



**Designed to measure aspherical lenses & molds, freeform optics, mirrors and any other precision component requiring nanometer level accuracy**

## **UA3P-3100**

"It is impossible to manufacture parts without making measurements" - The UA3P series supports nanometer-accuracy manufacturing by making precise measurements of various fine shapes. UA3P can measure aspheric lenses, free curved surface mirrors, and molds for processing them with a maximum accuracy of 0.01  $\mu\text{m}$ . These lenses and mirrors are indispensable for digital home appliances such as smartphones, DSCs, DVDs, and Blu-ray devices, home security, optical communication, automotive HUDs, etc. UA3P allows easy operations to achieve rapid processing feedback.

### **Key Features**

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Ultra-accurate measurement with highest stability

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Automatic NC program generation

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Extensive library of optional software

## UA3P-3100

<https://ap.connect.panasonic.com/th/en/products/smart-factory/ua3p-3100>

<b>Model name</b>	UA3P-3100*2
<b>Outer dimensions(WXDXH) mm</b>	760 x 860 x1580
<b>Mass of main body</b>	900kg (Others : 200kg)
<b>Measuring range(X,Y,Z axes) mm</b>	3100-A30 : 30 x 30 x 20 3100-A50 : 50 x 50 x 20
<b>Measured object placement area (X,Y,Zaxes)mm</b>	130 x 130 x 120
<b>Resolution</b>	0.3 nm
<b>Maximum inclination angle for top-surface measurement</b>	75°
<b>Angle for side-surface measurement</b>	-
<b>Measurement accuracy with top-surface probe *3</b>	30° or less : ±0.04µm ( round trip ) 45° or less : ±0.05µm ( round trip ) 60° or less : ±0.06µm ( round trip ) 70° or less : ±0.08µm ( round trip ) (Reference) Case of normal direction display(Nd) 0~70° : ±0.05 µm
<b>Measurement accuracy by coordinate axis (XYaxis measurement accuracy)</b>	100mm or less: 0.05µm (Repeatability within 0.05µm)
<b>Measurement speed</b>	0.005~5mm/sec
<b>Operating environment</b>	20~23°C(Variation±0.5°C) /20~60%
<b>Temperature/ Humidity/Vibration *1</b>	/ Allow. 1.0cm/S2(=1.0ga) Rec.0.5cm/S2
<b>Required power source</b>	AC100V±5%/ 14A
<b>Air: Pressure 0.5MPa~1.0MPa Flow rate</b>	150 L/min(ANR)
<b>Standard accessories</b>	Top ceramic stylus R500µm, Top diamond stylus R2D60, Probe, Standard sphere for calibration, Printer
<b>Footnote Description</b>	<ol style="list-style-type: none"> <li>1. Wind from air conditioners should not directly blow onto the equipment</li> <li>2. This product is categorized as a product(or technology) that qualifies as a regulated cargo as specified by the Foreign Exchange and Foreign Trade Act.To export or transfer abroad applicable products (or technology),you must gain permission for export in advance from the Japanese government.</li> <li>3. When using thetop ruby stylus or top ceramic stylus</li> </ol>