

# Embedded Power System

30~400A/1.74~24kW



## Introduction

This series of embedded power products includes 5 types of products: ETP4830, ETP4890, ETP48150, ETP48200 and ETP48400. They can provide wide range of DC output from 30A to 400A, and are very broad application in DC power system scenarios. The functional unit using a standardized installation structure design, power height ranging from 1U to 11U, compact design, support 19-inch rack or cabinet installation. The system can be adapted to a wide range of AC input voltage, with intelligent battery management, remote monitoring, etc.



ETP4830



ETP4890



ETP48150



ETP48200



ETP48400

## Features

- Support wide range of DC output from 30A to 400A
- High rectifier efficiency over 96% helps to save energy, derated output above 55°C
- Rectifier with MTBF > 500,000h helps to save OPEX
- E-label function, can achieve assets management of the whole site, easy for assets management and location of problem quality
- Battery anti-reversed connection function, avoid the possible of equipment loss and personal safety accident
- Complete system management function, LCD visualization monitoring
- Support multiple interfaces, convenient remote centralized management

## Application Scenarios

- Access network
- Transmission network
- Wireless base station
- Communication network of enterprise

## Specifications

Type	ETP4830		ETP4890		ETP48150		
System	Dimension(W×D×H)	442mm×255mm×43.6mm(1U)		442mm×255mm×86.1mm(2U)		442mm×255mm×130.5mm(3U)	
	Weight	≤8kg(fully loaded)		≤10kg(fully loaded)		≤20kg(fully loaded)	
	Cooling mode	Natural cooling					
	Installation mode	Installed on 19-inch rack or cabinet					
	Cabling mode	Left inlet and right outlet					
	Maintenance mode	Front access, support module grade change					
	Protection level	IP20					
AC Distribution	Input mode	220VAC single phase or 110VAC dual-live wire		220/380VAC 3-phase or 220VAC single phase or 110VAC dual-live wire			
	Input frequency	45~66Hz, rated value: 50Hz/60Hz					
	SPD	5kA/10kA, 8/20us					
DC Distribution	Output voltage	42~58V DC, rated value: 53.5V DC					
	Maximum capacity	2kW		4.8kW		8kW	
	Battery breakers	Fuse: 1×20A		MCB: 1×80A		MCB: 1x100A	
	Load breakers	Fuse: 2×20A		MCB: 1×10A, 1×30A, 2×40A		MCB: 2x12A, 2x20A, 4x40A	
Environment	Operating temperature	-40°C~+70°C					
	Storage temperature	-40°C~+70°C					
	Operating humidity	5%~95%(non-condensing)					
	Altitude	0~4000m (If the altitude is within the range of 2000m to 4000m, the maximum operating temperature decreases by 1°C as the altitude increases by 200m.)					
Rectifier	Rated power	870W (176~300VAC)		1000W (176~300VAC)		1600W (176~300VAC)	
	Input voltage	85VAC ~ 300 VAC, rated 220VAC					
	Working temperature	-40°C~+75°C (derated output above 65°C)		-40°C~+75°C (derated output above 55°C)		-40°C~+75°C (derated output above 55°C)	
	Dimension	95.5mm(W)×208mm(D)×40.8mm(H)					
	Weight	≤1.5kg		≤1.1kg		<1.6kg	
	Cooling mode	Forced cooling					
	Power factor	≥0.99					
THD	≤5%						
Controller	Type	SMU01A		SMU01B		SMU01C	
	Signal input	7 digital input, 2 analog input				2 digital input	
	Alarm output	8 dry contact output				4 dry contact output	
	Communication port	RS232/485, FE		RS232/485			
	Display mode	LCD					

Remark: Optional rectifiers with power efficiency >92% are available for this system.

## Specifications

Type	ETP48200		ETP48400	
System	Dimension(W×D×H)	482.6mm×330mm×219.5mm or 482.6mm×310mm×266.7mm		422mm×330mm×489.5mm
	Weight	≤20kg (without rectifiers)		≤35kg (without rectifiers)
	Cooling mode	Natural cooling		
	Installation mode	Installed on 19-inch rack or cabinet		
	Cabling mode	Top cabling or front cabling		Front cabling
	Maintenance mode	Front access, support module grade change		
	Protection level	IP20		
AC Distribution	Input mode	220/380VAC 3-phase, 220VACsingle phase, or 110VAC dual-live wire		
	Input breakers	1 branch		
	Output breakers	Max 3 branches		2 braches
	Input frequency	45~66Hz, rated value: 50Hz/60Hz		
	SPD	30kA/60kA, 8/20us		5kA/10kA , 8/20us
DC Distribution	Output voltage	42~58V DC, rated value: 53.5V DC		
	Maximum capacity	12kW		24kW
	Battery breakers	2 braches		
	Load breakers	Max 12 braches		
	SPD	10kA/20kA, 8/20us		
Rectifier	Dimension(W×D×H)	105mm×281mm×40.8mm(1U), or 103mm×243mm×88.9mm ( 2U )		
	Weight	≤2.8kg		
	Cooling mode	Forced cooling		
	Power factor	≥0.99		
	THD	≤5%		
Controller	Signal input	6 digital input, 1 door magnetism, 1 water logging, 1 smoke, 2 temperature, 1 battery temperature, 1 environment temperature and humidity		
	Alarm output	8 dry contact output		
	Communication port	RS232/485, FE		
	Display mode	LCD		
Environment	Operating temperature	-40°C~+65°C		
	Storage temperature	-40°C~+70°C		
	Operating humidity	5%~95%(non-condensing)		
	Altitude	0~4000m(If the altitude is within the range of 2000m to 4000m, the maximum operating temperature decreases by 1°C as the altitude increases by 200m.)		

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