



**BATTERYBANQ**

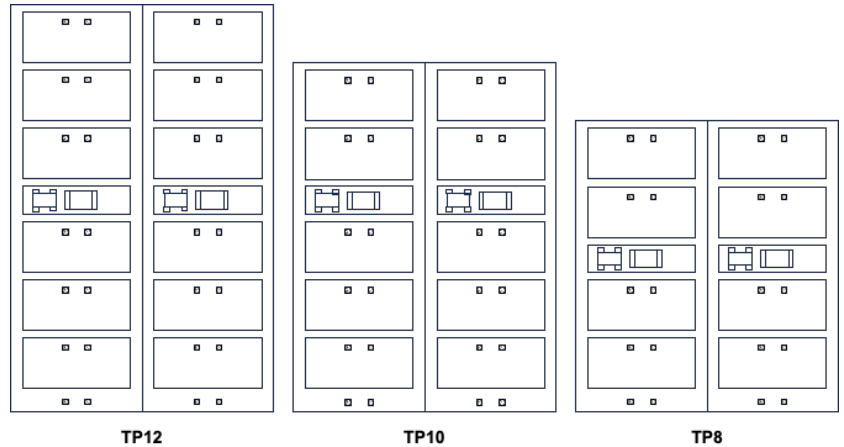
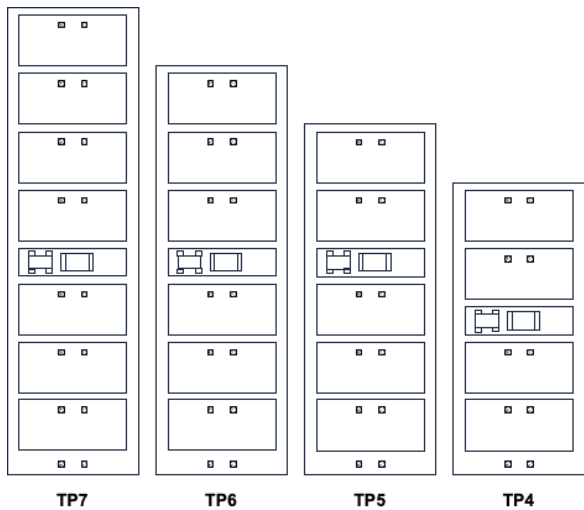
# BATTERY BANQ TOWER OF POWER

(314 Ah cells)



## MEDIUM VOLTAGE RANGE

## HIGH VOLTAGE RANGE



### CONFIGURATION AND TECHNICAL INFORMATION

| Battery Module                 | Balancell P34 (314 Ah, 32.6 kWh, 104 V, 202 kg) |                     |                     |                     |                      |                      |                      |
|--------------------------------|---|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|
| Product                        | TP 4  | TP 5                | TP 6                | TP 7                | TP 8                 | TP 10                | TP 12                |
| Number of Modules              | 4   | 5                   | 6                   | 7                   | 8                    | 10                   | 12                   |
| Useable Energy                 | 130 kWh   | 163 kWh             | 196 kWh             | 228 kWh             | 261 kWh              | 326 kWh              | 391 kWh              |
| Nominal Voltage (VDC)          | 416 V   | 520 V               | 624 V               | 728 V               | 832 V                | 1040 V               | 1248 V               |
| Operating Voltage (VDC)        | 371 - 451 V                                     | 464 - 564 V         | 556 - 677 V         | 649 - 790 V         | 742 - 903 V          | 928 - 1129 V         | 1113 - 1355 V        |
| Weight                         | 1,039 kg  | 1,299 kg            | 1,559 kg            | 1,819 kg            | 2,079 kg             | 2,599 kg             | 3,118 kg             |
| Dimensions (mm)<br>(w x d x h) | 754 x 955 x<br>1787                             | 754 x 955 x<br>2017 | 754 x 955 x<br>2347 | 754 x 955 x<br>2677 | 1512 x 955 x<br>1787 | 1512 x 955 x<br>2017 | 1512 x 955 x<br>2347 |



