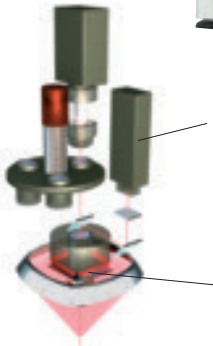
High Accuracy CNC Vision Measuring Machine
Quick Vision

QV-APEX

Floor-standing CNC model designed for demanding tasks in vision-based measurement and featuring a choice of accuracy specifications. Incorporates four-color LED Coaxial and ring lights.

Accuracy:
1.5 µm

- CNC-controlled
- Triangular pattern focusing for low-contrast surfaces
- Programmable magnification changer 1X, 2X and 6X
- White LED transmitted stage light
- LED Coaxial light with variable light color
- Programmable 4-quadrant LED ring light with variable light color
- High-precision measurement lens system 1X, 2.5X, 5X, 10X and 25X
- High-resolution CCD black and white camera
- Resolution: 0.1 µm (0.0001 mm)
- "One-click tool" technology for optimum edge detection
- User-friendly QVPAK software



White LED transmitted light
4-color LED Coaxial light
(RGB + white)

4-color LED ring light
(RGB + white)

Specifications

Name		QV-APEX302	QV-APEX404	QV-APEX606
Optical System		**PRO/PRO LAF**	**PRO/PRO LAF**	**PRO/PRO LAF**
Measuring range (X × Y × Z)		11.81"x7.87"x7.87" (300 × 200 × 200mm)	15.75"x15.75"x9.84"(400 × 400 × 250mm)	23.62"x25.59"x9.84"(600 × 650 × 250mm)
Resolution / scale unit		0.1µm / reflective-type linear encoder		
CCD camera		B & W		
Illumination unit	Vertical reflected stage	White LED		
	Coaxial	Color LED		
	PRL (Ring Light)	Color LED		
Measuring accuracy	E_1X/Y axes	(1.5+3L / 1000) µm		
	E_1Z axis	(1.5+4L / 1000) µm		
	E_2X-Y plane	(2+4L / 1000) µm		
LAF repeatability*1		σ : 0.4µm		
Maximum stage loading		44lbs.(20kg)	88lbs.(40kg)	110lbs.(50kg)
Mass of main unit (including mounting stand)		794lbs.(360kg)	1,276lbs.(579kg)	3,197lbs.(1450kg)

*1: Applicable to the LAF model only. (Optional)

Remark: The measuring accuracy is evaluated according to a Mitutoyo inspection method. "L" indicates an arbitrary measuring length (unit: mm).
Accuracy is guaranteed under the following optical conditions: (QV-HR2.5X or QV-SL2.5X) + tube lens 1X for PRO.