

## Root Scanner



BIOBASE optional

### Introduction:

Root analysis system is based on image recognition technology, it is professionally used for root analysis of plants after washing the roots in vitro. It has the characteristics of convenience, efficiency and high accuracy, which can improve the work efficiency of practitioners, reduce labor costs.

### Features:

- \* Clear interface design, modular function design.
- \* User learning cost is lower, operation is more convenient and smoother.
- \* The analysis results are more accurate.

### Technical Parameters:

Model	RS-A
Power Supply	100~240V, 50/60Hz
Optional Accessory	computer
Package Size	805*235*395mm
Net Weight	8kg
Gross Weight	9.7kg

### Overall Analysis Parameter:

Model	RS-A
Root Tip	Number: the total number of root tips, equal to the number of termination points
	Range 0~1000
	Accuracy error <5%
Root System	Length: total root system length, including main root and secondary roots
	Range 0~10000mm
	Accuracy error <3.65%
	Average Diameter: the average diameter of the root system
	Range 0~20mm
	Accuracy error <0.04%
	Projected Area: the projected area of the root system as a whole
	Range 0~200000mm <sup>2</sup>
	Accuracy error <4.02%
	Surface Area: the overall surface area
	Range 0~1000000mm <sup>2</sup>
	Accuracy error <3.75%
	Volume: overall volume
	Range 0~2000000000mm <sup>3</sup>
	Accuracy error <3.82%

### Topological Analysis Parameter (requires relatively complete root system):

Model	RS-A
Quantity: the sum of the number of roots at all levels	
Range	0~100
Number of Connections: the sum of the number of connections on the side roots at all levels	
Range	0~100
Length: the sum of the lengths of the lateral roots at all levels	
Range	0~10000mm
Diameter: the average diameter of each side root	
Range	0~20mm
Surface Area: the sum of the surface area of each side root	
Range	0~1000000mm <sup>2</sup>
Volume: the sum of the volume of each side root	
Range	0~2000000000mm <sup>3</sup>
Projected Area: the sum of the projected area of each side root	
Range	0~200000mm <sup>2</sup>