



Controllis

Better Power
Anywhere

Smart48 Embedded Power System



Features

- 19" 4U sub-rack, easily embedded into all standard telecom equipment racks and enclosures
- Up to 12kW system capacity
- Up to 0.99 power factor
- Intelligent fan-cooling
- Hot swappable rectifier modules
- N+1 rectifier module redundancy
- Advanced battery monitoring and management
- ECO mode
- High power density

Applications

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

Introduction

- The Smart48 Embedded Power System is a compact and intelligent power system, It can house up to 4*3KW rectifiers and 1*controller module
- AC input, DC output, front access & operation with dry contact capability
- Compact design provides easy installation
- Two levels of 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

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	SPI 48/2000 SPII 48/2000 SPII 48/2000HE SPI 48/3000 SPII 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