

# SmartPower 4820

## High energy, 2U rack-mount lithium-ion battery system

SmartPower 4820 has been designed to provide power backup for remote or outside telecom plants like Access Terminals, Base Transceiver Stations, Base Station Controllers. They are also suitable to provide bulk power in Central Offices.

This “all included” stand-alone battery system now provides the benefits of Sacred Sun Li-ion technology in a qualified industrial design: SmartPower provides maintenance-free energy storage in a reduced volume, combining high operational reliability with outstanding life time under the most difficult environmental conditions.

### Features

- 19 inch rack-mount
- Integrated 48 V system containing 0.96 kWh of energy
- Parallels operation, for scalability
- Energy density of 67 Wh/dm<sup>3</sup>,
- State of charge and state of health indication
- Built-in battery control for efficient operation
- Redundant safety
- Comprehensive communication
- Compatible with standard telecom rectifiers
- RoHs compliant

### Benefits

- Increased energy in given space
- Easy installation and upscaling
- High operational reliability
- Optimized supervision strategy through remote control/diagnostic
- Very long life time
- Zero maintenance throughout lifetime



SmartPower 4820	
<b>Nominal Characteristics</b>	
Nominal Voltage (V)	48
Nominal Capacity (Ah)	20
Nominal Energy (Wh)	960
Volumetric energy density (Wh/dm <sup>3</sup> )	67
Gravimetric energy density (Wh/kg)	96
<b>Mechanical Characteristics</b>	
Width (mm)	442(19")
Height (mm)	88(2U)
Depth (mm)	370
Weight (Kg)	10.0
<b>Electrical Characteristics</b>	
Voltage Window	40.5 to 54.0
Charge voltage range (V)	52.5~54.0
Max. permanent discharge current (A)	20
Max. permanent charge current (A)	20
Faradic charge efficiency (+25 °C)	99%
Energy charge efficiency (+25 °C)	94%
<b>Operation Conditions</b>	
Cycle life (80% dod; +25 °C)	4000cycles
Charging temperature	0 °C/+55 °C
Discharging temperature	-20 °C/+60 °C
Storage temperature	-20 °C/+60 °C
Transportation regulation compliance	UN 38.3
EMC standard compliance	EN 61 000 chapter 6-2 and 6-3
Safety standard compliance at battery level	designed to meet IEC 60950
Certification designed to meet	CE/UL2054
Protection class	IP20

\*When the battery pack is connected in parallel, the maximum allowable charge and discharge current will be decline.

