

## XCT8500

### Universal X-Ray Inspection System

XCT8500 adopts YXLON X-ray tube design, the defect detection ability can reach  $0.5\mu\text{m}$ . It can realize 2D/3D/CT and other detection methods, and is suitable for quality inspection, three-dimensional measurement and non-destructive analysis.

#### Application Advantage

- ◆ With planar CT function (PCT), it can be applied to 3D/CT inspection of printed circuit boards, SMT, IGBT, wafers, etc.
- ◆ With cone beam CT function, it can be applied to the detection of sensors, relays, micro motors, materials, and aluminum castings.
- ◆ Convenient  $360^\circ$  fixed-point observation mode
- ◆ 2D void detection software module (optional)
- ◆ 3D measurement and analysis software module (optional)

#### Application Field

- ◆ Soldering quality inspection of solder joints on PCB. BGA components, integrated circuit (IC) and its bonding wire inspection, semiconductor package inspection and internal connection, electronic power (IGBT) module inspection, Wafer defect inspection (WLCSP)
- ◆ Sensors, relays, fuses, coils, micro drive systems and air bag control systems, micro motors (MEMS, MOEMS), cables and plugs, plastic parts, various materials, such as plastics, ceramics, biological materials, optical components, small Titanium casting and aluminum casting inspection.

#### X-Ray Tube Parameters

|                                     |                                            |
|-------------------------------------|--------------------------------------------|
| Tube Type                           | Open micro-focus transmission X-ray source |
| Tube Voltage Range                  | 20 ~160KV                                  |
| Tube Current Range                  | 0.01mA ~ 1.0mA                             |
| Maximum Tube Power                  | 64W                                        |
| Maximum Target Power                | 15W                                        |
| Minimum Object Distance (FOD)       | < 300 $\mu\text{m}$                        |
| Micro Focus Size                    | < 1 $\mu\text{m}$                          |
| Minimum Defect Detection Capability | < 500 nm                                   |

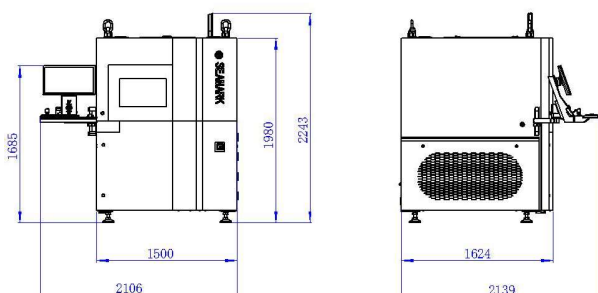
#### Flat Panel Detector Parameters

|                        |                                                  |
|------------------------|--------------------------------------------------|
| Flat Panel Type        | Amorphous silicon flat panel detector (optional) |
| Pixel Matrix           | 1536×1536                                        |
| Field of View          | 130mm×130mm                                      |
| Resolution             | 5.8Lp/mm                                         |
| Image Frame Rate (1×1) | 20fps                                            |
| AD Conversion Digits   | 16bits                                           |

#### 3D/CT Parameters (Optional Function)

|                        |     |
|------------------------|-----|
| CT Scan Cycle          | 20s |
| CT Reconstruction Time | 30s |

#### Dimensions



#### 360° Rotating Observation Mode



#### Equipment Performance Parameters

|                               |                                           |
|-------------------------------|-------------------------------------------|
| Maximum Sample Size           | 645mm×635mm                               |
| Maximum Detection Area        | 500mm×500mm                               |
| Image Geometric Magnification | 2500X                                     |
| Input Power Supply            | 220V 10A 50-60HZ                          |
| Control System                | DELL Precision T7920 graphics workstation |
| Dimensions                    | L1500mm×W1650mm×H2250mm                   |
| Net Weight                    | About 2950KG                              |