



## DF0210A Series of High-frequency Switching DC Power Supply System



DF0210A series of high-frequency switching DC power supply system are designed for power plant, 35kV ~ 500kV substations, electrical railway, city subway and other places where the DC power supply is needed. According to the different charging module employed, DF0210A series products are classified into three groups, namely the small system, the medium system and the large system.

### Characteristics

- Reliable modularization design, N+1 backup of charging modules, autonomous current sharing technique, and optional configuration.
- 32 bits powerful SCM controlled supervision unit, large LCD display.
- Support multiple communication protocols and easy to connect to remote supervision system.
- Prolong battery's life by intelligent battery management.
- Configure sine wave power inverter(220VDC ~ 220VAC) and DC converter ~ 220DC ~ 48VDC be able to provide 220AC and 48VDC power supply.

### Specifications

- Input voltage 380V ~ 20%  
50Hz ~ 10%
- Power factor 0.9 ~ small system and medium system 0.95 (large system)
- Efficiency ~ 92%
- Output voltage 220V, 110V
- Voltage accuracy ~ 0.5%
- Current accuracy ~ 0.5%
- Ripple coefficient ~ 0.1%
- Current sharing imbalance ~ 5%

### Small System

- Charger capacity 10A ~ 20A ~ 220V  
20 ~ 40A ~ 110V
- Application 35kV substation
- Connection type single bus
- Battery 24Ah ~ 100Ah

### Medium System

- Charger capacity 30A ~ 80A ~ 220V  
60A ~ 160A ~ 110V
- Application 220kV, 110kV, 35kV substation, power plant
- Connection type single bus, subsection single bus
- Battery 100Ah ~ 500Ah

### Large System

- Charger capacity 90A ~ 360A  
~ 220V ~ 160A ~ 480A ~ 110V
- Application power plant ~ water power plant ~ 500kV substation
- Connection type single bus ~ subsection single bus
- Battery 500Ah ~ 2000Ah



## High-frequency Switching Charging Module

### ■ Charging Module with Single-phase Input

DF0230-220/5	Rated output voltage: 220V Rated output current: 5A
DF0231-220/10	Rated output voltage: 220V Rated output current: 10A
DF0235-110/10	Rated output voltage: 110V Rated output current: 10A
DF0236-110/20	Rated output voltage: 110V Rated output current: 20A

### ■ Charging Module for Three-phase Input

DF0233-220/30	Rated Output Voltage: 220V Rated Output Current: 30A
DF0237-110/40	Rated Output Voltage: 110V Rated Output Current: 40A

## DF0240 Series of Supervision Unit

- A Motorola's 32-bit SCM is used to ensure high performance and great data processing capabilities.
- Several serial communication ports make it easy to connect with other intelligent equipment.
- Four remote functions: Remote measurement, remote signal, remote control and remote regulation.
- Battery Management: Automatic conversion among constant current charge, equalizing charge and floating charge.
- Alarm: Sound and light alarm and remote alarm.

## Intelligent High-frequency Switching Power Supply System



DUM series of intelligent high-frequency switching power supply system are multifunctional, high-powered and high reliable combined power supply systems designed for suiting the demand of communication in modern times. Each system possesses module-combined structure, integrates rectifier modules, supervision unit, lightning protection device, distribution unit, charging unit and power supplying function in one system. The capacity of system can vary from 40A to 2500A upon user's requirements. This series have been widely used in electric power industry, China Unicom, China Mobile, China Railcom, broadcasting and television industry, police communication and metallurgical industry.

