|                      | Li, Mg, Mn, Na, Ni, Pb, Zn, Sb, etc)                    |  |

## Flame System:

| Acetylene Air Burner                       | 100mm                                      |
|--|--|
| Ignition Dynamic Baseline Drift            | ≤0.006A/30min                              |
| Characteristic Concentration               | ≤0.025μg/ml/1%(Cu)                         |
| Related Standard Deviation of the Accuracy | ≤0.5%(Cu, absorbance > 0.8A) (detection    |
|  | limit Cu≤0.008μg/ml)                       |
| Safety system                              | Can automatically cut off the gas when the |
|  | pressure is not enough, the power is off,  |
|  | flameout and unconformity of the burner.   |

# **Graphite Furnace (Optional):**

| Max. temperature        | 3000°C  |  |  |
|-------------------------|---|--|--|
| Max Heating Speed       | ≥2000°C/S   |  |  |
| Characteristic Quantity | Cd≤0.5×10 <sup>-12</sup> g Cu≤0.5×10 <sup>-11</sup> g |  |  |
| Accuracy                | Cu≤3% Cd≤3%   |  |  |
| Safety system           | Over current protection;                              |  |  |
|                         | Low air pressure alarm/ protection;                   |  |  |
|                         | Low cooling water flow alarm/protection               |  |  |
| Power Supply            | 110/220V, 60/50Hz                                     |  |  |
| Consumption             | 7000W   |  |  |
| Packing Size(mm)        | 550*450*300   |  |  |
| Gross Weight(kg)        | 65  |  |  |

# 3 Quotation

Our prices are quoted in US Dollars.

Our prices do not include any taxes (VAT), duty or other costs liable on importation into the country of the customer.

| Item | Description  | QTY | Unit Price  | Total Cost |
|------|--|-----|-------------|------------|
| 1    | AAS500 Atomic Absorption Spectrophotometer  • 190-900nm wavelength | 1   | \$29,800.00 |            |
| 2    | Need 1 lamp for each element to be detected                        | TBD | \$190.00    |            |

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| Optional Items |                         |     |             |  |
|----------------|-------------------------|-----|-------------|--|
| 3              | Graphite Furnace        | TBD | \$13,950.00 |  |
| 4              | Furnace Tubes           | TBD | \$70.00     |  |
| 5              | Hydride Vapor Generator | TBD | \$4,900.00  |  |
| 6              | Auto-sampler            | TBD | \$9,800.00  |  |
| Total          |                         |     |             |  |
| Notes:         |                         |     |             |  |

1. Mercury Vaporizer Unit: we suggest customers use the Hydride Vapor Generator for this function as well

### **Terms & Conditions**

a) Time of Delivery

8-12 weeks after receipt of order

b) Ex Works

Stoughton, MA

c) Payment Term

T/T Advance

d) Period of Warranty

12 Months from date of delivery

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