

## ATEM POWER CY200AA2

# ATEM POWER 12V 200AMP Power Analyzer User Manual

Model: CY200AA2

## 1. INTRODUCTION

The ATEM POWER 12V 200AMP Power Analyzer is a high-precision watt, voltage, and amp meter designed for monitoring electrical parameters in various 12V systems. It provides real-time, high-contrast display of current, voltage, and power, along with sequential display of charge, energy, current peak, minimum voltage, and power peak. This robust device is ideal for applications in caravans, camping setups, dual battery systems, solar installations, RVs, and wind power systems, allowing users to accurately track energy flow and system performance. Its user-friendly design with pre-installed Anderson plugs ensures easy in-line connection without complex configuration.

## 2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the device. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Do not exceed rated current and voltage:** Ensure the system's current and voltage do not exceed the meter's maximum ratings (200A, 60V).
- **Proper connections:** Always connect the meter in series with the load or source, ensuring correct polarity. Incorrect connections can damage the device or the system.
- **Avoid short circuits:** Be careful to prevent short circuits during connection, especially with high-current systems.
- **Operating environment:** Use the device in a dry environment. Avoid exposure to water, moisture, or extreme temperatures.
- **Handling:** Handle the device with care. Do not drop or subject it to strong impacts.
- **Maintenance:** Do not attempt to open or repair the device. Refer all servicing to qualified

personnel.

### 3. PRODUCT OVERVIEW

The ATEM POWER 12V 200AMP Power Analyzer is a compact and durable device designed for precise electrical measurement. It features a clear LCD display and robust Anderson plugs for easy integration into your power system.



**Figure 3.1:** Front view of the ATEM POWER 12V 200AMP Power Analyzer, showing the LCD screen and Anderson plugs.

#### 3.1 Components

- **LCD Digital Backlight Display:** Provides real-time readings of various electrical parameters.
- **Anderson Plugs:** Pre-installed for quick and secure in-line connections.
- **Durable Casing:** Made of ABS material with dense vents for efficient heat dissipation.
- **Auxiliary Power Connector:** Allows the meter to be powered externally for measurements in the 0-8V range or for more precise readings.



Figure 3.2: Close-up of the LCD display.

