

PAR METER
INSTRUCTION MANUAL



- To ensure safety, please read this manual carefully before installation and follow the instructions herein.
- Store this manual in a secure place for future reference
- **WARNING: CHOKING HAZARD** - Accessories contain small parts
- Printed by color ink, water will smudge

GETTING STARTED

Hello there! Thank you for your purchase! Our products are packaged and shipped with the utmost care. In the unlikely event that your item is incorrect, incomplete, or unsatisfactory, please contact us, and we will promptly rectify the situation. The Quantum meter is designed to measure PAR (Photosynthetically Active Radiation) flux in wavelengths ranging from 400 to 700nm. There is a proportional relationship between the number of photons absorbed in 400 to 700nm band and the rate of photosynthesis in plants, which is important for horticultural studies and monitoring plant physiology.

PACKAGE CONTENTS

1. PAR Meter Unit 2. Instruction Manual 3. 2 x AAA Batteries
- Main unit includes ¼” screw mount for tripod and selfie stick compatibility.

KEY FEATURES

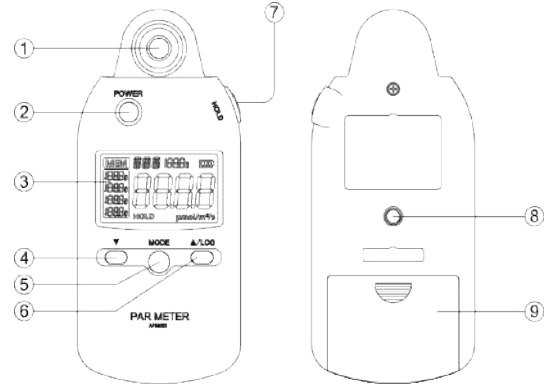
- Easy operation with a clear display and compact design
- Records up to 100 measurements
- Displays the last 4 records
- HOLD Function
- Measure MAX, MIN, AVERAGE values
- Zero Point Calibration
- Reset factory settings

SPECIFICATIONS

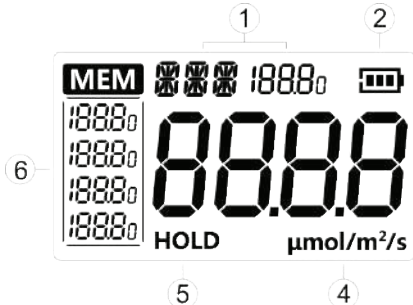
Typical test conditions, unless otherwise specified: Ambient Temp =23±3°C, RH=50%-70%, Altitude=0~100 meter

Operating Temperature	32°F to 122°F (0°C to 50°C)
Storage Temperature	-4°F to 140°F (-20°C to 60°C)
Operating & Storage RH	0-95%, non-condensing
PPFD Measurement	
Repeatability	±1 μmol/m2/sec
Measurement Range	0-5000 μmol/m2/sec
Display Resolution	0.01 μmol/m2/sec (0-99.99)
	0.1 μmol/m2/sec (100-999)
	1 μmol/m2/sec (1000-5000)
Measuring Rate	1 measurements per second
Cut-On Wavelength	400±10nm
Cut-Off Wavelength	700±10nm
Power Requirements	2pcs AAA alkaline battery
Dimension	152 x 68 x 22mm / 5.98 x 2.68 x 0.87 inches
Weight	115g / 0.25pounds (without batteries)

DEVICE INTRODUCTION



1. Light Sensor
2. Power Button
3. LCD Display
4. Down Button
5. Mode Button
6. Up/LOG Button
7. HOLD Button
8. Tripod Socket ¼”
9. Battery Cover



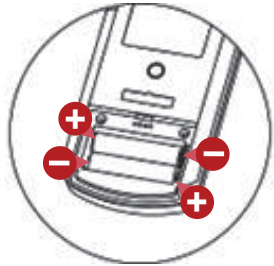
1. AVE, MAX, MIN, REC, CAL, RES
2. Battery Indicator
3. Real-Time Measuring Value
4. Measuring Unit
5. HOLD
6. The Last 4 Logged Measuring Value

OPERATING INSTRUCTIONS

1. **Battery Installation:**
Open the battery cover and insert two AAA batteries.



1. Open the battery cover





2. Insert two AAA batteries into the battery compartment.



3. Close the battery cover

Note: If the battery is installed backwards, the device won't power on.

2. **Power ON/OFF**
Press the  to turn on the device. Press and hold the  for 3 seconds to turn off the device. The device will shut down automatically if there is no operation within 3 minutes.

3. Three Types of Measurements

1) Real-time Measurement:

The reading will change dynamically per second when the sensor at different positions, until you press the **HOLD**.



