

# CI-600 In-Situ Root Imager





# CI-600 In-Situ Root Imager

- ✓ High-resolution image - up to 23.5 million pixels
- ✓ Quick image capture - 5 to 15 seconds per scan
- ✓ Linear scanning with no distortion
- ✓ Each scan generates a near 360-degree image ( $21.59 \times 19.56\text{cm}$ ) at up to 600dpi resolution
- ✓ Very portable and quick operation
- ✓ Enables observation of root system architecture and behavior during the entire growth season
- ✓ USB interface for laptop computer image storage

The study of fine root dynamics (production, turnover, and lifespan) and root system architecture (RSA) is at the forefront in the fields of ecology and agronomy/plant breeding. Future gains in plant productivity will be driven by selection for traits that optimize acquisition of resources such as water and mineral nutrients under limiting conditions. The CI-600 leads the fine root-imaging field by offering researchers the ability to acquire high-resolution images of roots over time.

The CI-600 allows researchers the ability to scan multiple tubes in the field with one hand-held unit.



## The CI-600:

Provides a high-resolution underground color image of living roots in the soil.

Enables observation of root system architecture and soil profile over time.

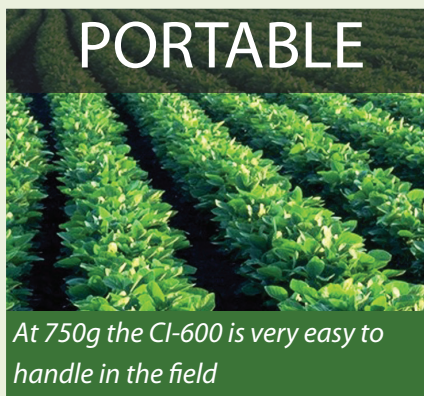
Portable and field ready for fast, accurate root and soil images.

### PRECISE



*High-resolution images of root system architecture*

### PORTABLE



*At 750g the CI-600 is very easy to handle in the field*

### LIGHTWEIGHT



*Non-destructive root and soil images taken in the field over the entire growing season*





## HOW TO USE IT

---

The CI-600 is designed for long-term root studies on living plants in the field. Install clear acrylic tubes within the study area prior to the growing season. When the plant begins to build a network of roots, simply slide the CI-600 scanner head within the tube at the desired depth and download images to your computer via USB connection. The images collected by the CI-600 can be imported and analyzed with RootSnap!® root image analysis software

## WHAT'S IN THE BOX?

---

### CI-600 Root Scanner includes:

- ✓ Root imaging unit
- ✓ Three 105cm clear tubes with end caps  
(custom length tubes available)
- ✓ Calibration tube
- ✓ Scanning software and operating manual
- ✓ Hard shell instrument case
- ✓ *Optional hand-held computer*
- ✓ *Optional RootSnap!® root image analysis software*



**Rhizosphere Fungus:** This image was scanned at 600 dpi. The original image size was 21.59 x 17.78 cm. Image provided courtesy of Dr. Dylan Fischer of The Evergreen State College. For more information and images please see his website: <http://blogs.evergreen.edu/ecology/belowground-ecology/>.

# SPECIFICATIONS

Scanner Resolution:	Maximum 600dpi - up to 23.5 million pixels
Image Size:	21.6W × 19.6L cm (8.5W × 7.7L in)
Scan Speed:	5 to 15 seconds - depending on scanning resolutions
Interface:	USB port
Power Supply:	Computer USB port
Scan Head Dimensions:	34.3cm long × 6.4cm diameter
Standard Clear Tube Dimensions:	6.4cm inner diameter × 105cm length (2.5 inches × 3.4 feet); custom lengths available upon request
Scanner Unit Weight:	750g



## HOW TO ORDER

CID Bio-Science, Inc. works with distributors world wide to provide technical training and resources that serve you and your needs. For local sales and service, please refer to our website [www.cid-inc.com](http://www.cid-inc.com) to find your local distributor, or you may contact us directly at 1-360-833-8835 or [products@cid-inc.com](mailto:products@cid-inc.com).

## ABOUT CID BIO-SCIENCE, INC.

CID Bio-Science is an industry leader in the design and manufacture of scientific instruments for agricultural, environmental and biotechnological research. We pride ourselves on creating portable instruments for precision plant measurement. CID's mission is to satisfy the needs of researchers by delivering instruments that are: reliable, portable and easy-to-use. For over 20 years, CID Bio-Science instruments have been used in the field, in laboratories worldwide and the International Space station for plant physiology research.