

# CI-600 In-Situ Root Imager

## DESCRIPTION

Observing a root system throughout a plant's life cycle is key to understanding overall plant behavior and health, and to improving crop performance.

The CI-600 is a minirhizotron that gives plant scientists, crop consultants, and farmers the ability to capture nondestructive, high-resolution, digital images of living roots in soil over multiple growing seasons. Durable and lightweight, the CI-600 is a portable minirhizotron that is easy to transport to any field location and can be used in sites with root tubes across a range of treatments or conditions. Our free root analysis software, RootSnap!, quickly and easily calculates parameters including root length, area, volume, diameter & branching angle..

## SPECIFICATIONS

Image Size: 21.59cm × 18 cm (8.5" × 7.1") Scan Speed: ~30 seconds (depending on selected resolution) Image Resolution: Up to 1200 DPI Interface: USB Cable Scan Head Dimensions: 35.9 cm long × 4.6cm diameter (14.125" × 1.8") Control Box Dimensions: 18 cm × 7.5 cm × 5 cm (7.125" × 3" × 2") Total Dimensions:1950g or 4.3lbs



CI-600 In-Situ Root Imager:

#### Roots play a vital role in crop and orchard health but are challenging to measure using above-ground indicators.

Because root-growth dynamics change seasonally and respond rapidly to various biotic and abiotic stressors, improved visibility and accessibility to roots throughout the growing season is key to improving crop management practices.

#### **Evaluating Roots in the Field**

Non-destructive root images show a variety of features including root system architecture, timing of new growth or dormancy, root length or

depth, mycorrhizal root tips, fungal infection, and parasites or nematode cysts.

Installing clear, plastic tubes throughout the field provides growers with a way to track changes to root systems in response to:

- Fertilizer application
- Watering schedule
  - Root die-back from disease
  - Parasitic nematode attack, mycorrhizal inoculation

# CI-600 In-Situ Root Imager

#### CI-602Narrow Gauge Root Imager

A New Minirhizotron System Compatible with 2-inch Diameter Tubes! Observing a root system throughout a plant's life cycle is key to understanding overall plant behavior and health, and to improving crop performance.

The CI-602 Narrow Gauge Root Imager is a minirhizotron system that captures non-destructive, highresolution, digital images of living roots in soil over multiple growing seasons. Compatible with root tubes measuring two inches in diameter, the CI-602 gives users the ability to work within new and existing tube installations. The CI-602 is a durable and lightweight minirhizotron that is easy to transport to any field location and can be used in sites with root tubes across a range of treatments or conditions. Our free root analysis software,

## Contact info



### Monitoring MENA Insight into instrumentations

### (+962) 5353-2091

PO Box 1100 Salt Post Code 19110 JORDAN sales@monitoring-mena.com www.monitoring-mena.com

#### **Product Features:**

- Lightweight and optimized for single-handed operation
- Stable analyzers for accurate CO<sub>2</sub> and H<sub>2</sub>O measurements
- Accommodates open and closed system measurements
- Infrared, non-contact leaf temperature sensor
- Ten interchangeable chambers customized for different leaf types
- Custom soil respiration chamber
- Control modules for light, temperature control, CO<sub>2</sub> / H<sub>2</sub>O supply and chlorophyll fluorescence measurement
- Chlorophyll fluorescence and photosynthesis measured simultaneously.



## APPLICATIONS

Agricultural professionals use our CI-600 In-Situ Root Imager to:

- Take non-destructive, high-resolution digital images of roots systems underground
- Observe the development and function of a plant's root system over time
- Track establishment and rooting of new crops throughout the growing season.
- Detect and diagnose plant pathogens and disorders before changes are visible above ground
- Time soil amendment applications with root flush





This Instrument is manufactured by our principle company

**CID Bio-Science - USA**