

# 5G High Density Embedded Power



## ETP48400-C5B1

### Introduction

ETP48400-C5B1 is a new type of embedded power designed by Huawei. It is small in size and high in power density (maximum capacity up to 24kW, 5U height), and compatible with multiple input formats (three phase four wire, single phase and dual live wire). With the features of supporting multi-level power-off, easy installation and maintenance, full digitalization and intelligentization, it is suitable for scenarios such as expansion on existing wireless sites, 3/4G wireless sites new-built and 5G wireless sites new-built.



ETP48400-C5B1

### Features

- Small size, 5U height, high power density
- Compatible with multiple input formats (three phase four wire, single phase and dual live wire)
- Multi-level power-off, matching 5G service network diversification
- Support fast 5G expansion: -57VDC constant voltage output solves the problem of 5G high power consumption in AAU remote power supply
- Intelligent peak shaving enables grid free from modernization
- Intelligent staggering power unleash the potential of sites: grid adaptive adjustment, make full use of difference between peak and valley power price, reduce electric cost
- Intelligent management: online remote maintenance reduces site visits and maintenance costs

### Scenarios

- 5G expansion on existing wireless site
- 3/4G wireless sites new-built
- New-built 5G wireless site

## Specifications

Product Type		ETP48400-C5B1		
System	Dimension (W × D × H)	442mm × 330mm × 5U		
	Weight	< 20kg (without rectifiers)		
	Installation mode	19 inch rack		
	Cabling mode	Up inlet, up outlet		
	Maintenance mode	In front		
	Noise level	Meet ETSI300753 standard Class 3.1 requirements		
AC Distribution	Input mode	Three-phase four wire, compatible with single phase and dual live wire		
	Input voltage	Three phase: 147VAC - 519VAC (nominal 380V); Single phase/ dual live wire: 85VAC - 300VAC (nominal 220V)		
	Input frequency	45Hz - 65Hz, rated value: 50Hz/60Hz		
	Input capacity	N/A (getting AC power from optional AC power introduction box)		
	AC SPD	Default: N/A (getting AC SPD from optional AC power introduction box)		
DC Distribution	Output voltage	Normal mode : 42VDC - 58VDC (default: 53.5VDC , nominal: 48 VDC) 5G mode : 57VDC constant ( must be used together with BoostLi lithium battery)		
	Maximum capacity	24kW (6 × 4KW)		
	Battery branch	2 × 125A/2P MCB		
	LLVD branch	2 × 125A MCB, 3 × 63A MCB, 3 × 32A MCB		
	BLVD branch	2 × 63A MCB, 3 × 32A MCB, 3 × 16A MCB		
	DC SPD	Differential mode 10kA, common mode 20kA (8/20us)		
Rectifier	Type	R4875G5	R4850G2	
	Input voltage	85VAC - 300VAC, rated 220VAC		
	Rated power	4000W (176VAC - 300VAC) 4000W - 1600W (175VAC - 85VAC Linear derating)	3000W (176VAC - 300VAC) 3000W - 1250W (175VAC - 85VAC Linear derating)	
	Maximum Efficiency	97%	96%	
	Working temperature	-40°C to +75°C		
	Dimension (W × D × H)	105mm × 281mm × 40.8mm		
	Weight	≤ 2.2kg	≤2.0kg	
	Power factor	≥ 0.99		
THD	≤ 5%			
Controller	Signal input	2 AI (battery temp., ambient temp.) 4 DI (gate, smoke, water, 1 reserved )		
	Alarm output	8 DO		
	Communication port	RS232, RS485, CAN, FE		
	Storage capacity	Up to 1000 historical records		
	Display mode	LCD, support optional mobile APP		
	Networking mode	IP, GPRS, In-band		
Environment	Operating temperature	-40°C to +65°C		
	Storage temperature	-40°C to +70°C		
	Operating humidity	5% - 95% (non-condensing)		
	Altitude	0 - 4000m (High temperature derating in the environment of 2000m - 4000m, the operating temperature is reduced by 1°C for every 200m increase)		
AC Power Introduction Box (Required)	Load branch	1×63A/3P, 4×25A/1P, RCD, universal maintenance socket		

Intelligent Features	Intelligent boosting	Support -57VDC constant voltage output by software configuration, suitable for high power load and long distance power supply	Note: must be used together with BoostLi lithium battery
	Intelligent peak shaving	When the peak load exceeds commercial power supply, the power system can control the battery to discharge and share the burden, reducing the peak load of grid power	
	Intelligent staggering power	Grid adaptive adjustment, make full use of the difference between peak and valley power price, reduce electric cost	
	Intelligent management	Support NetEco, can perform statistical analysis on energy efficiency of single station and the whole network, can carry out targeted upgrades and improve the operation efficiency, reduce maintenance cost	

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