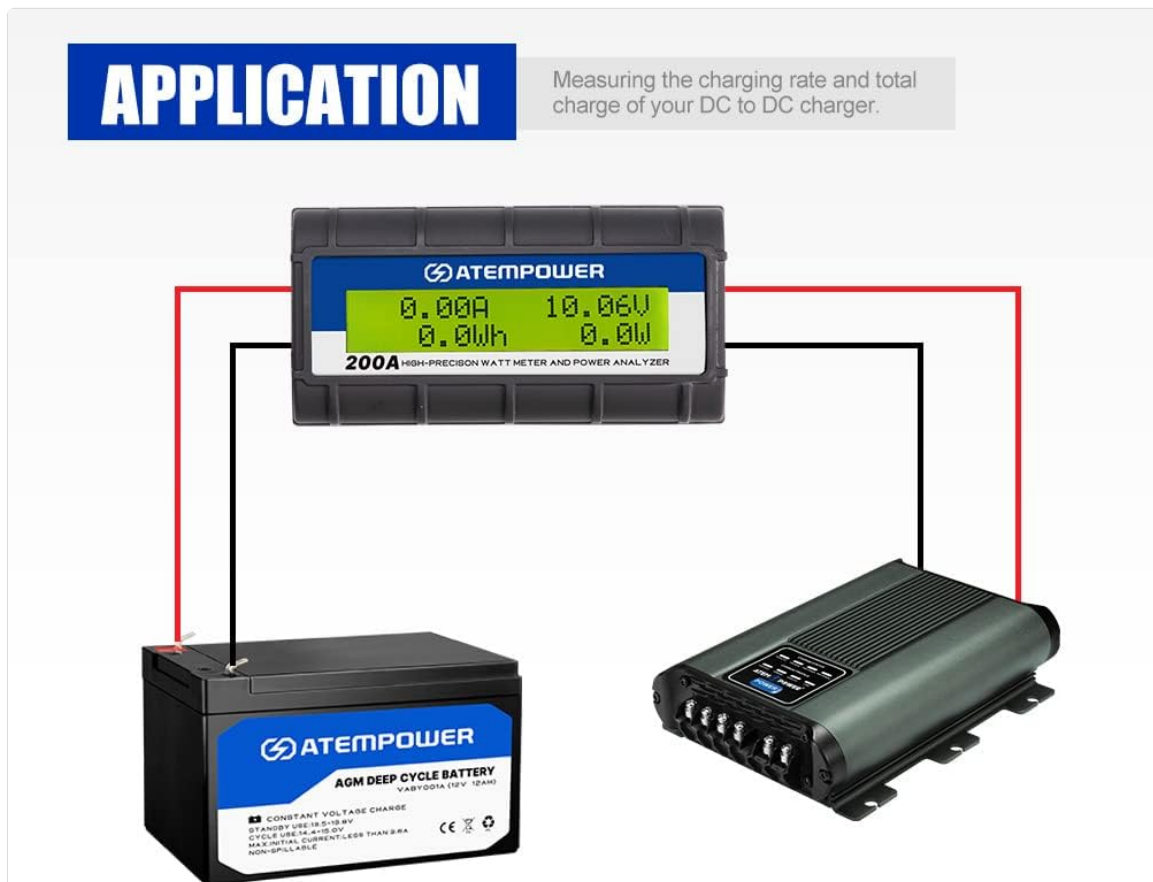


Figure 3.3: Side view showing heat dissipation vents.

# APPLICATION

Measuring the load of your power inverter and AC appliances.

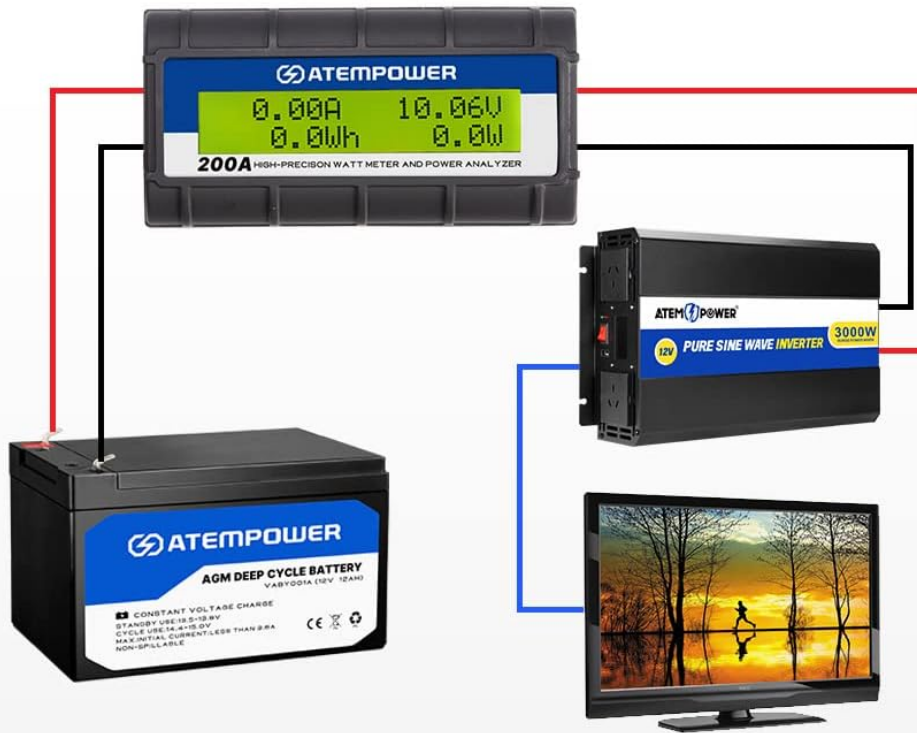


Figure 3.4: Rear view with auxiliary power port.

## 4. SETUP

The ATEM POWER Analyzer is designed for easy, automatic operation with pre-installed Anderson plugs. No complex configuration is required.

