

# Technical Information

The REDMAX RMBC1220 Smart Battery Charger is designed to intelligently charge 12V lead acid and lithium iron phosphate (LFP or LiFePO<sub>4</sub>) batteries.

Utilising a high efficiency switchmode power supply, the RMBC1220 delivers quiet, efficient charging with minimal fuss. Its fanless design reduces noise and provides long term reliability.

The RMBC1220 provides dependable performance and is backed by a 5 year warranty for added peace of mind.

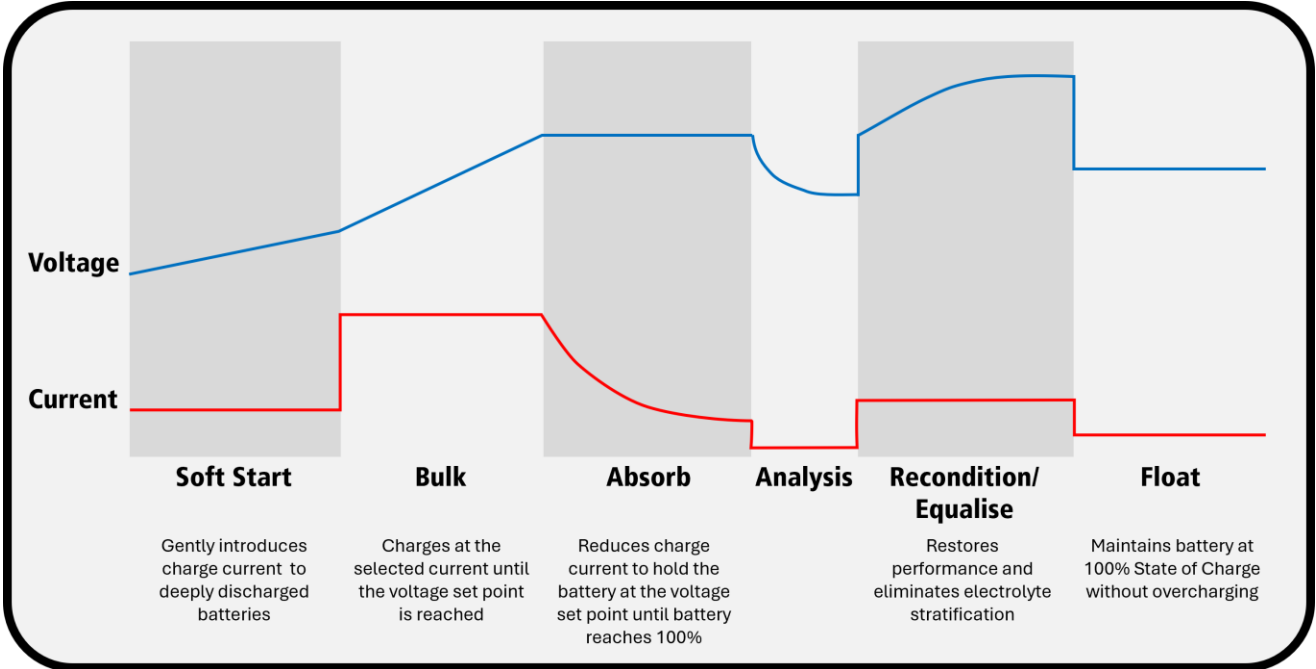


# Features & Benefits

- High efficiency switchmode technology
- Microprocessor controlled multi-stage charging:
  - 7 Stage Charging (Lead Acid)
  - 3 Stage Charging (LFP)
- Reverse polarity, over voltage and over temperature protection
- Power Supply mode for constant power applications
- Low start voltage for deeply discharged batteries
- Fanless design for improved reliability
- Battery clips and ring terminal charging cable included in the box
- 5 year warranty

| Technical Specifications  |                   |                                   |               |
|---------------------------|-------------------|-----------------------------------|---------------|
| Selectable Output Current | 1, 3, 7, 12 & 20A | Minimum Start Voltage             | 5.0V          |
| Input Voltage             | 220-240VAC, 50Hz  | Power Supply Voltage              | 14.0V         |
| Input Current             | 2.2A              | BMS Wake Up Voltage               | 13.8V         |
| Dimensions (L x W x H)    | 200 x 133 x 64mm  | Ingress Protection Rating (Case)  | IP65          |
| Weight (including cables) | 2.05kg            | Operating Environment Temperature | -10°C to 40°C |

Charging Stages



| Charging Stage             | Soft Start/<br>BMS Wake Up | Bulk | Absorb | Analysis | Equalise | Recondition | Float |
|----------------------------|----------------------------|------|--------|----------|----------|-------------|-------|
| Lead Acid (CAL & EFB)      | ✓                          | ✓    | ✓      | ✓        | ✓        | ✓           | ✓     |
| Lead Acid (WET, AGM, GEL)  | ✓                          | ✓    | ✓      | ✓        | -        | ✓           | ✓     |
| LFP (LiFePO <sub>4</sub> ) | ✓                          | ✓    | ✓      | -        | -        | -           | -     |

Profile Voltages

| Battery Type                     | WET  | CAL  | AGM  | GEL  | LFP  |
|----------------------------------|------|------|------|------|------|
| Charge Voltage (V)               | 14.6 | 14.6 | 14.4 | 14.1 | 14.2 |
| Recondition/Equalise Voltage (V) | 15.0 | 16.1 | 14.7 | 14.4 | N/A  |
| Float Voltage (V)                | 13.6 | 13.6 | 13.6 | 13.6 | N/A  |