



# SYSTRONICS (INDIA) LIMITED ATOMIC ABSORPTION SPECTROPHOTOETER SYS 999D



### MODEL: SYS 999D DESCRIPTION

AAS-SYS 999D the multi-media graphite furnace visual system can intuitively monitor the sample's dynamic evolutionduring drying, ashing and residue burning process in the graphite tube. Advance technology for intelligent stray light measure and correction, Original Optical Noise Reduction & Automatic measurement and stray light, Internal lamp control technology. It enables convenient observation of the auto sampler's capillary injection needle reaching the best position and depth in the tube, as well as the position of the platform placed in the graphite tube. It ensures analysis precision and graphite tube's lifetime.

#### SYSTRONICS (INDIA) LIMITED

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## **SPECIFICATION:**

Model	SYS 999D	
Туре:	Flame System	Graphite Furnace System
Light Source:	8 Lamps Automatic Turret, Automatic Alignment	
Optical System:	High Resolution 1800 lines/mm grating, True Double Beam Optics	
Wavelength Range:	180nm ~ 900nm	
Accuracy:	≤0.1nm	
Repeatability:	±0.02nm	
Spectral Bandwidth:	0.1, 0.2nm,0.4nm,0.7nm,1.4nm,2.0nm (Automatic Switching & Alignment)	
Baseline Stability:	≤±0.002A/30min (static), ≤±0.005A/30min (Dynamic)	
Absorbance Range:	0 ~ 4 A	
Detector:	Photomultiplier Tube (PMT)	
Background Correction:	High Speed Self-reversal (BGC-SR) method: High Speed D2 lamp method (BGD-D2).	
Burner Head:	Titanium alloy combustion head,50&100mm	-
Atomization Chamber:	Polyphenylene Sulphide spray chamber	-
Nebulizer:	Adjustable nebulizer (Platinum capillary)	-
Detection Limits(Cu):	0.7 μg/mL	-
Precision:	RSD≤0.5%	-
Graphite Furnace Temp:	-	Current And Voltage Vector Control
Temp. Control Method :	-	Graphite tube wall temperature
Heating Temp. Range:	-	RT to 3000°C
Heating Rate:	-	≥2000 <b>≴</b> C
Temperature Accuracy:	-	≤0.5%
Characteristics Volume:	-	0.5 × 10 <sup>-12</sup> g (Cd)
Detection Limit:	-	$0.4 \times 10^{-12}$ g (Cd)
Precision:	-	RSD≤3%
The Cooling Water:	-	Cooling water circulation system
Ignition Type :	Microcomputer control, Automatic ignition	
Gas Control:	Automatic gas control system )erusserp /wo (noitazimitpo	
Safety:	Gas Leak check, prevention of gas release when ema dies out, prevention	
	of kcabhsa through pressure monitoring	
Power Supply:	AC220V (+5% ~ -10%), 60/50Hz, Lamp Current : Pulsed power supply	
Weight:	Approx. 150 Kg	
Interface:	Computer and USB interface communication	
Software:	PC communication software to control AAS system, Data processing, Data analysis, Print etc.	
Auto Sampler		
Auto Sampler System:	64-Position Auto Sampler Automatic configuration of standard curve, automatic	
	dilution, high-precision injection	
Number of Sample cups:	60 Sample cups (1.5ml), 04 Reagents cups (10ml)	
Sample Volume:	1-50µ	
Injection Accuracy:	≤0.5% (5 - 50µL)	
Injection Mode:	Vertical injection	
Injection Pump:	Double injection pump, equipped with special cleaning pump	
Power Requirement:	DC24V, 60W	

### **SPECIFICATION:**

Hydride Vapour Generator		
Hydride Vapour	Hydride Vapour The Hydride Vapour Generation device can detect the low temperature elements,	
Generator:	such as Mercury <b>(Hg),</b> and Arsenic <b>(As),</b> Selenium <b>(Se),</b> Antimony <b>(Sb)</b> , Bismuth <b>(Bi)</b> ,	
	Lead <b>(Pb)</b> , Tin <b>(Sn)</b> , Tellurium <b>(Te)</b> and Germanium <b>(Ge)</b> etc	
Pneumatic	Auto-sampling system, Automatic fluid measurement system, low stabilizer, Program-	
Automated Technology:	time controller and so on are pneumatic automatic systems which are run by the	
	carrier gas source pressure.	
Highly Automatic:	After pressing the start k 🕏, the whole process (sampling, reacting, calibrating and cleaning) will be finished automatically.	
Sensitivity:	≤1ng/ml/1%A	
Sensitivity of Arsenic(As):	≤0.15ng/ml/1%A	
RSD:	≤3%	
Less Solution:	Sample 2-2.5mL (including clean),	
	Potassium borohydride 1-1.5mL, carrier liquid 5-6mL.	
Measurement Time:	25 – 35 Seconds	
Weight:	1.5 Kg	
Size (L*W*H):	210*150*120mm	
Power Supply:	AC220V, 50/60Hz	
Oil-Free Air Compressor		
Air Flow:	118 L/min	
Speed:	1400RPM	
Max. Pressure:	8Bar	
Restart Pressure:	5Bar	
Tank Capacity:	24Litre	
Noise Level:	52dB	
Power:	600W	
Weight:	25 Kg	
Size (L*W*H):	400*400*520mm	
Power Supply:	AC220V, 50/60Hz	
<b>Recirculating Water Chil</b>	er	
Cooling Mode:	Compressor Cooling	
Temperature Controller:	PID Controller	
Temperature Range:	5°C – 35°C	
Accuracy:	±1°C	
Cooling Capacity:	1300W @25°C	
Pump Pressure:	≤1.3Bar	
Pump Flow:	≤15Litre/min	
Tank Volume:	8 Litre	
Tank Material:	Stainless Steel SS304	
Refrigerant:	R134a	
Size (W*D*H):	360*450*653mm	
Power Supply:	AC220V, 50/60Hz	