### 4.1 Basic Connection

1. Identify the input and output sides of the power analyzer. The input side is typically marked or indicated by the direction of current flow you wish to measure (e.g., from a power source).
2. Connect the Anderson plug from your power source (e.g., battery, solar panel) to the input Anderson plug of the power analyzer.
3. Connect the Anderson plug from your load (e.g., fridge, inverter, DC-DC charger) to the output Anderson plug of the power analyzer.
4. Ensure all connections are secure and properly seated. The meter will automatically power on and begin displaying readings once connected to a live circuit.

### 4.2 Auxiliary Power Option

For measuring very low voltages (0-8V) or for more precise measurements where the meter's own power consumption might affect readings, you can use the auxiliary power connector. Connect a separate 12V power source (e.g., a small 12V battery or power supply) to the auxiliary port. This allows the meter to operate independently of the main circuit being measured.

## 5. OPERATING INSTRUCTIONS

The power analyzer provides comprehensive real-time data on your electrical system. The LCD display shows key parameters continuously, with other values cycling every 2 seconds.

### 5.1 Display Readings

The meter provides 8 electrical readings with high resolution:

- **Current (A):** Amperes, showing the flow of electricity (resolution 0.01A).
- **Voltage (V):** Volts, indicating electrical potential (resolution 0.01V).
- **Power (W):** Watts, representing the rate of energy transfer (resolution 0.1W).
- **Charge (Ah):** Ampere-hours, total electrical charge transferred (resolution 0.001Ah).
- **Energy (Wh):** Watt-hours, total electrical energy consumed or produced (resolution 0.1Wh).
- **Current Peak (Ap):** The maximum current recorded during the measurement period.
- **Min Voltage (Vm):** The minimum voltage recorded during the measurement period.
- **Power Peak (Wp):** The maximum power recorded during the measurement period.

### 5.2 Measurement Applications

The versatility of the ATEM POWER Analyzer makes it suitable for various monitoring tasks:

