力科惠泽
Eco-mind

LK-1200 Benchtop root analyzer is designed for digital rotational imaging of root system after flushing; can analysis two-dimensional images of abundant root system continually. The analyzer can be used for rotational imaging of root from any angle continuously, involved to hundreds of plant root samples per day. With the professional controlling software and image analyzing software, LK-1200 can be used to measure length, diameter, area, surface area, digital biomass and topology of an entire root system.

Furthermore, LK-1200 is equipped with barcode scanner, which can recognize names of root by barcodes automatically to save much time.LK-1200 can be generally applied to research and education of agronomy, biology, ecology, cultivation, horticulture, etc.

Imaging system of LK-1200 is stationary high definition imaging system. Before delivery, distinguish ability, area, distance have been set in advance by manufacturer, and therefore customers can directly fix flushed root to automatically revolving table.

With the barcode scanner, LK-1250 can identify the name and serial number of root system automatically. The root images can be analyzed by professional root analyzing software, but prior to imaging, focal length and position ought to be set.

Feature

- 20.44 megapixels high definition imaging module;
- Root images rapid identifying, with the barcode scanner;
- Root can rotate 360 degree, and imaging root system can be performed in any angle;
- Imaging system can adjust frame automatically by rail according to the size of root system;
- Powerful root image analysis software can measure twenty root morphology parameters.

Technical Specifications

1. Framework: aluminum;

2. Illuminant: LED;

3. Root images analysis software: included

4. Camera parameters

       Port: USB3.0;

       Interface rate: 5.0Gbps;

       Sensor type: CMOS;

       Max frame rate: 19.5FPS;

       Resolution : 5536×3692 Pixel;

       Optical Size: 13.286×8.861 mm;

       Shutter: Rolling shutter;

Sensor size: 1 inch;

Pixel: 20.44MegaPixel;

Pixel size: 2.4 μm;

ADC: 12 bit

Color depth (camera): 12 bit;

Binning horizontal: increased frame rate;

Binning vertical: increased frame rate;

Binning factor: 2;

Power consumption: 1.8W – 3.5W;

Image memory: 128 MB;

IP code: IP30;

Device temperature during operation: 0℃ - 55℃/32℉- 131℉

Weight: 49g;

Lens Mount: C-Mount;

5. Other specifications：Calibration in advance, PnP, CE certification, FCC certification, UL certification.

Root images analysis software

The root images analysis software designed for flushed plant root system are as follow:

DIRT、Root Trace 、RootNav 、SmartRoot 、RhizoChamberMonitor、WinRhizo Tron

Origin and Manufacturer: China Eco-mind