

18th May 2024 Volume 1, Issue 1

# Life Extension of DC UPS/ Rectifier



As utility and Oil & Gas infrastructure age, and a increased focus on sustainability and energy efficiency in the GCC is in need for upgrading and modernizing existing UPS systems. POWERON having sound technological expertise for Life Extension services, including the restoration or replacement of DC UPS system

Battery Charger/ DC UPS Life Extension, Life renewal services in the GCC (Gulf Cooperation Council) region and elsewhere in the world is the need of the day due to the region's growing infrastructure and construction activities.



 Achieve seamless integration and customization for your existing system through targeted refurbishing, avoiding the need for new equipment.

### Refurbishing of DC UPS offers several advantages over new procurement

### **Cost-Effectiveness**

Life Extension is more cost-effective mostly for high capacity system than purchasing new Battery Charger panels, as it allows for the reuse of existing components while addressing specific issues or modernizing the system.



### **Time Efficiency**

Life Extension projects generally have shorter turn around times compared to manufacturing and delivering new system. This can be crucial, especially in situations where minimizing downtime is a priority.

### Sustainability

Refurbishing battery charger aligns with sustainability goals by reducing waste and minimizing the environmental impact associated with manufacturing and disposing of new materials.

## Customization and Upgrades

Life Extension allows for customization and incorporation of modern technologies or upgrades to meet current standards, without the need for a complete replacement.

### Preservation of Infrastructure

Refurbishing DC UPS can help extend the lifespan of existing infrastructure, contributing to the preservation of valuable assets and reducing the need for frequent replacements.

## Adaptability

Life Extension provides the opportunity to adapt DC UPS to changing requirements or regulations without the need for a full system replacement, offering a more flexible solution. It's important to assess the specific situation and requirements to determine whether Life Extension or new procurement is the most suitable option in a given context and detailed technical audit is imperative.

"Boost efficiency and slash costs with expertly refurbished DC rectifiers!"

# Refurbishing Battery Charger/ rectifier panels typically involves several steps



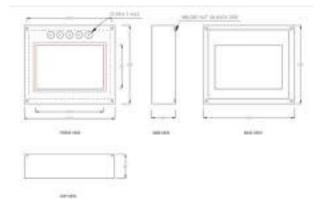
standards are crucial to ensure the reliability and performance of the UPS panel.

# Major parts to be replaced

### Central Monitoring System

- ♦ 7" multicolor LCD, touch screen monitor, full graphical display, Status Information on MIMIC and system setting function.
- ♦ Available ports RS485, RJ45 interface; protocol MODBUS, IEC61850.
- ♦ Capable of storing up to 10,000 alarm logs and status logs with time stamping.
- ◊ Battery charge management function. Can manage two battery banks.
- Monitoring and display of AC input, battery status, charger and load Voltage and current, battery charging and discharging info, charger info etc.
- **b** DC Bus earth leakage, optional DC feeder leakage detection function. Grounding alarms





**Central Monitoring System** 

### SCR Firing control

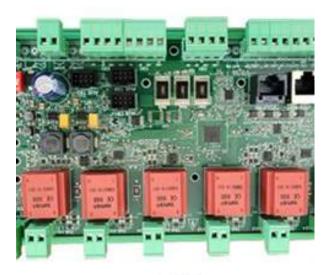
- 6 pulse advance Syncro lock technology with 32 bit microprocessor based control
- ◊ Independent current limit for rectifier and battery.
- Active current shearing up to 8 battery chargers in parallel.
- Potentiometer for rectifier voltage, battery current and rectifier current setting.
- ◊ Optional 12 pulse, 24 pulse configuration capability
- ♦ Adaptable to any system of any make
- ♦ SMPS based power supply

### **Other Components**

- ♦ Filter capacitor as per system design requirement.
- ◊ Clamp on type DC hall current sensor as required for battery and load current
- ♦ Control cable herness



Filter Capacitor





**Firing Card** 



**Current Sensor** 

### Embrace Cost-Efficiency and Sustainability with Refurbished Power Systems

Upgrading your power systems with refurbished DC UPS or rectifiers offers significant advantages over purchasing new units. By choosing refurbishment, you can achieve substantial cost optimization, as it is more economical than buying new equipment.

Additionally, refurbishing minimizes electronic waste, promoting recycling of electronic parts and contributing to a greener tomorrow.

POWERON specializes in refurbishing your existing systems to meet your specific requirements and customizations, ensuring high-quality, internationally designed solutions at a fraction of the cost. Empower your power systems and support sustainability with POWERON's expert refurbishment services.



#### POWERON ENERTECH ENERGY SYSTEMS LLC

Warehouse No.224, Plot No. 7-0, Jebel Ali Industrial First Dubai, UAE. PO BOX : 124750.



engineering@poweronenertech.com