

PS48300/1800

DC Power Systems
for Business-Critical Continuity

Integrative DC Power Series -48VDC up to 17.4kW

Features

- Provide up to 17.4kW Max
- Front access design for installation and maintenance
- Wide input voltage range from 85Vac to 300Vac
- Wide working temperature: -40°C ~ +70°C
- Work in poor electric power environment
- Rectifiers adopt DSP control technology, with high power density
- Low voltage battery disconnection to protect batteries
- Easily expandable with more power or/and feature when new demand arise
- Self-contained surge protection for AC, DC and signal
- Hot swap of rectifier and monitoring modules
- Utilize CE/UL approved rectifier R48-1800A

Introduction

PS48300/1800 system is optimized for base station power application. This system offers advanced features, DSP control technology, intelligent battery monitoring, remote monitoring and low voltage battery disconnection. The system comes fully equipped with integrated AC and DC distribution.

Cost-effective for possible demand and future-proof, flexible and scalable system that can be configured to meet current demand and future expansion.

PS48300/1800

System Electrical Specifications				
Nominal Input Voltage	380Vac/220Vac(3 phase/1 phase)			
Nominal Output Voltage	-48Vdc			
Input Voltage Range	85-300Vac(Line-neutral), power decrease linearly below 176Vac			
Frequency Range	45 - 65Hz			
Output Power(max)	17.4kW			
AC Distribution				
	X1, X3 System	X2 System	X6 System	
Input	2×100A/3P (manual switchover)	1×63A/4P (Single input)	1×63A/4P(Single input)	MCB
Output	1×16A/3P, 3×16A/1P	None	1×16A/3P, 1×16A/1P	MCB
DC distribution				
	X1, X2, X3 System	X6 System		
Battery Fuse	2×250A	2×250A		
DC Output	12 Output	7 Output		
LLVD	5×100A(Fuse) 1×63A/1P(MCB)	3×100A (Fuse)		
BLVD	2×63A/1P, 2×32A/1P(MCB) 2×10A/1P(MCB)	2×32A/1P (MCB) 2×10A/1P (MCB)		
Mechanical Parameters				
X1, X6 System:	600W×600D×1600H(mm)	≤130kg (excluding rectifiers and SCU)		
X2, X3 System:	600W×600D×2000H(mm)	≤150kg (excluding rectifiers and SCU)		



PS48300/1800-X2
PS48300/1800-X3



PS48300/1800-X1

M500D Monitoring module

Features

Intelligent battery management
Visual and audible alarms
Alarm history log
RS232/Modem, User configurable digital inputs
Hot Swapable and dry contacts



M500D Monitoring Module

R48-1800A Rectifier module

General

Safety	CE, UL	UL/ EN/ IEC 60950-2000
EMC		EN 55022 Class B
Dimensions		87.9×85.3×272mm (H×W×D)
Weight		≤2.0kg
Enclosure		IP 20

Input characteristics	Specification	Unit	Remark
Voltage	85~300 (power decrease linearly below 176Vac)	Vac	Single phase
Line frequency	45~65	Hz	
Power Factor	0.99		
Efficiency	91	%	

Output characteristics	Specification	Unit	Remark
Voltage	-42~-58	Vdc	
Power	1740	W	30A@-58V
Current	0~33	A	
Load regulation	≤0.5	%	
Line regulation	≤0.1	%	
Load share	≤±0.9	A	
Peak to peak noise	≤100	mV pk-pk	(0 - 20 MHz)
Psophometric weighted noise	≤2	mV	
THD	≤5	%	

Environment conditions	Specification
Operating temperature	-40℃~+70℃(full power to +45℃)
Storage temperature	-40 ~ +70 ℃
Relative humidity	≤90% RH
Elevation	≤2000 m

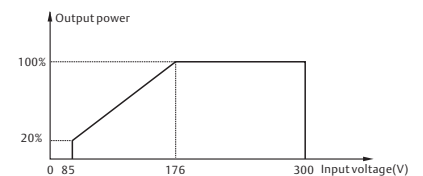
Protection characteristics

Short circuit protection at constant current
Output over-voltage protection, voltage set point selectable
Input over-voltage protection, automatically recoverable
Input under-voltage protection, automatically recoverable
Over-temperature protection, > 98℃ protection, automatically recover

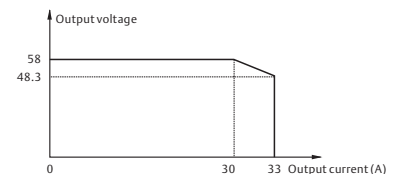


R48-1800A Rectifier module

Rectifier output power and input voltage relationship



Output Current and Output voltage relationship



Emerson Network Power.
The global leader in enabling
business-critical continuity.

- AC Power
- Embedded Computing
- Outside Plant
- Racks and Integrated Cabinets
- Connectivity
- Embedded Power
- Power Switching&Controls
- Services
- DC Power
- Monitoring
- Precision Cooling
- Surge Protection

Emerson Network Power Co., Ltd.
No. 1 Kefa Rd., Science & Industry Park
Nanshan District 518057, Shenzhen, China
Phone: +86-755-8601-0808
Fax: +86-755-8601-0909
www.emersonnetworkpower.com.cn
www.emersonpower.com.cn

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co.
© 2007 Emerson Electric Co.