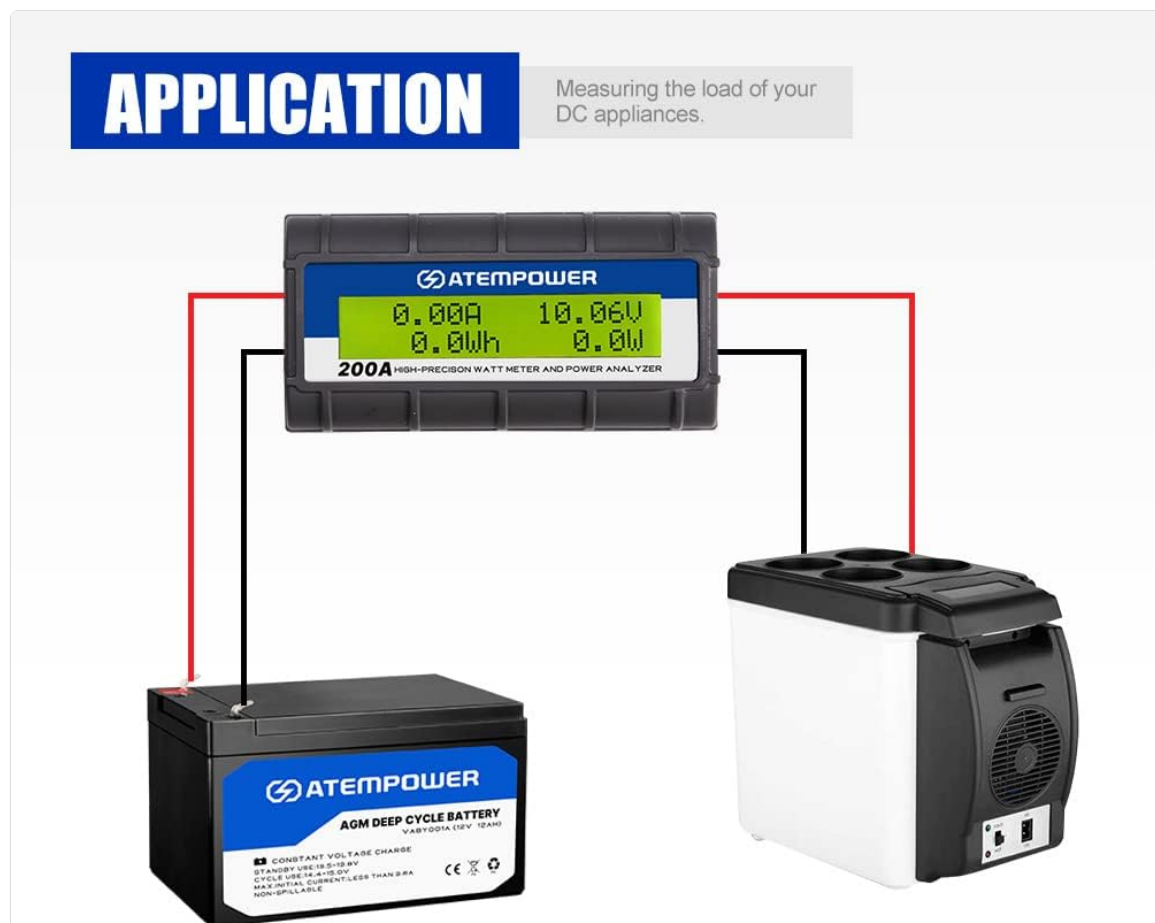


Figure 5.1: Measuring charging rate and total charge of a DC to DC charger.

# APPLICATION

Measuring the charging rate and total charge of your solar panels.

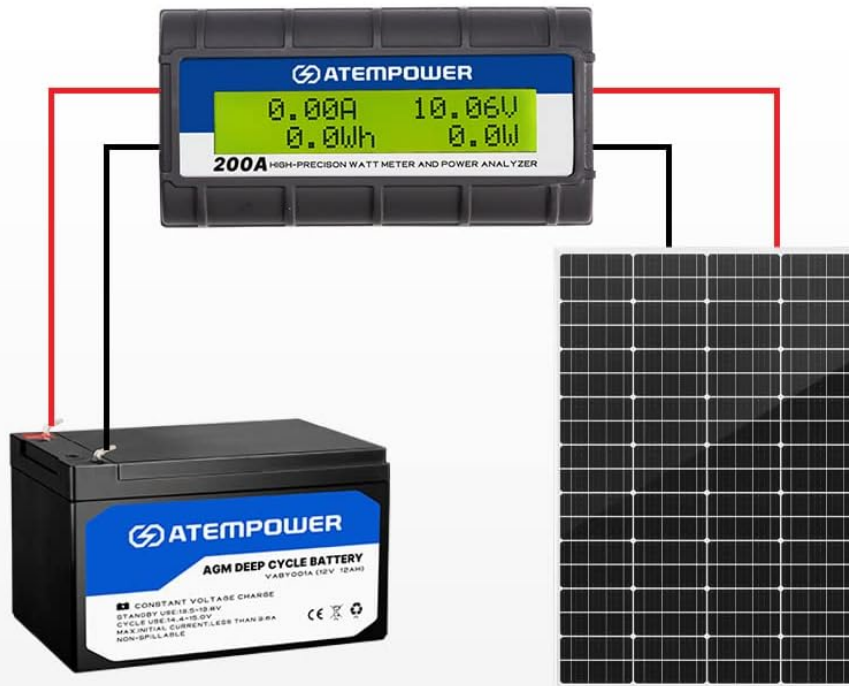


Figure 5.2: Measuring the load of a power inverter and AC appliances.

