PG200N UVA Sensor Head

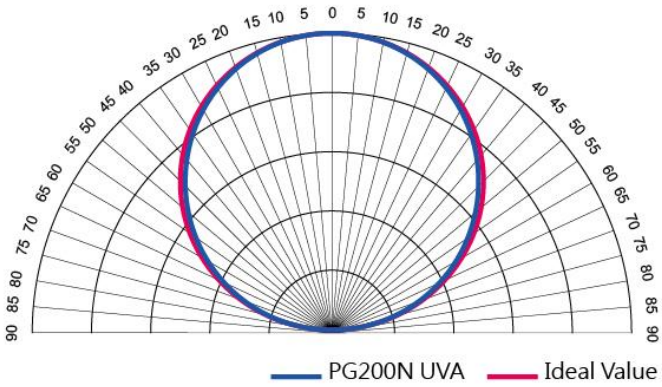
Handheld Spectrometer

Specification

Spectrum	
Sensor	CMOS Linear Image Sensor
Illuminance meter class	Directional response conforms to JIS C 1609-1:2006 for General Class AA. Directional response conforms to DIN 5032 Part 7 Class B.
Wavelength Range	320 to 500 nm
Wavelength Data Increment	1 nm
Spectral Bandwidth	Approximately 9 nm (Half Bandwidth)
Wavelength Reproducibility	± 1 nm *1
Measurement Range	0.2~330 W/m^2 (Irradiance)
Accuracy	± 5%
Integration Time Range	100 µs to 1,000 ms
Digital Resolution	16 bits
Feature	
Capture Function	One time / Continuous
Dark Mode	Auto Dark
Operation Mode	Standalone Mode / Bluetooth Mode*2 / USB Mode（MSC Mode*3+PC connection）
Integration Mode	Auto/Manual
G sensor mode	Axial Displacement（x,y）
Measuring Modes	1. Basic Mode
	2. Spectrum Mode
	3. PPFD Mode
	4. PPFD Spectrum Mode

	（Including reference spectrum - Chlorophyll A, Chlorophyll B, Beta-carotene, Phytochrome A red, Phytochrome A far red）
	5. Logging Mode
	6. Grid Mode
	7. Compare Mode
	8. Browser Mode
	9. Option Mode
Measuring Capabilities	1. Photosynthetically Active Radiation (PAR) (µmol/(m^2*s) (1) PFD(320nm~500nm) (2) PFD-B(400nm~500nm) (3) PFD-UVA(320nm~400nm) (4) PFD-Y(320nm~500nm - User Defined)
	2. Spectral Power Distribution (SPD)(mW/m^2)
	3. Peak Wavelength (λp)
	4. Peak Wavelength Value (λpV)
	5. Intergration Time (I-Time)
	6. Irradiance (320nm~500nm) (W/m^2)
	7 Temperature (℃)*4
	8. Relative Humidity (% RH)*4
System Configurations	
Display	4.3" 800X480 Capacitive Touch LCD
Waterproof level	IP66*5
Max. Files	≒ 68,000 Files @ 8GB SD Card（Excel + JPG）
Battery Operation Time	≦ 5 hours / Fully Charged
Power	Adapter; 3200 mAh（3.7V Rechargeable Li-ion Battery）
Data Output Interface	MicroSD Card（SD2.0,SDHC / up to 32G）/ Type C / Bluetooth 3.0 and 4.0 compatible with iOS and Android
Data Format	Compatible Excel / JPG
Dimensions（UVA sensor head）	56.6 x 80.3 x 30.5 mm（H x W x D）
Weight（UVA sensor head）	64 g ± 5 g
Operating Temperature / Humidity	0 to 35 ℃, relative humidity 70% or less without condensation
Storage Temperature / Humidity	-10 to 40 ℃, relative humidity 70% or less without condensation
Display languages	English / Traditional Chinese / Simplified Chinese / Japanese / Spanish / German / French / Italian / Russian
PC Software	uSPECTRUM

Cosine Correction



*1：Input source must be a stable light source.

*2：It can be connected to mobile phones and tablets.

*3：MSC- Mass Storage Class.

*4：It has to be used with "PG200N Thermo-Hygro cable" to do the measurement.

*5：Only sensor, not the whole body.

The company reserves the right to change product specifications at any time without prior notice.

UPRtek

PG200N UVA User Manual


PG200N UVA Sensor Head


Protection Bag


Micro SD card (Calibration file & User manual)


User Manual


Sensor Cover


Type C Dust plug


SD card (Calibration file & User manual)


Warranty Card


Sensor head standard bracket


Screwdriver


Screws

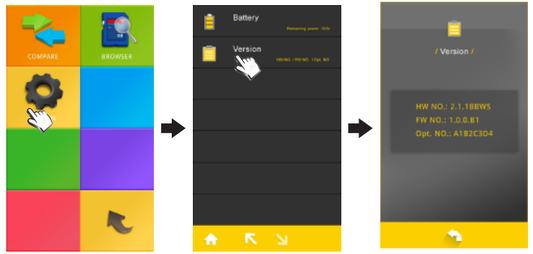
52-72-00035-0000

Preparing Before Use

When changing to the UVA Sensor Head, please insert the MicroSD card with corresponding optical calibration file into the console to start the measurement.

