

### Verifier<sup>Plus</sup> (FSX-075)

## Enhanced, X-Ray Inspection System

The Verifier Plus (FSX-075) is a low-cost, general purpose solder quality verification and defect detection tool that provides continuous real-time x-ray inspection for manufacturing quality assessment and rework operations. Systems are CE, CSA and TUV certified and exceed all safety requirements set forth by CDRH and FDA regulations.

### Key Features

The Verifier Plus supports a broad range of failure analysis and inspection applications from general quality inspection to rework verification. Its greater than >220X magnification provides excellent viewing of the smallest SMD electrical interconnections.

- Easy-to-use
- >220X magnification
- Excellent imaging quality
- Flexible board/part handling
- Multipurpose inspection tool
- Portable, small 32" x 34" footprint
- 75kV source provides sufficient power for low density quality inspection applications

**\*Safe:** The Verifier exceeds all safety and radiation protection requirements set forth by CDRH and FDA regulations. Systems are CE, CSA & TUV certified.

### Easy-to-Use Controls

Intuitive controls and indicators for On/Off, Gain, Zoom, Focus and Interlock functions. Operators can be trained quickly and easily.



### Specifications

#### Hardware

- **Footprint:** 32"W x 34"L x 65"H
- **Board Handling:** up to 16" x 18"
- **Angled Viewing:** up to 70° (360° w/ fixture)
- **X-Ray Source:** 75kV, <33 micron
- **Magnification:** >220X
- **Field-of-View:** up to 2.25 (57mm)
- **Resolution:** >30 lp/mm
- **PC:** Intel/ATX mini tower w/ printer & CDRW
- **Flat Panel Display:** 19" std. (20" optional)
- **Network Ready:** Ethernet 10/100 base-T

#### System/Image Processor Software

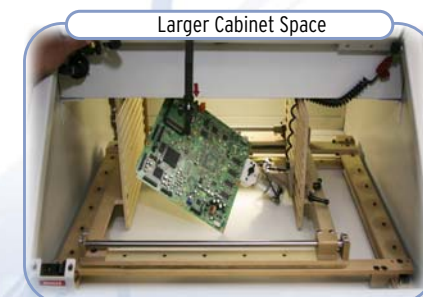
- **Operating System:** Windows™ XP Pro
- **Image Processor:** Verifier VIP (standard)

#### Optional Image Processors

- VIP Plus Enhanced Image Processor
  - VIPx Advanced Image Processor
- \* See FocalSpot VIP Series Datasheet for details

### Flexible Sample Holder

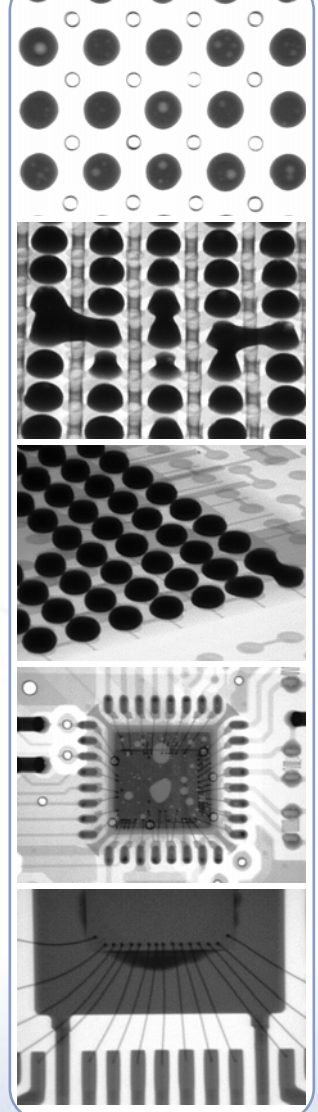
- **Sample Door:** 28" wide, for easy load/unload
- **Manual X/Y sample positioner:** 16" x 18"
- **Angled Viewing:** 0-70° (standard fixture)
- **Rotation Fixtures:** Manual and Motorized options for 360° rotation of small boards.



Extended Height  
provides increased  
oblique viewing!



#### Sample Images



### About FocalSpot

FocalSpot, Inc. is recognized worldwide as a leader in the design and manufacture of affordable high-quality x-ray inspection systems; providing Inspection and Rework solutions for Electronic Manufacturers worldwide. FocalSpot is also a regional distributor and value-added reseller for DEN-ON BGA/SMT rework solutions; Optilia BGA/SMT video microscopes; and First Article AOI Inspection Systems; providing sales, service and support in North/South America, Canada and Mexico.

## Verifier Series, Portable X-Ray Inspection Solutions

The Verifier, Verifier Plus and Verifier HR X-Ray Inspection Systems are portable, fit through a standard doorway and with exceptional performance and value. Ideal for prototyping, failure analysis, manufacturing process validation, rework verification and more...

## Verifier Series X-Ray Inspection Systems

Verifier Series	Features Comparisons		
System Features	Verifier FSX-080	Verifier Plus FSX-075	Verifier HR FSX-090
<b>System Hardware</b>			
X-Ray Source	80kV	75kV	90kV
Magnification	110X	220X	715X
Spot Size	<50 micron	<33 micron	<5 micron
Resolution	>20 lp/mm	>30 lp/mm	>40 lp/mm
Field-of-View	>40mm	>70mm	>40mm
Standard 120VAC Power	Standard	Standard	Standard
Standard 240VAC Power	Optional	Optional	Optional
<b>IP Computer Hardware</b>			
Flat Panel Display (Monitor)	19"	19"	19"
Windows© XP, Operating System	Windows© XP Pro	Windows© XP Pro	Windows© XP Pro
<b>Image Processor Options</b>			
VIP	Standard	Standard	Standard
VIP Plus	Optional	Optional	Optional
VIPx	Optional	Optional	Optional
<b>Board Handling</b>			
Maximum Board Size	16x18"	16x18"	16x18"
X/Y Board Manipulation	Manual	Manual	Manual
Tilt	Manual	Manual	Manual
Rotate	Optional	Optional	Optional
Tube-Z1	N/A	N/A	Optional
Detector-Z2	N/A	N/A	N/A
<b>Inspection Capabilities</b>			
Solder Joint Quality (BGA, Leaded)	●	●	●
Bridging	●	●	●
Voiding	●	●	●
Opens	●	●	●
Package Inspection (wire bonds)	○	◐	●
Bare boards (Inner layers, traces, vias)	○	◐	●
Subtle Defect Inspection	○	◐	●
Flip Chip Capable	○	◐	●

Verifier Series Portable, X-Ray Inspection Systems

