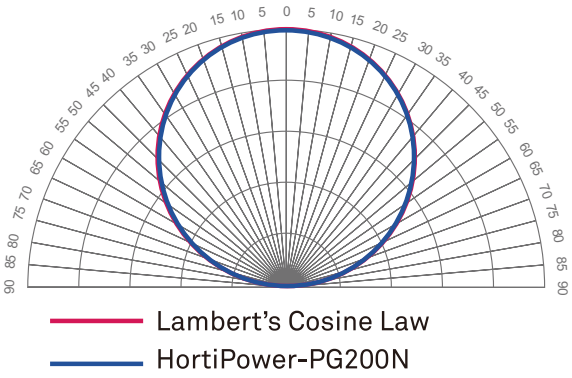
HortiPower
GROW WITH NATURE



RoHS

HortiPower Smart Spectrum Meter

HP-PG200N

READY FOR NEXT GENERATION HORTICULTURE LEDs

The HortiPower Smart Spectrum Meter is a tool for next-generation horticulture lighting to measure plant-sensitive light for tissue culture, city farming and other horticultural applications. It is equipped with the most sensitive sensors that can capture scientifically defined light for plants, such photosynthetically active radiation (PAR), PPF, and PPFD.

FAST

It provides superfast and accurate measurements under all light-sources and lighting systems, including natural light, fluorescent lights, LED grow lights and systems. With a wide spectral range of 350-800nm it is able to measure UVA, visible light and all the way until infrared light.

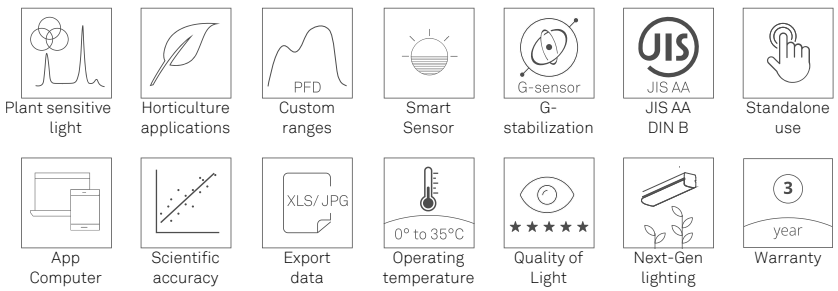
EASY TO USE

The hand-held meter is easy to use and provides easy access to the data. Designed with a responsive touch display, Micro SD card, optional mobile app and optional compatible computer software, users can capture, view and retrieve their data anytime and at any device. The linear image sensor is water repellent and contains a motion sensor to operate well in the field. The sensor head is detachable and allows for accurate readings in less accessible locations.

RELIABLE

The meter is a calibrated device and meets all professional standards for reliable lighting measurements. It is optimized to capture accurately the actual performance of LED lighting sources and next generation horticulture LEDs. It is also capable to measure conventional lighting qualities such as CCT, CRI, XY and more.

PRODUCT FEATURES



- Designed for Horticulture applications (tissue culture, city farming, floriculture, greenhouse)
- Fast, reliable and accurate measurement of plant sensitive light
- Customizable PFD range
- Dust and water repellent sensor, with inbuilt stabilizer and conform reliability norms
- Use as standalone meter, with app or computer
- Use in scientific experiments and export data
- Compatible with new, next-generation horticulture LEDs

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SPECIFICATION

Wavelength range	350-800nm
Measuring modes	PPFD, PFD, Custom spectrum range
Capture function	One time / Continuous
Intensity range	1 ~ 3000 µmol/(m^2*s) 0.5 ~ 1000 W/m^2 (irradiance) 70 ~ 150,000 lx
Illuminance Accuracy	± 5%
Illuminance Repeatability (2σ)	0.2%
Color Accuracy	± 0.0025 in CIE 1931 x,y
Color Repeatability (2σ)	0.0005 in CIE 1931 x,y
CCT Accuracy	± 2%
CRI Accuracy @ Ra	± 1.5%
Measured data	PPFD (400 nm -700 nm) PFD UV (350 nm -400 nm) PFD B (400 nm -499 nm) PFD G (500 nm -599 nm) PFD R (600 nm -700 nm) PFD FR (700 nm - 800 nm) PFD (350 nm - 800 nm) General lighting spectrum PPFD spectrum PFD-B:G ratio (400-500nm:500-600nm) PFD-R:FR ratio (600-700nm:700-800nm) Illuminance (lux) Peak Wavelength (λp) Dominant Wavelength (λd) CCT CRI (Ra) R1 to R15 CIE 1931/ CIE 1976 Chromaticity Coordinates
Wavelength data increment	1nm
Spectral bandwidth	9 nm approximately
Wavelength reproducibility	± 1 nm
Integration Time Range	100 us to 1,000 ms
Sensor stability and smart measurement	Detachable G Sensor with automatic adjustment for artificial measurement error reduction
Sensor norms	JIS AA (JIS C1609-1:2006) DIN (DIN 5032 Part 7 Class B)
Recording modus	Logging Mode, Browser mode
Storage	68,000 Files @ 8GB SD Card (Excel + JPG)
Export format	.xls .jpg

