# Model 110

## Scanning Interface Unit

## Description

The RBD Instruments' Model 110 Scanning Interface Unit provides PC system control for the PHI® 590, 595, and 600 Scanning Auger Systems. The obsolete 18-170 and 18-070 scanning electronics and 18-075/18-175 keyboard are removed from the system. All scanning functions are performed by the PC via the Model 110 and RBD's software. The result is a system that is incredibly reliable, powerful, and easy to use.

**Enhances the following PHI® Scanning Auger systems:**

PHI 590
PHI 595
PHI 600

**PHI is a registered trademark of Physical Electronics*

## Advantages

- Replacing the scanning electronics and keyboard, the electron gun operation becomes a breeze
- DEC™ computer and obsolete 20-137A are removed from the system
- Photos are now digitized and the Tektronix oscilloscopes are removed from the system
- System reliability and operation are greatly improved
- Compatible with RBD 147 PC Interface Unit
- Advanced software features make operation easy to learn and use
- Easy installation

# Model 110 Scanning Interface Unit

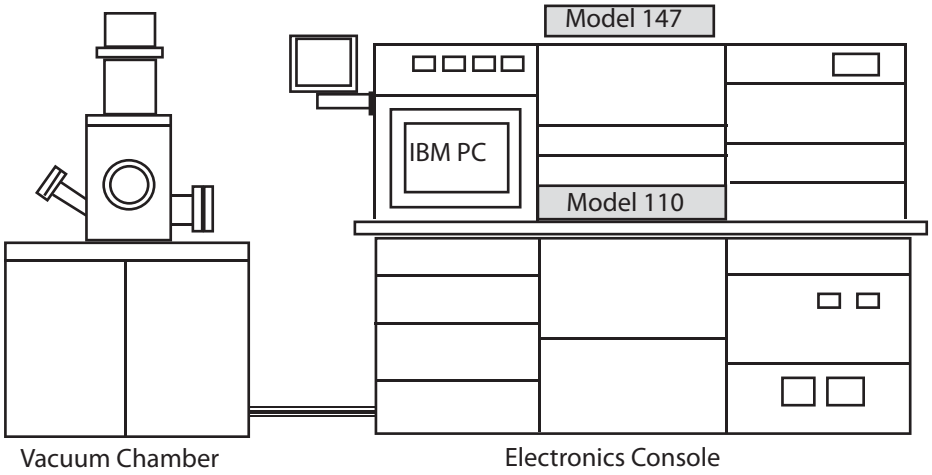
## Specifications

| *Parameter* | *Min.* | *Typ.* | *Max.* | *Units* |
|---|---|---|---|---|
| **General** | | | | |
| Weight | | 11 | | lbs |
| Dimensions (W x H x D) | | 19x3.5x11 | | inches |
| **Power Supplies (supply to unit)** | | | | |
| Deflection high voltage | | +/- 150 | +/- 175 | Vdc |
| Deflection high voltage current | | 12.8 | 16 | mA |
| Deflection low voltage | | +/- 20 | | Vdc |
| Control voltage | | 5 | | Vdc |
| **Deflection Electronics** | | | | |
| Power Bandwidth | | 26 | | kHz |
| Output voltage swing | +/-Vs-12 | +/-Vs-10 | | V |
| Slew Rate | | 40 | | V/ms |
| Current, peak (per amp.) | 120 | | | mA |
| Current, cont. (per amp.) | 60 | | | mA |
| Temperature range | -25 | | +85 | deg. C |
| Input Range (X & Y Defl.) | | | +/-5 | V |
| Beam Ref. Input Range | 0 | | +15 | V |
| Primary Gain (8 of 16 in octupole) | | 20.0 | | |
| Secondary Gain (8 of 16 in octupole) | | 8.27 | | |
| Stigmator Gain | | 5.00 | | |

## Related Equipment

- RBD 147 System Interface Unit
- RBD 147 Cable Kit
- RBD Model 21V
- PCMap1 Interface Card
- RBD AugerScan Software
- RBD AugerMap Software
- RBD 147 Software Driver
- ScanMap1 Installation Manual

## RBD Model 110 System Diagram with ScanMap1




RBD INSTRUMENTS

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