

■ CI-110 Comparison Chart

	CID Bio-Science	Regent Instruments	Dynamax	Dynamax/Delta-T	Delta-T	Decagon	LI-COR
Specification	CI-110 Plant Canopy Imager	WinSCANOPY Attachment and Software with 10MP or 24MP DSLR Camera	HemiView	SunScan Canopy Analysis System	BF5 Sunshine Sensor	Accupar LP-80	LAI-2200
Battery specifications	Powered by tablet computer, operates for approximately 6 hours before needing to be recharged.	n/a	15000mAh battery	Four AA Alkaline cells, 12 hours	2 x 1.5V AA Alkaline batteries	4 type "AAA" batteries	Control unit: 4 "AA" batteries (alkaline, NiMH, or lithium). 140 hours with 4 "AA" alkaline batteries, no optical sensor attached. 80 hours with 4 "AA" alkaline batteries, with one optical sensor attached. Sensor: 180 hours with 2 alkaline batteries.
Data storage	Up to 64 GB (according to tablet capacity)	16 GB SD Card	4 GB SD Card	>100 MB	Requires data logger (Delta-T PDA sold separately)	1 MB Flash	128 MB for data storage (over 1.5 million readings)
Data output	Onboard processing by tablet, wifi, and SD card	SD card	SD card and/or USB cable	RS-232	Requires 5m cable BF5 to bare wire type SP-BF/w-05	Direct via RS-232	USB

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Dimensions	20 x 20 mm (probe size); 400 mm (arm length)	26.5 cm x 22 cm x 15 cm	89° adjustable tripod system	PDA 165 mm x 95 mm x 45 mm, sensor 1,300 mm (L) x 100 mm (W) x 130 (H) mm	120 mm x 122 mm x 95 mm	15.8 cm x 9.5 cm x 3.3 cm	20.9 x 9.8 x 3.5 cm (8.2" x 3.9" x 1.4")
Weight	0.5 kg (probe and arm weight)	2.2 kg	0.750 kg camera + tripod	1.7 kg	635g	0.55 kg (1.21 lbs)	0.454 kg (1.0 lb) with batteries
Display specifications	320 x 60 daylight visible	No in-field preview of data	Eyepiece viewfinder	1/4 VGA sunlight readable	n/a	Digital	128 x 64 graphics LCD display
Camera	Custom	24MP DSLR or 10MP point-and-shoot	Sigma SD14 DSLR	n/a	n/a	None	n/a
Technology type	150° equidistant wide-angle lens with PAR sensors	180° fish-eye lens converter calibrated with the camera you order	180° fish-eye lens camera (without PAR)	PAR Sensor (no camera)	Light Sensor	Data logger and probe	LAI Light Sensor
Resolution	768 x 494 pixels	24 Mpixels	14 Mpixels	0.3 $\mu\text{mol.m}^{-2}\text{s}^{-1}$	PAR: 0.6 $\mu\text{mol.m}^{-2}\text{s}^{-1}$ Energy: 0.3 W.m^{-2} Illuminance: 0.060 klux	1 $\mu\text{mol m}^{-2}\text{s}^{-1}$	n/a
PAR range	0 ~ 2500 $\mu\text{mol m}^{-2}\text{s}^{-1}$	n/a	n/a	0 ~ 2500 $\mu\text{mol mol}^{-1}$	0-2500 $\mu\text{mol.m}^{-2}\text{s}^{-1}$	0 > 2,500 $\mu\text{mol m}^{-2}\text{s}^{-1}$	n/a
Response	400 ~ 700 nm	n/a	n/a	400 - 700 nm	<250 ms	1 $\mu\text{mol m}^{-2}\text{s}^{-1}$	320 - 490 nm
Determine LAI for 0.5m tall plant	Yes	No	No	Yes	No		Accessory available

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Software	Integrated capture and analysis software provides simple, repeatable measurements and instantaneous calculation of diffuse radiation transmission, mean foliage inclination angles, plant canopy extinction coefficients, solar beam transmission coefficients or gap fractions for LAI analysis. Users can customize azimuth and zenith angles used in LAI calculation and can digitally mask unwanted elements.	WinSCANOPY software (Reg or Pro) calculates canopy and solar radiations analysis which measures leaf area index, gap fraction, canopy openness, and site factors.	HemiView Software for processing image data file for further manual analysis.	SunData Software used for data analysis and storage.	SunData Software available	LP-80 Utility Program	FV2200 software provides data processing options, including 3 additional inversion methods, ring masking, and tools to compute canopy volume.
Carrying case	Hard shell, weather-proof carrying case	Weather-proof carrying case	Camera case and carrying strap for tripod.	n/a	Available	Not specified	n/a