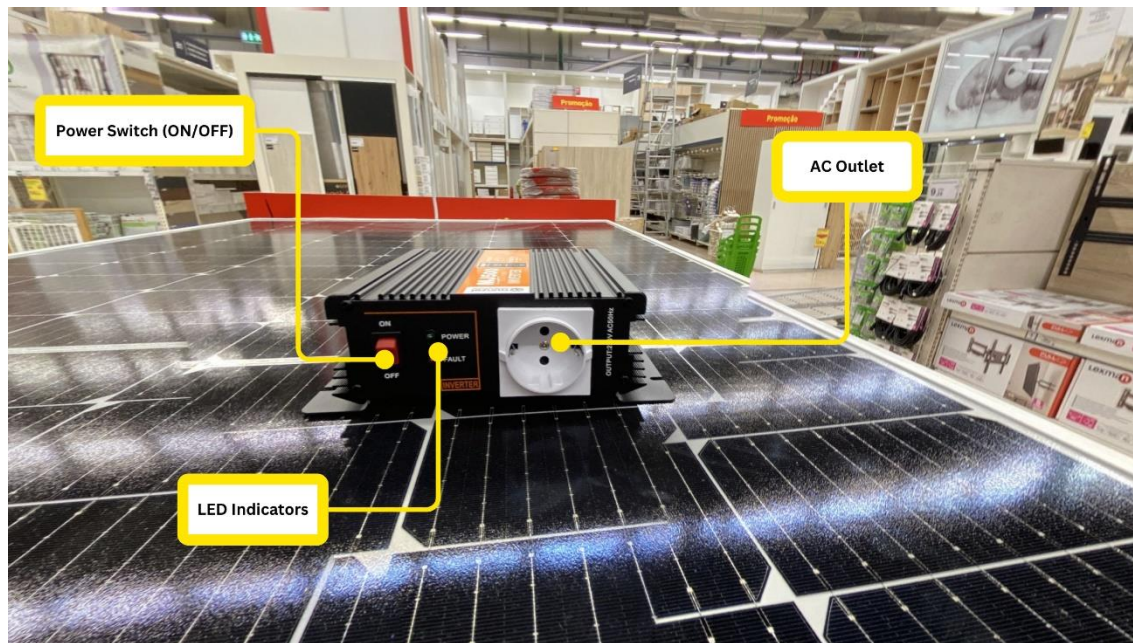


## Unit 3 – Inverters: Components



*Figure 1 - MJ500 Inverter*

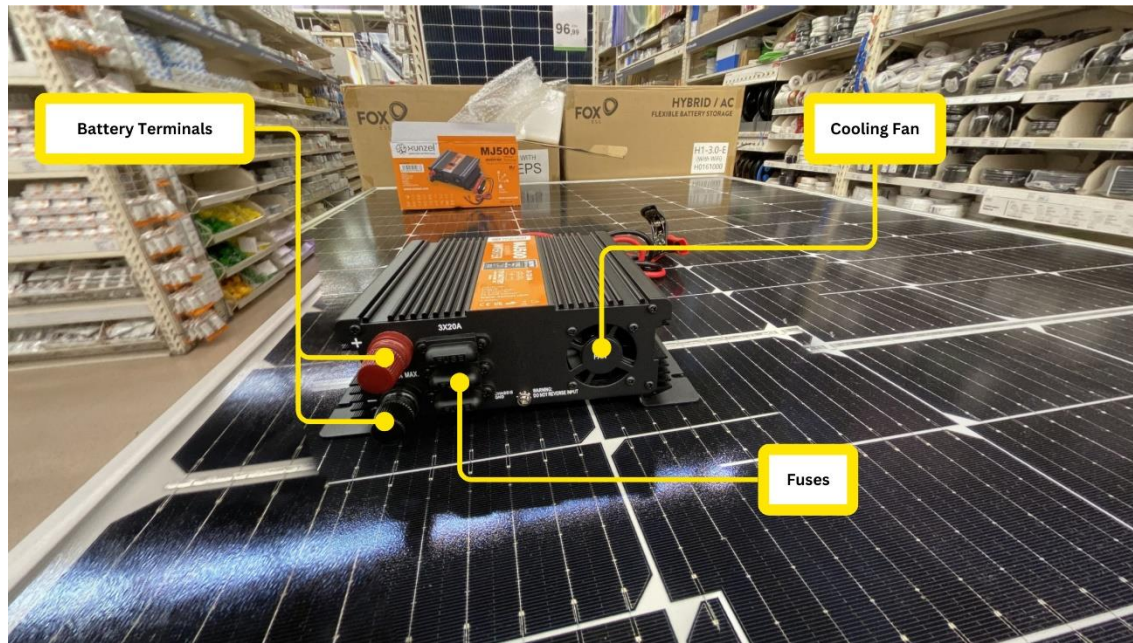
Inverters like this have a **robust aluminium heatsink body**, which provides passive cooling. This design enhances heat dissipation during operation, preventing overheating and ensuring longevity.



*Figure 2 - Inverter Front Side*

The inverter front side features a **main power switch (ON/OFF)**, an **LED indicator panel**, and a **universal AC outlet**.

- **Switch:** Activates the inverter, powering up the AC output.
- **LED Indicators:**
  - **Power (Green):** Indicates normal operation.
  - **Fault (Red):** Signals an issue, such as over-voltage or overheating.
- **AC Outlet:** Provides standard 230V AC output for connecting devices like laptops, fans, or small appliances.



*Figure 3 - Inverter Back Side*

The back side includes **battery connection terminals** (positive/red and negative/black), an integrated **cooling fan**, and **fuse holders** for additional protection.

- **Battery Terminals:** Securely connect to a 12V battery source. It's crucial to match the polarity to avoid damage.
- **Cooling Fan:** Activates during high power loads to prevent overheating.
- **Fuses:** Protect the inverter from short circuits or excessive currents.

Get ready for the next activity!