

# Embedded Power System

## ETP4860-B1A2



### Introduction

ETP4860-B1A2 is an AC/DC embedded power system with excellent performance such as high power efficiency, intelligent battery management, remote management, wide range of AC/DC input voltage, etc. The system can configure 1U 30A high rectifier module, and provides 4kW output. ETP4860-B1A2 can be embedded in 19-inch rack or cabinet.



ETP4860-B1A2

### Features

- Wide range of AC input voltage from 85 V AC to 300 V AC
- Support high-voltage DC input (100 to 420V DC)
- Hot-swappable rectifier and DC distribution unit
- Standard structure design, adapt 19/21 inch installation
- Compact design(only 1U in height), saving user space
- High rectifier efficiency over 96% helps to save energy
- Excellent rectifier dormancy function increases system efficiency
- Intelligent battery management and protection help to prolong battery lifespan
- Support environmental signal monitoring and remote management through dry contact, serial interface or Ethernet interface



15A rectifier



30A rectifier



Monitoring unit  
SMU1C



Monitoring unit  
SMU1B

### Scenarios

- Access network
- Transmission network
- Communication network of enterprises

## Specifications

Product Type		ETP4860-BIA2	
System	Dimension	442 mm (W) × 255 mm (D) × 43.6 mm (U,H)	
	Weight	≤ 4 kg (without rectifiers)	
	Cooling Mode	Natural cooling	
	Installation Mode	Installed on 19-inch rack or cabinet	
	Cabling Mode	Front inlet and front outlet	
	Maintenance Mode	Front	
	Protection Level	IP20	
Input	Input Mode	220 V AC single phase or 110 V AC dual-live wire	HVDC (High-voltage DC remote power supply)
	Input Voltage	85-300 V AC, rated value: 220 V AC	100-420V DC rated value: 200-380V DC
	Input Frequency	45-66 Hz, rated value: 50/60 Hz	/
Output	Input Capacity	-	
	AC Output	-	
	Output Voltage	42-58 V DC, rated value: 53.5 V DC	
	Maximum Capacity	4 kW	
	Battery Breakers	1 × 50 A/IP	
	LLVD Breakers	-	
	BLVD Breakers	4 × 32 A/IP, 1 × 16 A/IP	
Environment	SPD	-	
	Operating Temperature	-40°C to +65°C	
	Storage Temperature	-40°C to +70°C	
	Operating Humidity	5% - 95% (non-condensing)	
Altitude	0 - 4000 m (When the altitude ranges from 2000 m to 4000 m, the operating temperature decreases by 1°C for each additional 200 m.)		

Product Type		R4815G1	R4830G1
Rectifier	Efficiency	> 95% (60% to 100% load) > 96% Max	> 95% (30% to 90% load) > 96% Max
	Maximum Power	1000W (176 to 300 V AC)	2000W (176 to 300 V AC)
	Input Voltage	85 to 300 V AC	85 to 300 V AC / 85 to 400 V DC
	Working Temperature	-40 °C to +75 °C (full output below 65°C), ETS EN 300-019	-40 °C to +75 °C (full output below 55°C), ETS EN 300-019
	Dimension	95.5 mm(W) × 208 mm(D) × 40.8 mm(H)	95.5 mm(W) × 208 mm(D) × 40.8 mm(H)
	Weight	<1.2 kg	<1.2 kg
	Cooling Mode	Forced Air cooling (Built-in fan)	Forced Air cooling (Built-in fan)
	Power Factor	≥ 0.98 (> 50% load at 230 V AC)	≥ 0.99 (> 50% load at 230 V AC)
	THD	≤ 5% (> 65% load at 230 V AC)	≤ 5% (> 50% load at 230 V AC)

Product Type		SMU1C	SMU1B
Controller	Signal Input	5 DI, 1 gate, 1 Btemp, 1 Etemp, 2 battery mid-point voltage detection	
	Alarm Output	2 DO (compatible with DI)	
	Communication Port	CAN, RS485(northbound), RS485(southbound)	CAN, FE(northbound), RS485(southbound)
	Display Mode	No LCD, support mobile APP	No LCD, support web

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