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# BATTERY BANQ TOWER OF POWER



## **BATTERY BANQ TOWER OF POWER: YOUR COMPLETE POWER SOLUTION**

### **Key Features**

- Complete Integrated Solution: Everything you need in one hassle-free package
- Hybrid Inverter Compatible: Seamless integration with leading inverters
- Integrated Communication System – RTU: Real-time monitoring and control
- Embedded Battery Management System (BMS): Precision protection and optimisation
- Locally Manufactured and Serviced: Johannesburg-made with full Service Level Agreement (SLA)
- Factory Acceptance Test and COC Done Before Installation: Certified and ready to go

### **Powerful Warranties**

- 10-year warranty on batteries plus Energy Throughput Guarantee—peace of mind built in

### **Proven Applications**

- Tariff arbitrage
- Renewable energy optimisation
- Energy security
- Power factor correction
- Diesel generator optimisation

### **Optional**

- Fire fighting system
- Inverter options
- EMS – Energy Management System upgrade

### **What's Excluded**

External cables

**Power up reliably, locally. Contact us today for your Tower of Power.**





### DISPLAY AND INTERFACE

- HMI Screen for cell level BMS monitoring and EMS interface
- Integrated communications gateway (RTU)



### BATTERY AND ENERGY MANAGEMENT SYSTEM "BMS AND EMS"



#### System Evaluation

- complete evaluation of inverter and solar system to identify inefficiencies and potential savings



#### Energy Monitor

- real-time remote inverter monitoring



#### Predictive Energy Optimiser

- dynamically fine-tune inverter(s) based on expected load shedding, historical usage trends and up-to-date weather forecasts
- non-essential loads can be automatically controlled based on available solar energy



### SAFETY AND PROTECTION

- HV interlock for battery OK signal
- DC fuses and 300A contactor

## GENERAL DATA

| Product                          | TP 4 | TP 5 | TP 6 | TP 7   | TP 8 | TP 10 | TP 12 |
|----------------------------------|------|------|------|--|------|-------|-------|
| C-rating (charge / discharge)    |      |      |      | 0.8C / 1.0C  |      |       |       |
| Continuous Discharge Current     |      |      |      | 314 A  |      |       |       |
| Surge Discharge Current - 30 sec |      |      |      | 924 A  |      |       |       |
| Surge Discharge Current - 3 min  |      |      |      | 628 A  |      |       |       |
| Charging Temperature             |      |      |      | 5 to 55 °C   |      |       |       |
| Discharging Temperature          |      |      |      | -15 to 55 °C   |      |       |       |
| Battery Cell Technology          |      |      |      | Lithium Ferro-Phosphate (LFP)  |      |       |       |
| Communication                    |      |      |      | CAN / RS485 / Modbus TCP   |      |       |       |
| Warranty per Battery Module      |      |      |      | Energy Output: 100% DOD - 94,000 kWh, < 80% DOD - 158,000 kWh   Calendar Time - 10 years |      |       |       |

## CERTIFICATIONS AND STANDARDS

| Product                              | P34 (32.6 kWh - 104 V) & Tower of Power                                       |
|--------------------------------------|---|
| Cell Certifications (GB)             | Certified to - GB31484, GB31485, GB31486, UL1973, MSDS UN38.3                 |
| Cell Manufacturing (ISO)             | Certified to - ISO9001, ISO14001, TS16949                                     |
| Battery Manufacturing (ISO)          | Certified to - ISO9001  |
| Electromagnetic Compatibility (CE)   | Certified to - EN 301 489-1: V2.2.3, EN 301 489-52: V 1.1.0, EN / IEC 61326-1 |
| Battery Standards (IEC)              | Designed to meet - IEC 62485-6, IEC 63056, IEC 61619, IEC 62660-2             |
| Battery Standards (UL)               | Designed to meet - UL 2580  |
| Tower Fabrication and Assembly (ISO) | ISO9001, ISO45001   |

