



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 μm . 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

Ultra-accurate measurement with highest stability

Automatic NC program generation

Extensive library of optional software

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

Model name	UA3P-3100*2
Outer dimensions(WXDXH) mm	760 x 860 x1580
Mass of main body	900kg (Others : 200kg)
Measuring range(X,Y,Z axes) mm	3100-A30 : 30 x 30 x 20 3100-A50 : 50 x 50 x 20
Measured object placement area (X,Y,Zaxes)mm	130 x 130 x 120
Resolution	0.3 nm
Maximum inclination angle for top-surface measurement	75°
Angle for side-surface measurement	-
Measurement accuracy with top-surface probe *3	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
Measurement accuracy by coordinate axis (XYaxis measurement accuracy)	100mm or less: 0.05µm (Repeatability within 0.05µm)
Measurement speed	0.005~5mm/sec
Operating environment	20~23°C(Variation±0.5°C) /20~60%
Temperature/ Humidity/Vibration *1	/ Allow. 1.0cm/S2(=1.0ga) Rec.0.5cm/S2
Required power source	AC100V±5%/ 14A
Air: Pressure 0.5MPa~1.0MPa Flow rate	150 L/min(ANR)
Standard accessories	Top ceramic stylus R500µm, Top diamond stylus R2D60, Probe, Standard sphere for calibration, Printer
Footnote Description	<ol style="list-style-type: none"> 1. Wind from air conditioners should not directly blow onto the equipment 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. 3. When using thetop ruby stylus or top ceramic stylus