TITAN
SMART ENERGY

Shenzhen Titan Smart Energy Technology Co., Ltd.

Air-Cooled

## Power-Bank-40K/80HB
## Power-Bank-50K/100HB
## Power-Bank-50K/120HB

# Hybrid Energy Storage System




### Versatile Scenario Adaptability

- Diesel Generator Hybrid Operation
- Seamless grid transition in ⩽20 ms
- ⩽150%(50K) PV Oversizing, Dual PV Inputs
- ⩽190%(40K) PV Oversizing, Dual PV Inputs

### Smart Operation and Maintenance

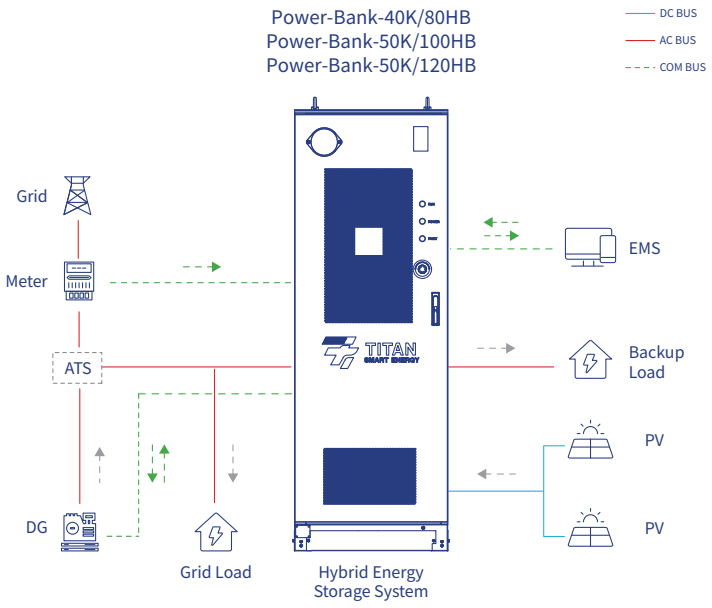
- HMI 10-inch local display
- 24/7 monitoring & early warning
- Supports microgrids and diverse application scenarios

### Safe and Efficient

- Cycle life ⩾ 8,000 cycles
- Multi-level fire protection design
- Intelligent temperature control design

### Simple and User-Friendly

- Easy and quick installation
- 100% Three-Phase Unbalanced Output
- Expandable modular design with flexible capacity options



| Specification | Models | Power-Bank-40K/80HB | Power-Bank-50K/100HB | Power-Bank-50K/120HB |
|---|---|---|---|---|
| PV Side | Maximum Input Power | 76.8 kW | | |
| | Maximum Input Voltage | 850 V | | |
| | Start-up Voltage | 250 V | | |
| | MPPT Operating Voltage Range | 200–800 V | | |
| | Number of MPPT Channels | 2 | | |
| | Number of Strings per MPPT Channel | 1 | | |
| | Maximum Input Current | 64 A*2 | | |
| Battery Side | Cell Type | LFP-314 Ah | | |
| | PACK Series-Parallel Configuration | 1P20S | | |
| | Number of PACKS | 4 | 5 | 6 |
| | System Capacity | 80.38 kWh | 100.48 kWh | 120.5 kWh |
| AC Side (ON Grid) | Rated Output Power | 40 kVA | 50 kVA | |
| | Rated Output Current | 58 A | 72.5 A | |
| | Maximum Input Current | 116 A | 145 A | |
| | Rated Output Voltage | 3P + N + PE，380/400 V | | |
| | Rated Output Frequency | 50/60 Hz (± 5 Hz) | | |
| | THDi | < 3 % | | |
| | Power Factor | -1~1 | | |
| AC Side (OFF Grid) | Rated Output Power | 40 kVA | 50 kVA | |
| | Rated Output Current | 58 A | 72.5 A | |
| | Rated Output Voltage | 3P + N + PE，380/400 V | | |
| | Rated Output Frequency | 50/60 Hz | | |
| | Three-Phase Unbalanced Load Capacity | 100 % | | |
| System Parameters | Switching Time | ⩽ 20 ms | | |
| | Cooling Method | Intelligent Air-Cooled | | |
| | Protection Rating | IP54 | | |
| | Operating Temperature Range | -20 °C ～+ 55 °C (>45 °C Derating Required) | | |
| | Humidity Range | 0~95 % RH(non-condensing) | | |
| | Altitude | 2000 m (>2000 m Derating Required) | | |
| | Corrosion Resistance Rating | C4 | | |
| | Weight | ≈1200 kg | ≈1350 kg | ≈1500 kg |
| | Fire Protection System | Smoke Detector + Heat Detector + Audible and Visual Alarm + Aerosol Fire Suppression | | |
| | SOC Calibration Method | Automatic | | |
| | Dimensions (W × D × H mm) | ≈750 × 1300 × 2225 mm | | |
| | Communication Interface | Ethernet/RS-485 | | |
| | Communication Protocol | Modbus-TCP/Modbus-RTU | | |
| | Cycle Life | ⩾ 8000 cycles（@25 °C, 0.5 P, DOD90 %, EOL70 %） | | |
| | System Certification | UN38.3; MSDS; IEC62619; IEC63056 | | |
| | PCS Certification | IEC62109-1/-2; IEC62477-1; EN50549-1/-10 | | |


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