

CI-600

In-Situ Root Imager

This minirhizotron root scanning system takes non-destructive, high-resolution digital color images of roots, root hairs, and mycorrhizae in the soil, enabling observation of root growth and behavior over time. The CI-600 can service multiple durable, acrylic access tubes for measurements throughout multiple growing seasons.



RootSnap! Image Analysis Software

RootSnap! automates much of the tedious work of analyzing root images. RootSnap! automatically detects root diameter along the entire length of the root. Initial tracing of the root is intelligently detected as you drag a finger over the image on a touch screen. By recognizing differences in pixel color values between root and soil, RootSnap! automatically “snaps-to” the root, even if the finger is not perfectly over the root during tracing.

Product Features

- ▶ High-resolution scanner head
- ▶ White calibration tube
- ▶ Collapsible indexing handle for consistent, repeatable measurements at any depth
- ▶ Six 1-meter clear acrylic tubes included with scanner package
- ▶ Handheld tablet computer preloaded with CI-600 operational software, as well as RootSnap! Image Analysis Software

RootSnap! Features

- ▶ Measurements of:
 - Root length
 - Diameter
 - Area
 - Branching angle
 - Volume
- ▶ Rapid cursory estimation of total root volume

Image size	21.6 x 19.6 cm (8.5" x 7.7")
Scan speed	30-480 seconds* depending on scanning resolution, (100 DPI – 600 DPI)
Image resolution	Up to 600 DPI
Scanner head dimensions	34.3 cm long x 6.35 cm diameter
Scanner unit weight	750 g
ROOT TUBE DIMENSIONS	
Inner diameter	6.35 cm
Outer diameter	7 cm
Wall thickness	3.2 mm
Standard length	105 cm