# PRODUCT DIMENSIONS

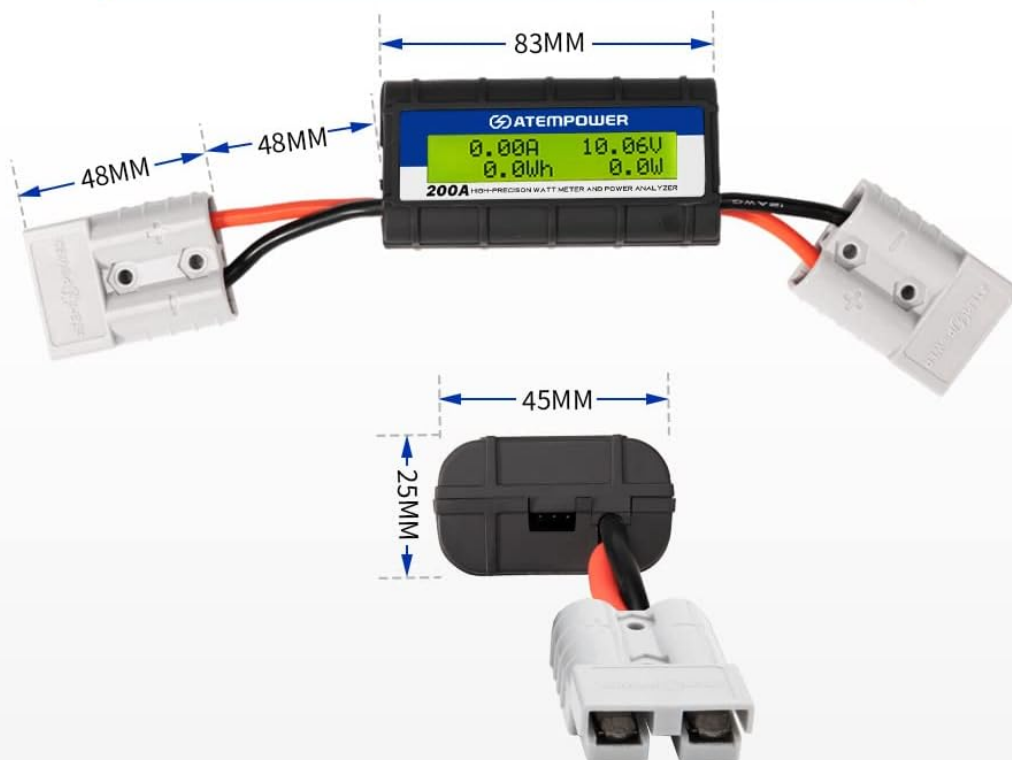


Figure 5.3: Measuring the load of DC appliances (e.g., portable fridge).



## PACKAGE INCLUDING



Figure 5.4: Measuring the charging rate and total charge from solar panels.

## 6. MAINTENANCE

To ensure the longevity and accurate performance of your ATEM POWER Analyzer, follow these maintenance guidelines:

- **Cleaning:** Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the meter in a cool, dry place away from direct sunlight and extreme temperatures when not in use.
- **Connection Points:** Periodically inspect the Anderson plugs for any signs of wear, corrosion, or damage. Ensure they are clean and make secure connections.
- **Avoid Physical Damage:** Protect the device from drops, impacts, and excessive vibration.

## 7. TROUBLESHOOTING

If you encounter issues with your power analyzer, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
---------	----------------	----------

Problem	Possible Cause	Solution
Display is blank	No power to the meter; incorrect connection; auxiliary power not connected (if measuring low voltage).	Check all connections for proper seating and polarity. Ensure the power source is active. If measuring below 8V, connect auxiliary power.
Inaccurate readings	Loose connections; interference; device operating outside specified temperature range.	Secure all connections. Move the device away from strong electromagnetic fields. Ensure operation within recommended temperature limits.
Meter not responding	Internal fault; severe overload.	Disconnect from power source, wait a few minutes, then reconnect. If problem persists, contact customer support. Avoid exceeding maximum ratings.
Display difficult to read in sunlight	Direct sunlight glare.	Relocate the meter to a shaded area or angle it to reduce glare.

## 8. SPECIFICATIONS

Technical specifications for the ATEM POWER 12V 200AMP Power Analyzer:

Parameter	Value
Manufacturer	Atem Power
Brand	ATEM POWER
Model Number	CY200AA2
Product Dimensions (L x W x H)	20.9 x 4.5 x 2.5 cm
Item Weight	180 Grams (0.18 Kilograms)
Power Source	Battery Powered
Style	Digital
Max Current	200A
Max Voltage	60V
Current Resolution	0.01A
Voltage Resolution	0.01V
Power Resolution	0.1W



