

PortaSpec® XBT Technical Data

Bragg Angle Range	13 to 98 Degrees Two Theta		
Analyzing Crystal	LiF 200		
Element Range K α	22 – 47 (Ti – Ag)		
Element Range L α	56 – 92 (Ba – U)		
Goniometer Range	13° – 98° 2 θ		
Goniometer Element Stops	5 Adjustable 1 Goniometer Locking Stop		
Element Dial Display	Degrees 2 θ and Element Symbol		
Collimators	20 Mil Divergent (Source) 10 Mil Receiving (Detector)		
X-Ray Source	X-Ray Tube – Tungsten or Rhodium Target Be Window		
X-Ray Tube Voltage	10, 20 or 30 kV Constant Potential		
X-Ray Tube Voltage Regulation	± 0.1% for ± 10% Line Voltage Variation		
X-Ray Tube Current	0 to 5 mA Adjustable		
Detector Tube	Sealed Proportional		
Detector Supply Voltage	2150 VDC Adjustable		
Internal Digital Scaler and Timer	Counting Range: 1 to 999,999 Timer Range: 1 to 990 Seconds With Pulse Height Analyzer		
Controls	Power Switch		
Fuses	Line	6 Amp Fast	Power Entry
	High Voltage Supply	4 Amp Slow	F6
	mA Board Supply	2 Amp Slow	F7
	DC Supply	2 Amp Fast	F8
	mA Trigger	1 Amp Fast	F15
	Water Circulator	2 Amp Fast	F1
Lamps	X-ray On	PSB 12	Red
	Power On		Green
			Fail Safe
Voltage Requirements	117 VAC	50/60 Hz	
	230 VAC	50/60 Hz	
	Single Phase		
	Line Regulation Required ± 5%		
Dimensions and Weight			
Portaspec	18" L x 14" W x 13" H	50 lbs.	
Water Circulator	10" L x 10.5" W x 13" H	10 lbs. Empty	
MCR Power Conditioner	7" L x 8" W x 13" H	40 lbs.	