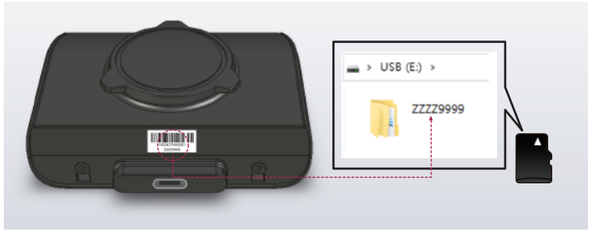
1. Check PG200N FW version

Check if PG200N FW version is 1.1.0.B46 (Global) / 2.1.0.B12 (EU) or later. If the firmware version is lower than the required version, please visit UPRtek website to download the firmware update file and update the PG200N to the latest version.



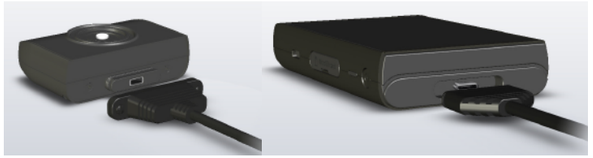
2. Install the optical calibration file

a. The optical calibration file for the UVA sensor is stored on the MicroSD card.
b. Ensure that the UVA sensor optical number matches the optical number of the calibration file on the MicroSD card.
c. Insert the MicroSD card into the console.



3. Connect the UVA sensor to the USB Type C cable

When using the 3M USB Type-C cable for long distance measurements, switch off the power before connecting the cable and tighten the screws on the UVA Sensor Head.



⚠ Notice:
Please avoid exposing the PG200N device to UV light.

Troubleshooting

Error message:
Please check if the calibration file in the SD card matches the optical number.

Error Reason:
The PG200N failed to load the calibration file.

Resolution:
(1) Switch off the power
(2) Check if the MicroSD card contains the correct UVA optical calibration files —the CAL file.

Lost calibration files

If the calibration files on the MicroSD card are lost, please find backup files on the SD card included in the package. Copy and save the files to the MicroSD card for use.

(If the calibration file on both the MicroSD card and the SD card are lost, please contact the distributor or UPRtek customer service department.)

UPRtek

PG200N UVA使用說明書

PG200N UVA
分光光譜計探測頭

保護套

Micro SD卡
(校正檔案 & 電子檔說明書)

使用說明書

矽膠光機蓋

Type C防塵塞

SD卡
(校正檔案 & 電子檔說明書)

保固卡

光機座支架

螺絲起子

螺絲

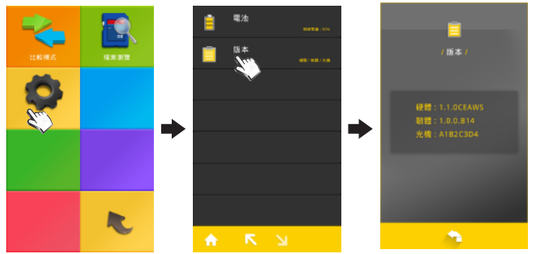
52-72-00035-0000

使用前置作業

PG200N更換為UVA探測頭時，須插入機身的Micro SD卡安裝與UVA探測頭內符合的光機校正檔，方可進行量測。

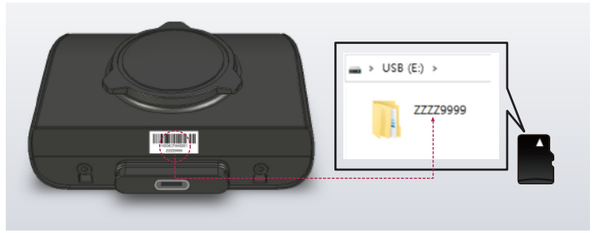
1. 確認PG200N韌體版本

確認PG200N韌體版本是否已更新至1.1.0.B46 (Global) / 2.1.0.B12(EU)以上，若韌體版本不符，請前往UPRtek官網，下載最新版韌體後並更新PG200N韌體版本。



2. 安裝校正檔案

a. 將UVA探測頭的光機校正檔放置於MicroSD卡內。
b. 確認UVA探測頭的光機碼與MicroSD卡中的資料夾名稱(校正檔案)相符。
c. 將Micro SD卡安裝至本機。



3. UVA探測頭與Type C傳輸線連接

使用3M USB Type C傳輸線進行遠距離量測時，請先將電源關閉後再執行拔插連接，並將連接光機的傳輸線接頭兩側之螺絲鎖緊後再開機進行量測。

⚠ 注意:
請勿將PG200N機身直接曝露於UV光源下，避免機身毀損。

故障排除

錯誤訊息：
請確認SD卡中的校正檔案資料夾名稱是否與光機號碼相符。
錯誤原因：
PG200N無法讀取到相符的UVA探測頭光機校正檔案。
排除方式：
(1) 請先關閉電源
(2) 確認MicroSD卡內，是否包含對應光機碼的校正檔案 - ’ CAL’ 檔案

遺失校正檔案
若遺失光機的校正檔案，可於產品配件的SD卡找到備份檔案，複製並儲存至MicroSD卡後可直接使用。

(如兩者皆遺失，請洽經銷商或本公司客服部門)