2) HOLD Measurement:

Press the **HOLD** to capture the reading of last dynamic measurement. Press the **HOLD** again to resume real-time measurements.



3) REC(Record Measurement):

Press the **▲/LOG** to manually store the data. The last logged measurement index is shown next to "REC" at the top of the screen, initially is "000", updates to "001" after the first measurement, up to 100 measurements.



4. AVE, MAX, MIN Measurements

AVE (Average value):

Upon startup the device, symbol "AVE" shows at the top of the screen, indicating the average of the measurements.



MAX/MIN:

To see the MAX and MIN values, press the **▼** to cycle between **AVE > MAX > MIN > REC**.

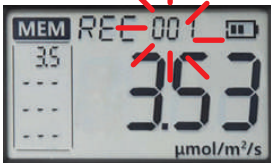
IMPORTANT: The AVE, MAX, and MIN values only reflect the dynamic measurements, do **NOT** include the measurements stored in the data log.

5. View Record Data

1). Press the **MODE** once, then symbol "REC" is blinking in the screen



2). Press the **HOLD** to enter REC mode, then index "001" will blink at the top of the screen.



3). Press the **▼** and **▲/LOG** buttons to view the data log. The blinking index and the corresponding measurement will be shown in the center of the display. If no measurement exists at the current index, will display "----"

4). Press the **HOLD** or **MODE** button to exit this mode.

6. CAL (Zero Point Calibration)

1). Press the **MODE** twice, then symbol "CAL" is blinking in the screen

2). Press the **HOLD** to enter CAL mode, symbol "no" will display

3). Press either the **▼** or **▲/LOG** to select "YES"

4). While "YES" is blinking, cover the light sensor to block all light, and then press the **HOLD**. The word "PASS" will display if calibration is successful.



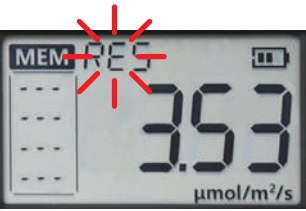
7. RES (Clearing Logged Measurements)

1). Press the **MODE** three times, then symbol "RES" is blinking in the screen

2). Press the **HOLD** to enter RES mode, symbol "no" will display

3). Press either the **▼** or **▲/LOG** to select "YES"

4). While "YES" is blinking, press the **HOLD** to clear the logged data and reset the device



PREPARATION FOR USE

Please ensure that you are familiar with the operation of your measuring device and do some test measurements to ensure the proper function of the device. If you are using it for quality inspections or for expertise please check if the instrument is calibrated and it is within the defined calibration interval. Our company assumes no liability for consequential damages.

SAFETY PRECAUTIONS

Please read these safety precautions carefully before using your measuring device. This will help you to avoid damaging the product and prevent personal injury.



This icon identifies important warnings which should be read in any case before the initial start-up of your product.

WARNINGS



Store the measuring device at a location which cannot be accessed by children.

The measuring device and its accessories include parts which can be swallowed. Make sure that these parts (e.g. housing covers, battery etc.) do not fall into the hands of children who might swallow them. Otherwise, danger of suffocation prevails.



Avoid any and all contact with liquid crystals.

If the display is damaged (e.g. broken), danger of injury due to contact with glass shards or discharge of liquid crystals exists. Make sure that skin, eyes and mouth do not come into contact with the liquid crystals.



Handle batteries with care.

Rechargeable and normal batteries may leak or explode if handled incorrectly. Please adhere to the following safety precautions:

- Only use the batteries which are recommended for this meter.
- Make sure that the battery is inserted correctly.
- Never short-circuit batteries, and never attempt to open a rechargeable or a normal battery.
- Do not expose the batteries to excessive heat or open flames.
- Do not expose the batteries to moisture; never immerse batteries in water.
- If the meter is not used regularly, remove the battery and close the battery compartment cover
- Never store batteries together with metallic objects which might cause short-circuiting.
- Danger of leakage exists, especially in the case of empty batteries. In order to prevent damage to the measuring device, batteries should be removed when fully depleted or in case of lengthy periods of non-use.
- When not in use, batteries should be stored in a cool place.
- Batteries heat up during use and may become hot. Be careful not to burn yourself when removing batteries. Switch the measuring device off or wait until it has shut itself down, and then wait a bit longer until the battery has cooled down.
- Do not use batteries which show any signs of damage such as discoloration or deformation of the housing.



This icon indicates that this product must be disposed of separately.

A YEAR WARRANTY:

Please contact us if you have any issue of the device, we will resolve your issue ASAP