

ICP-OPTICAL EMISSION SPECTROSCOPY

PART NO. ICP-S760-U



- Widely used in industries such as metallurgy, geology, materials, environment, food, medicine, petroleum, chemical engineering, biology, water quality
- Suitable for elemental analysis of various complex matrices, high salt content, organic solvents, etc.
- Echelle grating and prism cross-dispersion configuration with radial observation, featuring robust detection capability
- An efficient solid-state radio frequency generator with fast matching speed, high precision operation and long-term stability
- High speed area array CCD acquisition technology, obtaining all spectral line information in a single exposure
- Powerful software system, simplifies the development process of analysis methods, with intuitive and smooth operation



automatic sampler (optional)



simultaneous hydride generator (optional)



organic injection system (optional)

STANDARD DELIVERY

Main unit	1 pc
Computer	1 pc
Glass injection system	1 set
Analysis software	1 set
Circulating water cooler	1 pc
Voltage regulator	1 pc
Printer	1 pc
Consumable and spare parts	1 set

OPTIONAL DELIVERY

Automatic sampler (160 positions)	ICP-S760-SA
Simultaneous hydride generator	ICP-S760-TH
Organic injection system	ICP-S760-YJ
HF-resistant injection system	ICP-S760-NS
High-salt-resistant injection system	ICP-S760-GQ

SPECIFICATION

Optical system	optical system	echelle two-dimensional spectroscopic optical system
	focal length	400mm
	wavelength range	165nm~950nm
	raster specification	echelle grating, 56.27 lines/mm, size: 100×50mm
	optical prism	SiO ₂ material
	stray light	10000 μ g/mL Ca solution: EBC<2 μ g/mL at As 189.042nm
	light room inflation	multi point inflation technology: low flow purge at 1L/min, high flow purge at 4L/min
	temperature control	38°C±0.1°C, can be adjusted according to the actual environment 33~40°C±0.1°C
Detecting system	detector	large area, back illuminated CCD detector
	pixel count	1024×1024
	pixel area	24 μ m×24 μ m
	work temperature	<-40°C, stabilization time<3min
	quantization efficiency	without coating, the quantum efficiency can reach over 75%
Generator system	output power	500W~1600W, continuous 1W adjustable
	power stability	≤0.1%
	vibration frequency	27.12MHz
	frequency stability	≤0.01%
Injection system	torch orientation	vertical orientation
	torch coil	3 turns
	torch	integrated torch, 0.8mm quartz central tube
	nebulizer	concentric nebulizer, 6mm outer diameter
	spray chamber	cyclonic spray chamber
	peristaltic pump	4-channel, 12-roller
	argon gas consumption	8L/min~18L/min
	cooling gas	0~20.00L/min, accuracy: 0.01L/min
	auxiliary gas	0~2.00L/min, accuracy: 0.01L/min
	carrier gas	0~2.00L/min, accuracy: 0.01L/min
Software System	analysis program	multi-window, multi-method: simultaneous measurement, editing and viewing
	spectral library	70,000+ lines: intelligent interference prompts
	calibration mode	supports calibration after preliminary testing and sample analysis with the sandwich method
	analysis method	supports the standard curve method and standard addition method, with functions including blank subtraction, internal standard calibration and interference correction
	observation mode	intuitive display of test results, multiple report output formats available
Operating Environment	argon gas	purity≥99.995%
	chilled water	flow rate>3L/h, head>3m
	work temperature	64.4~75.2°F±3.6°F
	work humidity	20~80%RH
	exhaust ventilation	≥400m ³ /h or wind speed>5m/s, with adjustable setting
Power supply	110V, 50~60Hz	
Dimension (L×W×H)	47.64×29.13×31.50"	
Net weight	440.93lb	

ANALYSIS ELEMENTS

H	Li	Green-grid elements: analyzable														He	
Li	Be		H	Gray-grid elements: non-analyzable													
Na	Mg			B	C	N	O	F	Ne								
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Rd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Ac															
Lanthanide		La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	
Actinide		Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr	