

# VERTEX

## 261, 341, 342

- Equipped with a high-resolution camera-based system to get fast, accurate measurements on a variety of parts.
- Provides vivid pictures through a programmable optical and digital zoom.
- Supports sensitive touch probes systems.
- Integrates high speed vertical distance measurement sensors for scanning capability.
- Includes InSpec Metrology Software®.
- Uses proprietary edge detection to capture data.
- Offers advanced programmable lighting control.
- Includes automated calibration procedures.



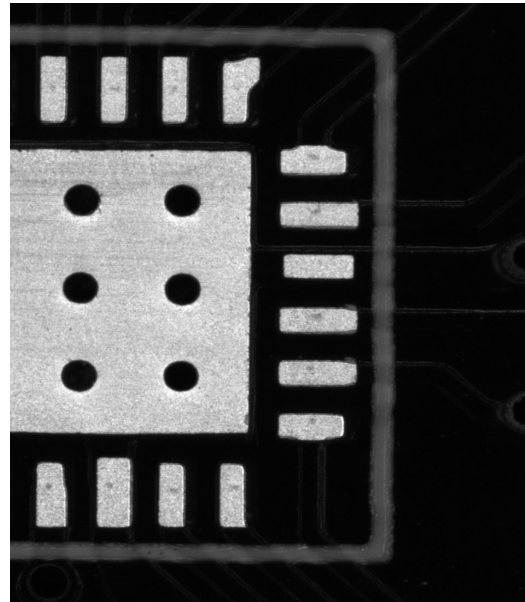
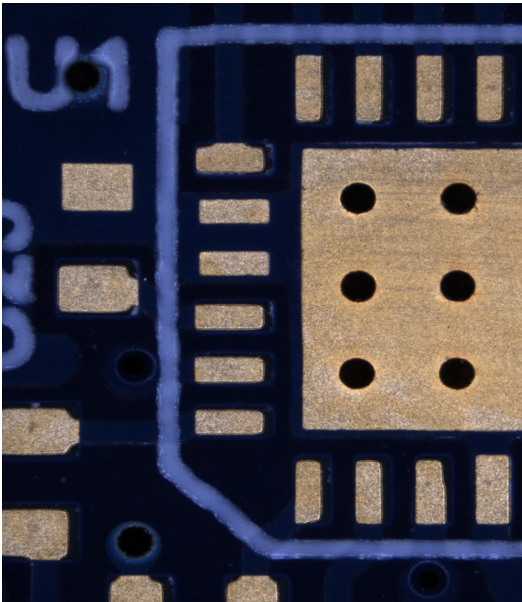
## Technical Specifications

|                               | Vertex 261                                     | Vertex 341        | Vertex 342        |
|-------------------------------|--|-------------------|-------------------|
| <b>Physical</b>               |  |                   |                   |
| Measurement Volume [mm]       | 250 x 160 x 160                                | 315 x 315 x 160   | 315 x 315 x 250   |
| XY Accuracy                   | 2.0+L/250                                      | 2.6+L/175         | 2.6+L/175         |
| Z Accuracy                    | 2.0+L/200                                      | 3.0+L/150         | 3.0+L/100         |
| Stage Capacity [kg]           | 10   | 10                | 10                |
| Exterior Dimensions [mm]      | 755 x 1130 x 1075                              | 900 x 1410 x 1065 | 900 x 1410 x 1245 |
| Machine Weight [kg]           | 100  | 150               | 160               |
| XY Max Speed [mm/s]           | 250  |                   |                   |
| Z Max Speed [mm/s]            | 100  |                   |                   |
| Linear Resolution [µm]        | 0.1  |                   |                   |
| <b>Electrical</b>             |  |                   |                   |
| Input Voltage [VAC]           | 100-240  |                   |                   |
| Power Consumption (Max) [W]   | 120  |                   |                   |
| Power Consumption (Idle) [W]  | 45   |                   |                   |
| Power Consumption (Sleep) [W] | 35   |                   |                   |
| <b>Environmental</b>          |  |                   |                   |
| Operating Temperature [°C]    | 18 - 27; <1 change per hour, <2 change per day |                   |                   |
| Storage Temperature [°C]      | 0 - 50   |                   |                   |
| Relative Humidity             | 30% - 80% (Non-Condensing)                     |                   |                   |
| Sound Level [dB(A)]           | < 70   |                   |                   |
| Max Altitude [m]              | 4000   |                   |                   |

Accuracy units are microns; length L units are millimeters.  
 Stage capacity is based on an evenly distributed load.

## Configuration Options

### Camera Options:



#### A. Color Camera:

- Utilizes white illumination system.
- Offers vivid chromatic information increasing the contrast of color parts.

#### B. Monochrome Camera:

- Utilizes red illumination system.
- Offers higher optical resolution compared to a color system.

### Optical Sensor Configuration Options:

#### A. Standard Zoom Range Lens or 6x Lens:

- Has an optical and digital hybrid zoom range of 19.5:1.
- Achieves an optical configuration and magnification of  $\approx 20x - 390x^*$ .
- Its simplicity and compactness usually allows for higher accuracy measurements and a longer life span.

#### B. Extended Zoom Range Lens or 12x Lens:

- Has an optical and digital hybrid zoom range of 36:1.
- Achieves an optical configuration and magnification of  $\approx 15x - 540x^*$ .
- Offers a larger field of view in low magnification and higher resolution in high magnification.

\*Monitor size and resolution affect on screen magnification.

## Optical Multiplier Options:

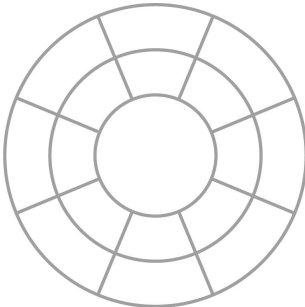
### A. No Multiplier or Long Working Distance:

- The optical magnification is maintained for both lens options.
- The working distance is  $\approx 66$  mm.

### B. 2x Optical Multiplier or Short Working Distance:

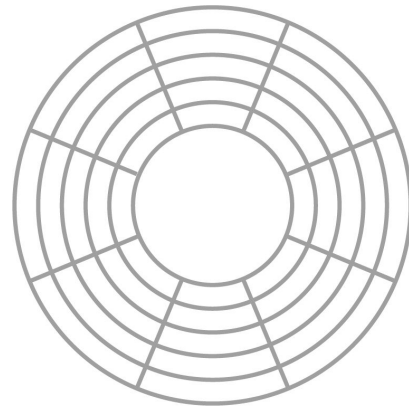
- Doubles the optical magnification of both lens options and simultaneously shrinks the field of view by half.
- Significantly shrinks the working distance to  $\approx 25$  mm.

## Ringlight Options:



### A. Standard Ringlight:

- Offers 2 rings, 8 sections, and 16 segments of programmable lighting options.
- Suffice the basic needs of programmable surface lighting.



### B. Macro Ringlight:

- Offers 5 rings, 8 sections, and 40 segments of programmable lighting options.
- Improved image contrast for parts with complex surface geometry.