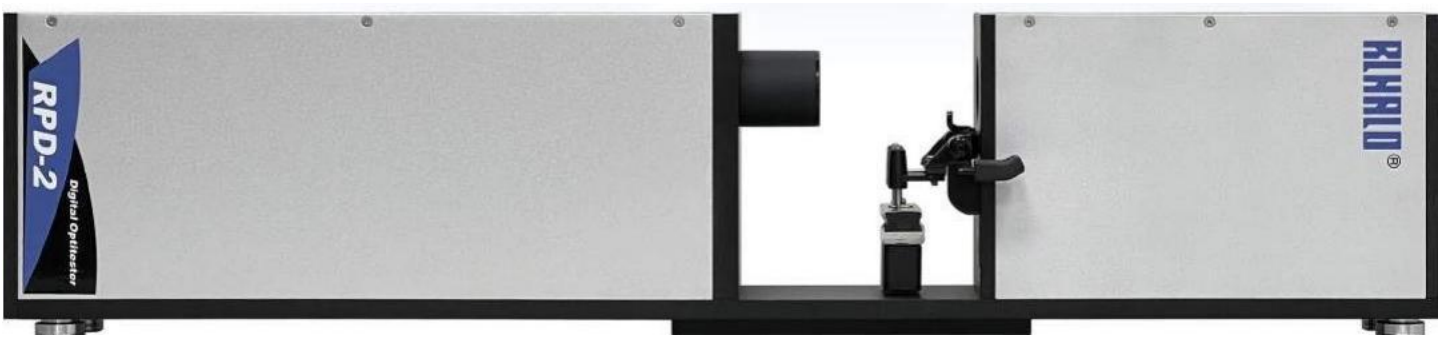
仙本科技

Optical Properties Tester
RPD-2

Simple - Fast - Accurate - Suitable for full inspection .....



RPD-2

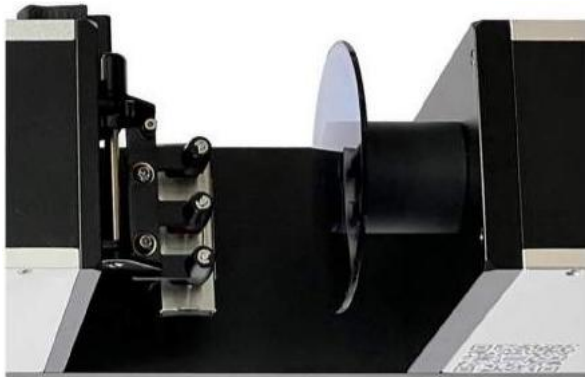
Optical Properties Tester

Software with strong functions

Click one button and get sphere, cylinder, and prism power for single lens at one test.
Automatically calculates test results, judges pass/fail status according to selected standards, and generates standard PDF test reports.
As per batch measurement list, statistical analysis can be carried out, and statistical report in Excel will be output accordingly.

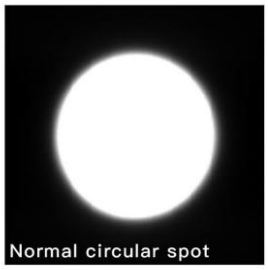
Adaptive detection light source

Supports open testing to greatly improve batch inspection efficiency. With millisecond-level dynamic light intensity detection, the system automatically adapts to samples of different color and various usage environments..



Evaluation on Lens Imagining

Supports the display of the original image of the lens, which is used to evaluate the optical performance of the lens on top of measuring of the spherical power and prism power, for example lens imaging distortion caused by spherical aberration, and coma aberration.



RPD-2 Standard Function：	
Display data：	Display sphere, cylinder, prism and its direction for single lens
Operation mode:	Windows desktop operation (option: touch screen)
Target display:	Digital electronic cross simulation target
Analog Imaging:	It can simulate the image distortion as per measured sphere and cylinder,presenting comprehensive optical features
Real-time image Display:	It can observe aberrations of the lens, such as spherical aberration, coma, resolution clarity, and other optical states
Diopter report:	Detailed optical parameter and simulation charts.
Prism power:	prism power reports for single lens
Test report output:	Excel list export for full inspection on batch measurement
Testing standard:	Automatic selection of testing standard as per selected sample

RPD-2 Technical Details:	
ISO target:	Virtual 1SO12311 Infinite Cross Target
Target size:	Cross target, inner ring 0.12cm/m, outer ring 0.25cm/m
Image Display:	Virtual target display and actual imaging display can be switched
Magnification:	12×
Objective aperture:	φ20mm
Image acquisition:	Low-light level industrial camera
Auto calibration:	Auto calibration as per ambient light and support for open test
Transmittance(Tv) calibration:	Automated light source calibration. No manual pre-input of lens transmittance ratio are required
Built-in filter	V(λ)Filter has peaked transmittance at green wavelength
Test speed:	≤1.5 seconds (AI automatic calculation speed)
Zero Indication error:	≤±0.001D(sphere power1/m)/≤+0.001(prism power cm/m)
Indication error：	≤±0.01D(sphere power 1/m)/≤±0.003△(prism power cm/m)
Repeatability:	100times repeat test without moving lens, sphere ≤0.002(1/m),prism ≤0.001(cm/m)
Power range:	-0.50D～+0.35D(sphere1/m)/-0.25D～+0.25D(cylinder1/m)0~0.3△(prism)
Automated test:	Sphere, cylinder, prism and prism angle
Report output:	PDF report for single lens including prism power report
Sample Types:	Sunglasses, Goggles, Ski-goggles, Uncut finished lens with non-destructive test
Mark Printing point:	Marks the measured prism center to adjust mold decentration.
Device Placement	Device can be placed horizentally and veritcally
Device Size	70W*120D*600H(mm)
Power:	100~240VAC|50/60Hz
Voltage:	10W(VA)

RPD-2 Compliance with Standards：

EN ISO 12312-1:2022	ISO 18527:2020
AS/NZS 1067:2016	GB 32166.1-2016
GB 39552.1-2020	ANSI Z80.3-2018
EN166~174	ANSI Z87.1-2020
GB 14866-2006	CSA Z94.3-15
ISO 16321-1:2021	GB/T 40047-2021

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