Parameter	Value
Charge Resolution	0.001Ah
Energy Resolution	0.1Wh

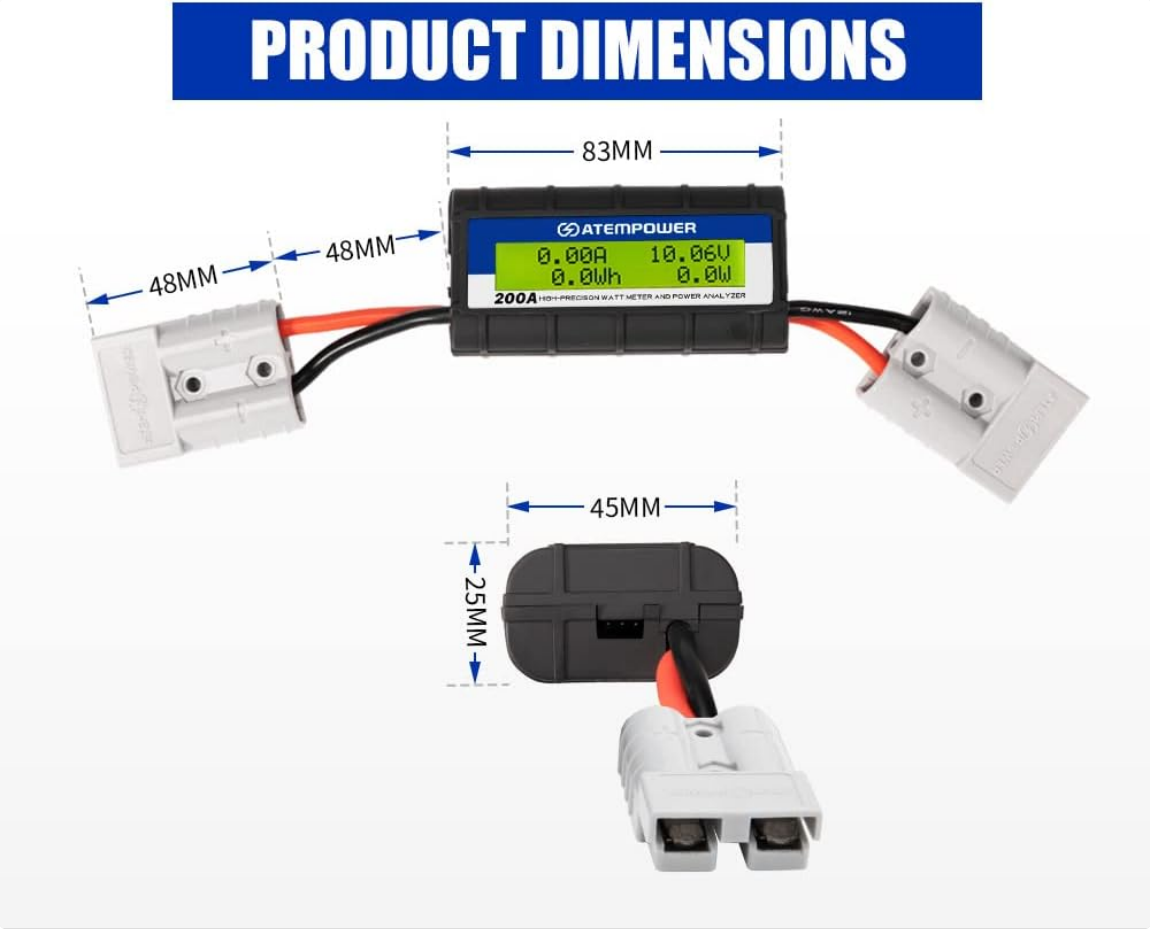


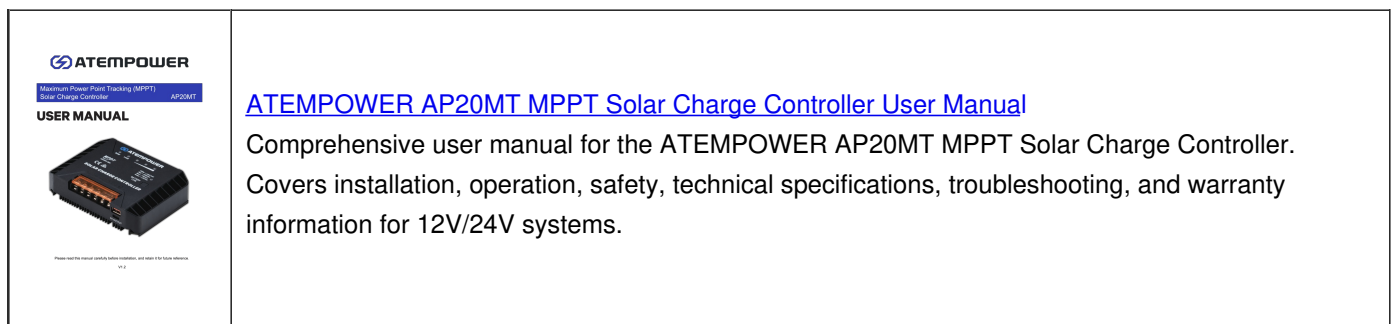
Figure 8.1: Product dimensions diagram.

## 9. WARRANTY AND SUPPORT

ATEM POWER products are manufactured to high-quality standards. For information regarding warranty coverage and terms, please refer to the product packaging or the official ATEM POWER website. If you require technical assistance or have questions about your ATEM POWER 12V 200AMP Power Analyzer, please contact ATEM POWER customer support through their official channels. Keep your purchase receipt as proof of purchase for any warranty claims.

**Return Policy:** This product is subject to a 30-day return policy for refund or replacement, as per standard retail terms.

<div><div>ATEMPOWER</div><div>Battery Box</div><div>USER MANUAL</div><div></div></div>	<p><a href="#">ATEM POWER Battery Box User Manual (Model K-VABB004A)</a></p> <p>Official user manual for the ATEM POWER Battery Box, model K-VABB004A. Details product features, safety precautions, installation, maintenance, and warranty for this portable power solution.</p>
<div><div>ATEMPOWER</div><div>12V 1200A Multi-functional Jump Starter</div><div>USER MANUAL</div><div></div></div>	<p><a href="#">ATEM POWER 12V 1200A Multi-functional Jump Starter User Manual</a></p> <p>Comprehensive user manual for the ATEM POWER 12V 1200A Multi-functional Jump Starter, detailing safety guidelines, operation instructions, troubleshooting, technical specifications, and warranty information. Learn how to safely jump start your vehicle and utilize its features.</p>
