

DC POWER SYSTEMS

Smart Series

Smart SYS SL-1500R48 Embedded Power System



Features

- 19" 4U sub-rack, easy to be embedded into all standard telecom equipment
- Up to 12kW system capacity
- Up to 0.99 power factor
- Intelligent fan-cooling
- Rectifier modules hot-swap
- N+1 rectifier module redundancy
- Advanced batteries monitoring and management
- ECO mode
- High power density

Applications

- Fiber optic network
- Access network
- Satellite communication ground station Transmission equipment
- Mobile communication
- ESS

Introduction

- Smart SYSSL-1500R48 system is a compact and intelligent power system, It can house up to 4*3KW rectifiers and 1*SC500 controller
- AC input, DC output and dry contact use front access and front operation
- With compact design, easy installation
- Two levels Low Voltage Disconnect (LVD) protection
- Two battery MCBs
- Compatible with rectifiers of the same size

Applicable Standards

| | |
|---------------|--|
| Electrical | IEC 60950-1 EN 60950-1 UL 60950-1 |
| EMC | EN 55022 Class A |
| Environmental | ETSI EN 300 019-2 ETSI EN 300 132-2 RoHS |

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Input

| | |
|---------------|--|
| AC Input | 85Vac-300Vac |
| Input Current | ≤21A (Per rectifier) |
| Frequency | 45~65Hz |
| THDi | <5%@full load <10%@half load Rated input and output voltage |

Output

| | |
|--------------------|---|
| Output Voltage | -53.5V Rated output voltage |
| Output Current | -53.5V float voltage -56.4V boost voltage ≥200A |
| Voltage Regulation | ±1% |
| Current Sharing | ±5% |
| Efficiency | ≥93.5% |
| Ripple and Noise | ≤200mV Peak-Peak |
| Psophometric Noise | ≤2mV |

Other Specifications

| | |
|-----------------------|--|
| Operating Temperature | -40°C to +70°C (-40°F to +158°F) |
| Storage Temperature | -40°C to +85°C (-40°F to +185°F) |
| Humidity | Operating: ≤95% non-condensing Storage: ≤99% non-condensing |
| Dimensions(mm) | 482.6W (19") x 177 H (4U)x 392D |
| Weight | ≤15kg (Without rectifier) |

Options

| | |
|------------------------|---|
| DC Distribution | LLVD : 4*20A/1P+3*16A/1P+ 1*10A/1P BLVD : 2*16A/1P+ 2*10A/1P+ 1*6A/1P 2 MCBs for battery, the rating of load MCB is 63A BLVD & LLVD1 , Front operation and front connection |
| AC Distribution | AC input mode: 4*25A/1P MCB Front access and front connection |
| Low Voltage Disconnect | 200A Bi-stable contactors should be used as LLVD1 &BLVD |
| Output Protection | Short-circuit protection Overload protection |
| Rectifier | SP I 48/2000 SP II 48/2000 SP II 48/2000HE SP I 48/3000 SP II 48/3000HE |

Monitoring

| | |
|-------------------|--|
| Function | Operation information acquirements, battery and system management, system alarm, communicate with control center related ports |
| Controller | SC500 |
| Battery Mid-Point | 2 x Battery mid-point |
| Dry Contact | 6 relay outputs, NO+COM |
| Digital Input | 6 DI |
| Interface | LCD |
| Temp Sensor | 1 |