All products including DUM186-48/20 power supply system, DUM201-48/50 power supply system, DUM201-48/50B power supply system, DUM201-48/50C power supply system and DUM185-48/100 power supply system have passed the Products Quality Inspection tested by Posts and Telecommu-



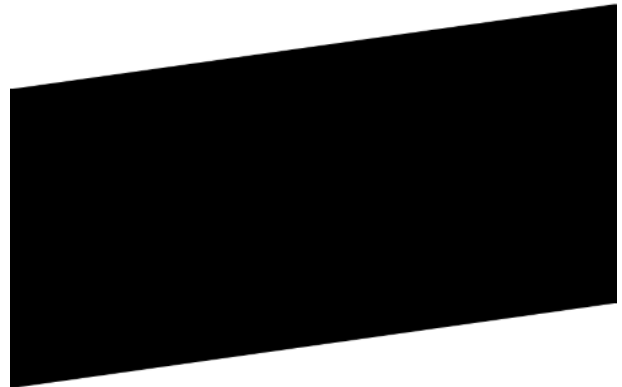
nications Industry Products Quality Surveillance and Inspection Center (PTPIC), obtained Network Access License for Telecommunication Equipment awarded by Ministry of Information Industry(MII), PRC, and passed the technological production identification organized by MII.

## System composition and characteristics

- Adopts active or passive power factor correction technique, possessing high power factor. Advanced power conversion technique.
- Perfect battery management and temperature compensation functions prolong battery's life.
- Hot-Plug technique makes it convenient to replace.
- Advanced current-sharing techniques guarantee good current-sharing.
- User-friendly man-machine interface, easy to learn and use.
- RS232 interface and Modem interface, realizing local and remote centralized supervision.
- A variety of flexible alarm modes, such as audible and visible alarm, pager alarm, telephone alarm and dry contact alarm.
- Offers kinds of communication modes and protocols.
- Remote signal, remote measurement, remote control and remote regulation functions match the demands of unattended system.
- Professional EMC design, with strong anti-electromagnetic interference capability.

## DC-DC ISOLATED CONVERTERS

- Fixed Input Voltage Series
- Wide Range Input Voltage Series
- High Power Density Series



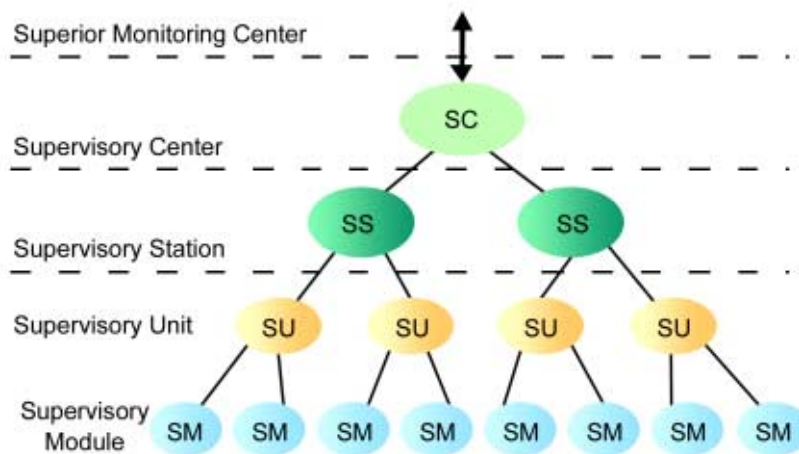


## S&C System for Power Equipment and Environment

### Overview

In order to facilitate our clients of communication industry to realize unmanned automatic control of communication stations so as to perform effective and timely maintenance and management, Dongfang referring to the relational standards and technical specifications, developed a new generation monitoring system DF0400 Supervisory Control System for Power Equipment and Environment.

### System Hierarchy



- SC (Supervisory Center) performs centralized monitoring over all the SSs and SUs.
- SS(Supervisory Station) performs centralized monitoring over all the SUs it charged so as to realize remote maintenance and operation.
- SU(Supervisory Unit) is a group of equipments to be monitored in a base station.
- SM(Supervisory Module) is responsible for gathering real time data and directly controlling the monitored equipment.
- In addition, DF0400 can exchange data with the superior monitoring center and local network management center.

### System Architecture

