

SPECIFICATIONS

ZSX Primus III NEXT		
Analytical range	^{80}O - ^{96}Cm standard (^{4}Be - ^{96}Cm Optional ^{*1})	
Spectral method	Wavelength dispersive	
Atmosphere	Vacuum	
X-ray generator system	X-ray tube	End window type Rh target 3 kW
	High voltage generator	High-frequency inverter system
	Heat exchanger	Pure water circulation supplier (built-in)
Spectrometer	Irradiation method	Tube-above
	Sample changer	Expandable sample changer with up to 48 positions
	Sample inlet	Air lock system
	Maximum sample size	ϕ 52 mm \times 30 mm (H)
	Primary filter	Ni400, Ni40, Al125, Al25
	Analysis area diaphragm	4 sizes automatic exchange mechanism 35, 30, 20 and 10 mm
	Primary Soller slit	3 positions automatic exchange mechanism Standard and fine slits / Optional: Ultralight element slit
	Goniometer	θ - 2θ independent driving mechanism
	Continuous scan	0.1°~240°/min
	Crystal exchanger	10 crystal automatic exchange mechanism
	Analyzing crystal	Standard: LiF, 200, PET, RX26 Optional: Ge, LiF, 420, LiF(220), RX9, RX4, RX35, RX40, RX45, RX61, RX61F, RX75
	Vacuum system	One shared vacuum pump between sample- and analyzing chamber. Sample powder trap filter
	Counting system	Pulse height analyzer
Detector		F-PC (Gas flow proportional counter) Optional: S-PC LE (Gas sealed proportional counter: does not require P-10 gas)

*1 depending on crystal configurations

INSTALLATION REQUIREMENTS

Required power supply	Instrument: Single (200 - 240 V), three phase (200 V) 50/60 Hz 40A Personal computer: 1-phase, 100-240 V, 10A
Grounding specification	30 Ω or below grounding (independent)
Cooling water	Temperature: Lower than 30°C Pressure: 0.29 - 0.49 MPa Flow: More than 5 l/min Quality: Equivalent to drinking water
Drained water	Gravity drain
Room temperature	18 - 30°C Daily variation within $\pm 2^\circ\text{C}$
Relative humidity	75% RH or less
Vibration	Less than 2 m/s ² Not detectable by a human
Gas for detector	P10 Gas (argon 90% methane 10% mixed gas) Pressure 0.15 MP a, 7 ml/min Not required if S-PC LE is selected

SPECTROMETER DIMENSIONS

