

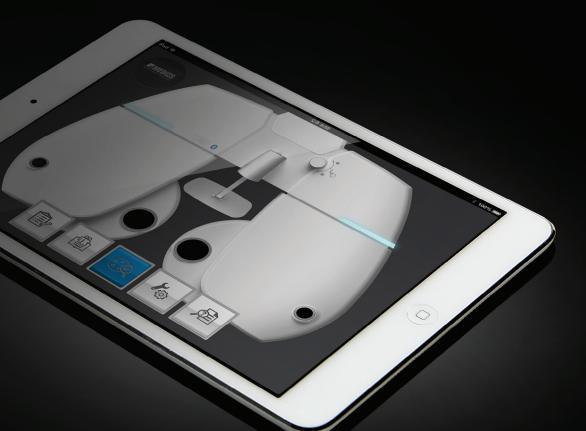
# SMART DR<sup>®</sup> 13 AUTO DIGITALZED REFRACTOR

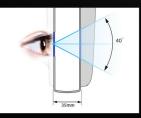
Two way operation (Manual/Digital)











# Wide Viewing Angle

The extra thin body provides wide angle of view, which is 40°, more effective for an eye test.



#### **Compatible Control**

Both Digital/Manual Phoropter mode and vision test chart can be controlled in one screen. The total refraction time is reduced significantly.



#### Interaction Among Smart Series

The Bluetooth wireless communication among Smart Series provides improved interaction and allows the operator to make patient's diagnosis conveniently.



#### Feedback LED Lighting

LED light indicates the circumstance of DR 13. The light creates an elegant mood.



#### Various Vision Test Charts

A comprehensive range of optotypes and tests provides various measurements on the individual preference.

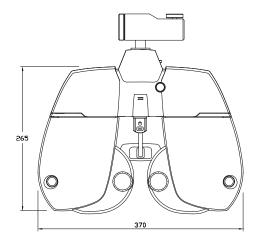


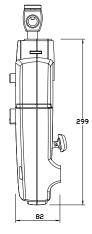
#### Use of the Auxiliary Lens

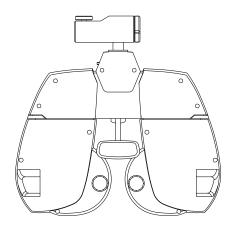
The refraction time is reduced significantly with the onetouch using of the auxiliary lens and test window open/close function.



## **Specification**







#### **Measuring Range**

Spherical Lens	-29.00 ~ +26.75D (0.12 / 0.25 / 0.5 / 1 / 2 / 3D increments)	
	-19.00 ~ +16.75D (Cross cylinder, Prism)	
Cylinder Lens	0 ~ ±8.75D (0.25 / 5 / 1 / 2 / 3D increments)	
Cylinder Axis	0 to 180° (1 / 5 / 15 / 30 / 45° increments)	
PD	48 ~ 80mm (In distance mode 0.5 / 1mm increments) Near PD 50 ~ 74mm (Near working distance : 30~70cm)	
Rotary Prism	0 ~ 20Δ (0.1 / 0.2 / 0.5 / 1 / 2Δ increments)	
Cross Cylinder Lens	±0.25D, ±0.50D, ±0.25 Dual Cross Cylinder Lens	
Retinoscope	+1.5, +2.0D	
Auxiliary Lenses		
Pin Hole Lens	Ø 2mm	
Maddox Rod	Right Eye(Red, Horizontal), Left Eye(Red, Vertical)	
Red / Greed Filter	Right Eye(Red), Left Eye(Green)	
Polarizing Filter	Right Eye: 135 / 45°, Left Eye: 45 / 135°	
Split Prism	Right Eye: 6∆BU, Left eye:10∆BI	
Fixed Cross Cylinder	$\pm 0.50D$ (Fixed with the Axis set at 90°)	
Visual Field		
40° (at VD : 12mm)		
Dimensions		
Main Body	370(W) x 82(D) x 299/358 with bracket(H)mm / 4kg [8.81lbs]	
Junction Box	92(W) x 32(D) x 61(H)mm / 500g [1 1]hs]	

Main Body	37U(W) x 82(D) x 299/358 with bracket(HJmm / 4kg [8.81lbs]
Junction Box	92(W) x 32(D) x 61(H)mm / 500g [1.1lbs]
Power Supply	AC100 ~ 240V, 50 / 60Hz (Free Voltage)
Power Consumption	130VA

### Controller

iPad, iPad mini	
Interface	Bluetooth