## **URBARN**<sup>™</sup> Nano XL-500 Spectroradiometer



URBARN's XL-500 is an ultra-compact Bluetooth Spectroradiometer based on disruptive digital-nano convergence technology. It provides feedback for growers by showing PPFD in real time—plus allows visualization of the spectral chart for quick reference.

The XL-500 is easy and convenient to use as a portable device or as a spectrum recorder, and includes a free Android/iOS App, internal memory, and a long-lasting rechargeable battery. It is individually calibrated and provides device-to-device repeatability. The features and performance are comparable to conventional industry equipment.

The tiny BLE spectroradiometer XL-500 measures and records light spectrum with absolute power values, not only SPD (W/m2/nm) but also PAR/PPFD (umol/m2/s/nm) and DLI measurements for agriculture.



## **Features**

- Spectral Power Density (SPD: W/m2 per wavelength)
- Lux (Photopic)
- •CIE S026 Rhodopic, Melanopic, Cyanopic, Chloropic, and Erythropic Lux
- •PAR/PPFD, DLI for Agriculture
- •X, Y, Z, CIE xy, CIE uv, CCT, CRI
- Individually Calibrated
- Device-to-Device Repeatability
- •Memory for up to 8,000+ Measurements

- •Ultra Low Power Consumption (lasting more than 1+ month @ every 5-minute measurement interval, within one charge)
- Auto Exposure Control
- •3.7V LiPo Rechargeable Battery, charging via micro-USB jack (included)
- •Wide Operating Temperature
- •Bluetooth Low Energy (BLE)
- •Free Android and iOS Apps

## **Company & Product**

Model	URBARN Nano XL-500
Description	URBARN Nano XL-500 Spectroradiometer

Dimensions & Weight (SKU)	Width	Length	Height	Weight
Nano XL-500	1.02"/26mm	1.55"/39mm	.63"/16mm	.99oz/28g
Carrying Case	3"/76.2mm	4.63"/117.5mm	1"/25.4mm	1.5oz/43g

Parameter	Value	
Wavelength range	380 - 850nm	
Resolution	10nm~40nm	
Repeatability(peak)	1nm	
SNR	> 100:1	
Dynamic range	> 1000:1	
Integration time	250us~, manual or auto	
Measurement Interval	Min. 100ms	
FOV (field of view)	> +/- 60 degree	
Power consumption	76uA @standby mode; 25mA@full operation	
Operation temperature	0°C ~ 60°C	

## **Kit Includes**

URBARN Nano XL-500 Spectroradiometer

Protective Carrying Case

**USB** Power Adapter

Quick-Start Instructions