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Mobile app (optional)	iOS, Android
Computer software (optional)	Windows, macOS
Battery	up to 5 hours
Adapter	2500 mAh (3.7V Rechargeable Li-ion Battery)
Dimensions	190 x 81.7 x 29.5 mm (H x W x D)
Operating Temperature/ Humidity	0° to 35° C, relative humidity 70% or less without condensation
Storage Temperature/Humidity	-10° to 40° C , relative humidity 70% or less without condensation
Display languages	English/ Traditional Chinese/ Simplified Chinese/ Japanese/ Spanish/ German/ French/ Italian/ Russian
Connectivity	Bluetooth (app), USB C, Micro SD card
Dark mode	Automatic
Screen	Capacitive Touch LCD (4.3”) 800 x 480
Digital resolution	16 bits
Weight	280 g
Warranty	3 years

RELATED PRODUCTS

HP-TC-Linear-20W-1000	HortiPower Tissue Culture Linear 20W 1000mm
HP-CF-Linear-40W-1000	HortiPower City Farming Linear 40W 1000mm
HP-FC-Dot-13W-149	HortiPower Floriculture Dot 13W 149mm
HP-610-DR	HortiPower LED driver, DC 24V, 6 Channels, DMX/RDM
HP-TP-6	HortiPower Touch Panel, 6 Channels
HP-TP-48	HortiPower Touch Panel, 48 Channels

ACCESSORIES

Case, Power adaptor, USB Cable, Type C USB Cable (for remote measurement), Protection bag, Screen wiper, SD card, User Manual, Warranty Card.

CO-CREATION

This product is a co-creation between UPRTek and HortiPower.

United Power Research Technology Corp. from Taiwan is a renowned supplier and manufacturer in the optoelectronics industry. UPRtek offers high quality spectrum meters and professional equipment since 2010. With both advanced technology and 9 years experience, UPRtek meetS every customer requirement in professional optoelectronics.

HortiPower offers plant-centric lighting to help growers grow faster, better an heathier. Its lighting system and algorithms are optimized for plant needs in city-farming, tissue culture labs and floriculture. It developed several IP-rights related to lighting and works with growers to bring light to life.

The smartphone app and computer program are serviced by UPRTek.

Warranty policy and Terms and conditions for sale of products and services apply.

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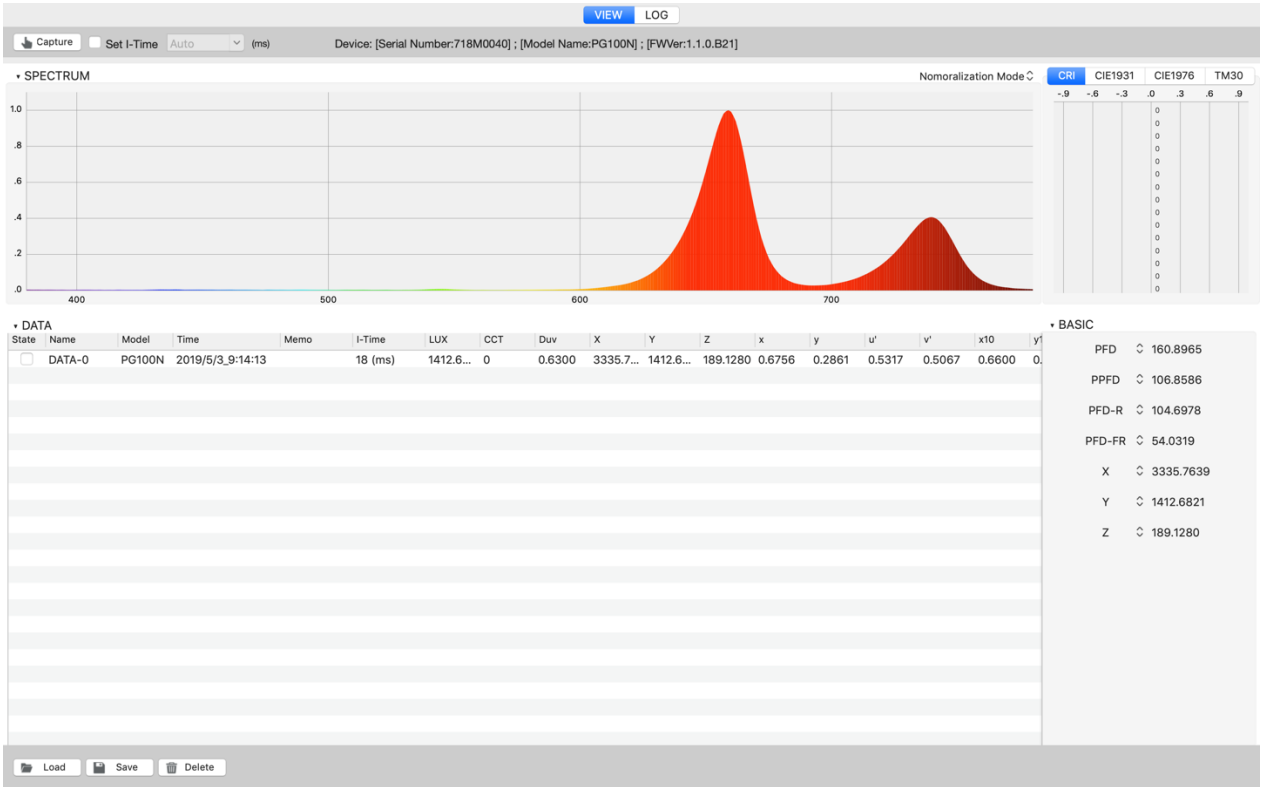
SCREENSHOTS



