

# DC POWER SYSTEMS

## Medium DC Power Systems – SPS Series

48V Indoor Cabinet DC power up to 81kW



### Features

- High efficiency, energy-saving, green DC power. Digitalized control
- Digitalized Primary and secondary controls could realize excellent monitoring and regulation.
- Ethernet interface built-in
- High reliability design
- Advanced battery management capacity  
Battery asymmetry control
- Excellent EMC performance
- Lower interference and excellent susceptibility give module better reliability
- Global approvals  
CE marked, UL recognized and TUV certified for worldwide application.

### Introduction

SPS 48/600 2900 cabinetized power supply system is designed to meet higher power efficiency and versatile technical requirement. Compact structure, full integrated functions of rectifier and system make SPS 48/600 2900 typical applications are providing 48V standby power for central data center and wireless transmission center.

Intelligent system management features include battery temperature compensation, fast charge, battery current limit, automatic equalize charging and automatic battery condition monitoring. With a compact power and distribution design, the system provides a maximum flexibility with a variety of possibilities.

### Applications

- Wireless, Wireline communication
- Broadband and network access
- Data center access
- 3G center base station
- Transmission center station

■ DC Power

■ Embedded Power

■ High Voltage Variable Frequency Drives (VFD)

■ AC Power

■ Outdoor Power

■ Centralized monitoring and management system

■ Power Distribution

■ Electronic Air Cleaner

■ Services

# DC POWER SYSTEMS

## Technical Specifications

### Input

AC Supply	1/2/3P+N+PE, Nominal 220/230/380/400/415VAC
Frequency	45~65Hz
Power Factor	0.99
Voltage wave distortion	<5%
Current Distortion	≤10% @50~100% load
AC Distribution	AC Input: 2*100A/3P MCBs, manual switch AC Output: 12*25A/1P MCBs for each rectifiers.

### Output

Output voltage	-48VDC (42-57.6VDC adjustable)
Output current	1500A ultimate capacity
Voltage regulation	≤±1%
Current Sharing	≤±5%
Efficiency	≥94% rated, 95% in maximum
Ripple and Noise	≤200mV P-Peak
Psophometric noise	≤2mV rms

### Options

DC distribution	6*(63-125A) MCBs 9*(1-63A) MCBs 3*(20-200A) HRC Fuses Custom options available
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Low Voltage Disconnect	Single or multiple LVD configured as battery disconnect
Output Protection	Over/under voltage shutdown Short circuit proof High temperature protection
Rectifier	Smart Power I 48/2900

### Monitoring and Control

System Controller	DKD41
Local operation	Menu driven software via keypads and LCD or PC
Remote operation	Modem/On-board web server/ SNMP
Alarms Relays	8 relays
Digital inputs	9 options (for external equipment and battery)

### Other Specifications

Operating temp	-40 to +75°C (-40 to +167°F)
Storage temp	-40 to +85°C (-40 to +185°F)
Humidity	Operating: ≤95% non-condensing; Storage: ≤99% non-condensing
Dimensions	600W x 600 D x 2000 H (mm)
Weight	85 kg without rectifier

# DC POWER SYSTEMS

## Medium DC Power Systems – DUM (30H&50H) Series

48V Indoor Cabinet DC power up to 32.4kW



### Features

- Wide AC input voltage range, 90V~300V.
- High reliability with autonomous current-sharing technique.
- High power density, lower electromagnet interference and high efficiency
- Hot-plug and smart fan cooling rectifier modules.
- Small size, lightweight and easy to use due to modular and block designed structure.
- Intelligent battery management including temperature compensation.
- Efficient alarm and protection measures

### Introduction

DUM series cabinetized power supply system is designed to meet higher capacity and versatile technical requirement. DUM-48/30H&50H could be used in a wide variety of 48VDC applications across the globe.

The system could house up to 12 nos. DZY (30H & 50H) series rectifiers. With a compact power and distribution design, the system provides a maximum flexibility with a variety of possibilities.

### Applications

- Wireless, Wireline communication
- Broadband and network access
- Satellite communication ground station
- 3G base station
- Data center

■ DC Power

■ Embedded Power

■ High Voltage Variable Frequency Drives (VFD)

■ AC Power

■ Outdoor Power

■ Centralized monitoring and management system

■ Power Distribution

■ Electronic Air Cleaner

■ Services



# DC POWER SYSTEMS

## Technical Specifications

### Input

AC Supply	1/2/3P+N+PE, Nominal 220/230/380/400/415VAC
Frequency	45~65Hz
Power Factor	0.99
Current Distortion	≤10%@50~100% load
AC Distribution	AC Input: 1*63A/3P MCB Optional: 2*63A/3P MCBs, manual/automatic switch Individual MCBs for each rectifiers

### Output

Output voltage	-48VDC (42-57.6VDC adjustable)
Output current	600A ultimate capacity
Voltage regulation	≤±1%
Current Sharing	≤±5%
Efficiency	≥92% rated, 95% in maximum
Ripple and Noise	≤200mV P-Peak
Psophometric noise	≤2mV rms

### Options

DC distribution	6*(63-125A) MCBs 9*(1-63A) MCBs 3*(20-200A) HRC Fuses Custom options available
Low Voltage Disconnect	Single or multiple LVD configured as battery disconnect
Output Protection	Over/under voltage shutdown Short circuit proof High temperature protection
Rectifier	DZY-48/30H,DZY-48/50H(1)

### Monitoring and Control

System Controller	DKD31
Local operation	Menu driven software via keypads and LCD or PC
Communications	RS232
Alarms Relays	8 relays
Digital inputs	9 options (for external equipment and battery)

### Other Specifications

Operating temp	-5 to +55°C
Storage temp	-40 to +70°C
Humidity	Operating: ≤95% non-condensing; Storage: ≤99% non-condensing
Dimensions	600W x 600 D x 2000 H (mm) 450W x 400 D x 1600 H (mm) optional
Weight	100 kg without rectifier