<div><div>ATEMPOWER</div><div>DC-DC CHARGER AP20DC</div><div>USER MANUAL</div><div></div></div>	<p><a href="#">ATEM POWER AP20DC DC-DC Charger User Manual and Installation Guide</a></p> <p>Comprehensive user manual for the ATEM POWER AP20DC DC-DC charger. Covers features, safety instructions, installation, usage, deep cycle battery maintenance, troubleshooting, technical specifications, and warranty information for charging auxiliary batteries in vehicles, caravans, and RVs using DC or solar power.</p>
<div><div>ATEMPOWER</div><div>1500W DC-AC PURE SINE WAVE INVERTER</div><div>USER MANUAL</div><div></div></div>	<p><a href="#">ATEM POWER 1500W DC-AC Pure Sine Wave Inverter User Manual</a></p> <p>User manual for the ATEM POWER 1500W DC-AC Pure Sine Wave Inverter, detailing product features, applications, technical specifications, safety information, installation, operation, troubleshooting, and warranty.</p>
<div><div>ATEMPOWER</div><div>10W/60W/130W/200W/250W Solar Panel</div><div>USER MANUAL</div><div></div></div>	<p><a href="#">ATEM POWER 10W/60W/130W/200W/250W Solar Panel User Manual</a></p> <p>User manual for ATEM POWER solar panels (10W, 60W, 130W, 200W, 250W), covering product features, safety information, installation, troubleshooting, and warranty details.</p>



[ATEMPOWER AP20MT MPPT Solar Charge Controller User Manual](#)

Documents - ATEM POWER – CY200AA2

[\[pdf\]](#) User Manual Accessories