Easy integration with windows or macOS allows you to capture quickly and analyse data

Easy to use interface

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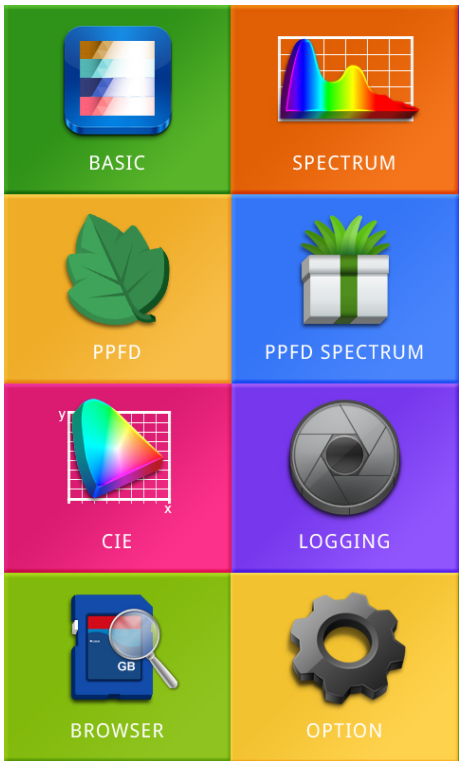
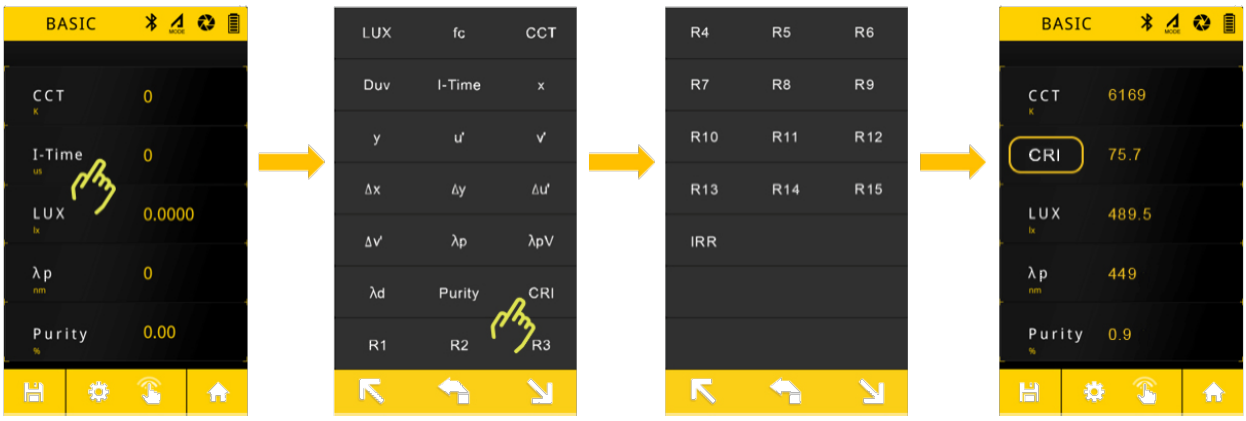


Main menu

Easily adjust PFD range



Measure faster the information you need, easily customize the basic menu
Suitable for measuring CRI, CCT, LUX

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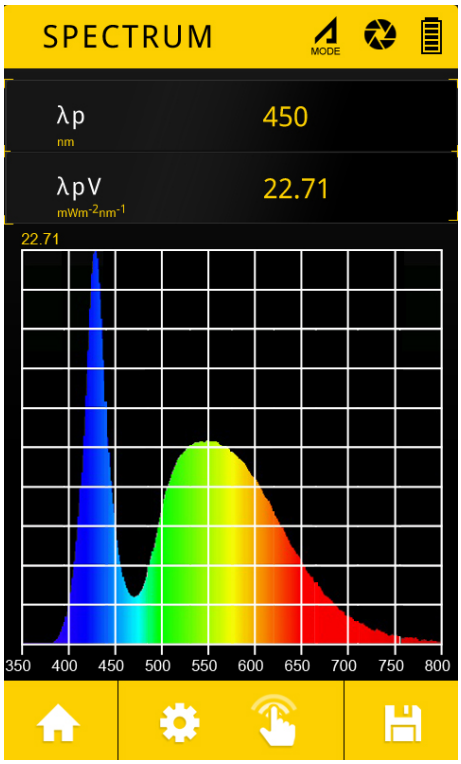

Inspect the whole spectrum

Measure the amount of plant sensitive light