DC Power Systems
for Business-Critical Continuity

### NetSure 801 Series DC Power System







# NetSure 801 Series DC Power System

### **Features**

- Wide AC input range from 260V to 530Vac
- System efficiency up to 93%
- Hot swappable rectifier and monitoring module
- Front access, top / bottom cable entry
- Remote monitoring through RJ45, RS232 and replay output
- Surge protection on AC,DC and signal side
- Easily expandable with more power or feature when new demand arise
- Utilize CE/UL approved rectifier R48-5800
- System comply with EN60590 and EN300386, ROHS

#### Introduction

NetSure 801 power system is a new generation of highly reliable power system designed by Emerson. The system can be smoothly expanded up to 6000A through parallel connection. It is applicable for following applications:

- Large and medium switching office
- Level-1 transmission backbone line
- GSM mobile switching office, mobile tandem exchange
- CDMA mobile switching office, mobile tandem exchange

### **System Configuration**

- Rectifier R48-5800
- Monitor M810G
- AC Distribution Cabinet (PD380/400AFH-6, PD380/630AFH-6, PD380/630AFA-6)
- DC Distribution Cabinet (PD48/1600DF-6, PD48/2500DF-6, PD48/2000HF-6/X1)
- Rectifier Cabinet (Rack1000-6, Rack2000-6)

System Electrical Specifications		
Input Voltage Range	260 ~ 530Vac (half power at 260 ~ 304Vac)	
Input Frequency Range	45 ~ 65Hz	
Power Factor	≥ 0.99	
Efficiency	≥ 93%	
Nominal Output Voltage	-42Vdc ~ -58Vdc	
Load Sharing	≤±1%	



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Environmental	
Operating Temperature	-10 ~ +65 $^{\circ}$ C (derating from 45 $^{\circ}$ C)
Relative Humidity	≤95% RH
Elevation	≤4200m
Storage Temperature	-40 ~ +70°C

### **Monitoring Module M810G**

### Features

Menu operated and user friendly

Configurable 8 pcs replay output and 4 pcs digit input

Remote monitoring through RJ45, RS232, modem, support TCP/IP, SNMP, web browser

Up to 400 alarm history logs

Intelligent battery monitoring

Visual and audible alarms

### **Rectifier Module R48-5800**

General		
Safety	CE,UL EN60950: 1992,UL1950	
EMC	EN55022 Class B	
Enclosure	IP20	
MTBF	> 390000 hours	

Input Characteristics	Range	Unit	Remark
Voltage	260 ~ 530Vac	V	Half power at 260 ~ 304Vac
Line Frequency	45 ~ 65	Hz	
Power Factor	≥ 0.99		
THD	≤ 5%		50% ~ 110% load

Output Characteristics	Range	Unit	Remark
Voltage	-42 ~ -58	Vdc	
Current	0 ~ 122	Α	
Power	5800	W	100A@-58V
Power Density	0.813	W/cm³	Size used: 85H × 224W × 371D
Efficiency	93%		40% ~ 100% load
Peak to peak noise	≤50	mV	0 ~ 20MHz
Psophometric weighted noise	≤0.5	mV	(300 ~ 3400Hz)

Rectifier Cabinet Configuration		
Rack1000-6	M810G	0 ~ 1
	R48-5800	1 ~ 10
Rack2000-6	M810G	0 ~ 1
	R48-5800	1 ~ 20
* Note: One M810C supports	up to 60 PAR 5800 roctifiors	

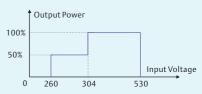
Model	HxWxD(mm)	Weight (kg)	Remark
Rack1000-6	2000 × 600 × 600	≤150	Not including rectifiers
Rack2000-6	2000 × 600 × 600	≤180	Not including rectifiers
R48-5800	88 × 244 × 372	7.8	Including faceplate
M810G	87.5 × 243.5 × 161	2	



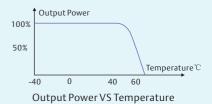
M810G



R48-5800



Output Power VS Input Voltage







Rack 1000-6

Rack 2000-6

### **AC Distribution Cabinet**

### **Features**

- Built-in CPU, independent monitoring
- Backlit large LCD display of AC voltage, current, frequency and status of lightning arrester
- Visual and audible alarm
- Two mains auto/manual switchover
- Front access, top / bottom cabling
- DC emergency lighting available in case of mains failure
- Expandable up to 5 AC cabinets
- Lightning proof and electrical insulation in compliance with IEC standard, ROHS compliant

### **Input / Output Specifications**

	PD380/400AFH-6/X1	PD380/630AFH-6/X1	PD380/630AFA-6/X1
AC Input	3 phase / 5 line	3 phase / 5 line	3 phase / 5 line
	Manual switchover	Manual switchover	Automatic switchover
	400A/3Px2	630A/3Px2	630A/3Px2
AC Output	$4 \times 160A/3P(MCCB)$	6 × 160A/3P(MCCB)	6 × 160A/3P(MCCB)
	1 × 63A/3P(MCB)	1 × 63A/3P(MCB)	1 × 63A/3P(MCB)
	1 × 32A/3P(MCB)	1 × 32A/3P(MCB)	1 × 32A/3P(MCB)
	$3 \times 32A/1P(MCB)$	$3 \times 32A/1P(MCB)$	$3 \times 32A/1P(MCB)$
	$3 \times 20A/1P(MCB)$	$3 \times 20A/1P(MCB)$	$3 \times 20A/1P(MCB)$
DCEmergency Output	100A/48V	100A/48V	100A/48V

### **Mechanical Specifications**

Model	HxWxD(mm)	Weight(kg)
PD380/400AFH-6/X1	2000 × 800 × 600	≤240
PD380/630AFH-6/X1	2000 × 800 × 600	≤260
PD380/630AFA-6/X1	2000 × 800 × 600	≤300





## **DC Distribution Cabinet**

#### **Features**

- Built-in CPU, independent monitoring Backlit large LCD display of DC status
- Visual and audible alarm
- Front access, top / bottom cabling
- Visual and audible alarm
- Expandable up to 8 DC cabinets
- Lightning proof and electrical insulation in compliance with IEC standard, ROHS compliant

### **Input / Output Specifications**

	PD48/1600DF-6/X1	PD48/2500DF-6/X1	PD48/2000HF-6/X1
Battery fuse	2 × 1000A(NT4)	2 × 1000A(NT4)	2 × 1000A(NT4)
DC Output	6 × 500A(NT3)	8 × 630A(NT3)	120 × 10A (MCB)
	2 × 200A (NT2)	4 × 400A (NT2)	(High ohmic
	8 × 100A (NT00)	4 × 200A (NT2)	distribution, $30 \text{m}\Omega$ )
	6 × 63A(NT00)	8 × 100A(NT00)	
		6 × 63A(NT00)	

### **Mechanical Specifications**

Model	HxWxD(mm)	Weight(kg)
PD48/1600DF-6/X1	2000 × 800 × 600	≤280
PD48/2500DF-6/X1	2000 × 800 × 600	≤320
PD48/2000HF-6/X1	2000 × 800 × 600	≤ 270





