X-Scope 3000
X-Ray Inspection System

The X-SCOPE 3000 X-Ray Inspection System is the latest addition to the X-Scope platform. Based on the very popular X-SCOPE 2000, it adds a larger working area, more power and can use the same 130kV X-Ray source found in our flagship model, X-SPECTION 6000.

Applications
- Multilayer PCBs
- BGA, QFN, wire bond, etc.
- Semiconductor
- Over molded electrical connectors
- Encapsulated components
- Aluminum die casting
- Molded plastic
- Automotive assemblies
- Medical devices
- Pharmaceuticals
- Ceramics
- Agriculture

System Details

FEATUREING
- Fully integrated, 110 or 130kV high power micro focus closed X-ray tube
- Spot size down to 5μ
- 4”x3” high resolution CMOS digital flat panel image detector
- 50° detector tilt for oblique angle viewing
- 25.4”x 19.5” Inspection area
- Color mapping camera with zoom window provides easy location and identification of faults
- Z axis movement of the x-ray tube and detector
- Computer controlled kV and mA settings
- Computer controlled variable speed X-Y stage
- Simple point and click, intuitive GUI provides access to create advanced inspection routines
- Industrial PC with Windows 7 PRO, 24” LCD flat panel display

All software tools standard including (but not limited to)
- BGA Void detection and automatic calculations
- Easy macro recording for intuitive step and repeat programming
- Various measuring tools for radius, area, perimeter, etc.
- Industrial PC with Windows 7 PRO, 24” LCD flat panel display

SCAN THIS CODE WITH YOUR SMART PHONE
**MACHINE SPECIFICATIONS**

**X-Ray Tube**
- **X-Ray Source:** Micro-focus, integrated (closed)
- **Operating voltage:** 110kV or 130kV
- **Maximum Power:** 16 W 50-130kV
- **Minimum Focal Spot Size:** 5 Micron
- **Magnification up to:** 900x

**Digital Flat Panel Detector**
- **Grayscale:** 14 bit (16,384 shades of grayscale)
- **Speed:** 40FPS
- **Resolution:** 49.5μm or 99μm
- **Detector Size:** 4” x 3” high resolution, 4” x 3” ultra-high resolution or 5” x 5” high resolution

**Work Area**
- **Sample Table Size:** 645mm x 496mm / 25.4” x 19.5”
- **Inspection Area:** 595mm x 460mm / 23.4” x 18”
- **Oblique Angle View:** ±50°

**General Machine Specs**
- **Dimensions:** 53.5” x 53.5” x 66” (81” including light tower)
  1358mm x 1358mm x 1677mm (2057mm including light tower)
- **Weight:** 1400kg / 3080lbs (steel lead welded construction)
- **Power:** 110-230 VAC 50/60 Hz 300Wh (auto switching)
- **Industrial PC:** Microsoft Windows 7 PRO (64-bit)

---

**Compliance**

THE SCIENSCOPE X-SCOPE X-RAY INSPECTION SYSTEMS MEET THE FDA-CDRH REGULATION CFR 21 1020.40 SUBCHAPTER J FOR CABINET X-RAY SYSTEMS. THE FDA-CDRH STANDARDS FOR CABINET X-RAY SYSTEMS STATES THAT RADIATION EMISSIONS WILL NOT EXCEED 50 MICRO R/HR 5 CM FROM ANY EXTERNAL SURFACE. THE X-SCOPE X-RAY INSPECTION SYSTEMS TYPICALLY HAVE A RADIATION EMISSION READING OF LESS THAN 20 MICRO R/HR 5 CM FROM ANY EXTERNAL SURFACE. ALL SCIENSCOPE X-SCOPE X-RAY SYSTEMS HAVE A CE APPROVAL. SCIENSCOPE X-SCOPE X-RAY SYSTEMS ARE CLASSIFIED AS "CABINET X-RAY SYSTEMS" AND REQUIRE NO EXTERNAL RADIATION SHIELDING, WELDED STEEL / LEAD STEEL CONSTRUCTION, NO VISIBLE SHIELDING.

FDA #1020.40 | CE Reference Number: CN: CE-0402-09.07

---

1(800)216-1800 | info@sciencescope.com
5751 Schaefer Ave
Chino, CA 91710, USA

24/7 SERVICE HOTLINE
1(800)216-1800