iMagicPower

HUAWEI

ETP23006-C3A1

Introduction

ETP23006-C3A1 is a AC & DC embedded power system with new architecture. Based on the integrated and all-scenario power platform, ETP23006-C3A1 adopts all-modular hardware design. It supports multiple energy (solar, grid or D.G.) access and scheduling, and supports multi-mode AC & DC output. ETP23006-C3A1 is 3 U high. Its maximum DC power is 12 kW and maximum AC power is 6 kVA. ETP23006-C3A1 supports 19-inch rack installation and supports multiple networking modes (GPRS, IP, In-band, and etc.).



ETP23006-C3A1

Application Scenarios

- · Applicable to non-grid, unreliable and reliable grid areas
- Supplies power to sensing devices, such as cameras and sensors.
- Supplies power to communications devices, such as wireless and transmission devices.
- Supplies power to IT devices, such as servers, storage devices, and routers.

Structure



NO.	Name	Description	NO.	Name	Description
1	AC input	72A single-phase/dual-wire; 24A three- phase		DC output	1 x 60A MCB
2	DC output	2 x 63A MCB, 2 x 32A MCB (optional)	11	AC output	1× 63A MCB, single-phase
3	Main monitoring module	SMU02C	12	Cascading communication port	_
4	Communications expansion module (optional)	Wireless communication & D.G. control	13~15	Inverter slot	Compatible: DC-AC inverter: 3 kVA inverter Solar power module: 3 kW SSU, 4 kW SSU, 4 kW PCU Multi-mode low-voltage power module: MIMO module (12/24/36V DC; 24V AC) Intelligent power distribution expansion module: iDCDU module
5	User interface module	-	16	Battery route	1 × 200 A OT treminal
6	AC maintenance socket	1 x C13	-	-	-
7~9	Rectifier slots	 Compatible: AC-DC rectifier: 3 kW rectifier, 4 kW rectifier Solar power module: 3 kW SSU, 4 kW SSU, 4 kW PCU Multi-mode low-voltage power module: MIMO module (12/24/36V DC; 24V AC) Intelligent power distribution expansion module: iDCDU module 	-	-	

Features

High power density

12 kW DC / 6 kVA AC (maximum), 3U high

Unified intelligent power system

Multiple energy inputs (solar, grid, or D.G.) and multiple output modes (AC: 24/220 V; DC: 12/24/36/48/57 V)

AI-based synergy scheduling

Multi-energy (solar-grid-D.G.-battery) synergy scheduling, improving site power supply efficiency and reliability

Intelligent DC load management

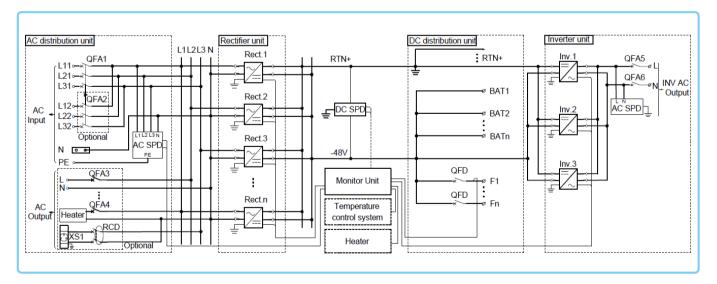
Accurate branch metering of service power consumption, and device-level precise power backup

Intelligent management

Remote online O&M, reducing site visits and O&M costs

Electrical schematic diagram

ETP23006-C3A1system electrical schematic diagram



Specifications

Product Type		ETP23006-C3A1	
	Dimensions (W \times D \times H)	482.6 mm × 330 mm × 3U	
	Weight	≤ 20 kg (excluding rectifiers)	
Basic Parameters	Installation Mode	19-inch rack installation	
basic r arameters	Cabling Mode	Front cabling	
	Maintenance Mode	Front	
	Protection Level	IP20	
	AC Mode	Single-phase/dual-wire/three phase: 85 - 300 Vac	
A.C. Immut	Frequency	45Hz - 66Hz, default 50/60 Hz	
AC Input	Input Current	Single-phase/dual-wire: max. 72A Three-phase: max. 24A	
	SPD	30kA (8/20μs)	
	Capacity	Single-phase 6kVA	
	Output Voltage	Single-phase 220 V AC	
AC Output	Frequency	50Hz/60Hz	
	AC Output Branch	1 x 63 A MCB and 1 x maintenance socket (C13)	
	AC SPD	30KA/30kA (8/20μs)	
	Capacity	12kW	
	Output Voltage	42V - 58V DC, default 53.5V DC	
DC Output	DC Output Branch	1 x 60A MCB	
	Battery Branch	1 × 200 A OT terminal	
	DC SPD	10kA/20kA (8/20μs)	

Specifications

Product Type			ETP23006-C3A1	
	Model		l23003G1	
	DC Input	Current	85 A max	
		Voltage	43.2 V ~ 58 V	
	Output voltage		220 Vac±2%	
Inverter Module	Output frequency		50Hz±1%	
	Inverter capacity		3kVA	
	Peak efficiency		≥94%	
	Output power factor		0.8	
	Overload capability		105%≤ load ≤125%: >1min	
	Model		R4875G5	
	Input voltage		85–300 V AC, rated 220 V AC	
	Rated power		4000W (176VAC - 300VAC) 4000 W to 1600 W (175 V AC to 85 V AC linear derating)	
	Maximum efficiency		97%	
Rectifier	Operating temperature		-40°C - +75°C	
	Dimensions (H x W x D)		105 mm × 269 mm × 40.8 mm	
	Weight		≤2.2kg	
	Power factor		≥0.99	
	Harmonics		≤5%	
	Model		M48500N1	
	12 V DC output current/power		2 x 6 A, total power < 100 W	
MIMO Module	24 V DC output current/power		2 x 8 A, total power < 200 W	
	24 V AC out current/pow		4 x 3 A, total power < 200 W, 50Hz	

Specifications

Product Type		ETP23006-C3A1		
	Monitoring Model	SMU02C		
	Signal input	Two AI channels (battery temperature and ambient temperature) Four DI ports (one for the access control system, one for the smoke sensor, one for the water sensor, and one reserved)		
Monitoring	Alarm output	8-channel DO		
module	Communication port	RS232, RS485, CAN,FE		
	Storage capacity	A maximum of 1000 historical alarm records are supported.		
	Display Mode	LCD, supporting the mobile app		
	Networking Mode	IP, GPRS, inband		
	Operating temperature	-40°C - $+65^{\circ}\text{C}$ 80% load @ 50°C to 65°C. The system can be started @ -40°C to -33°C .		
Environment	Storage temperature	-40 °C - +70 °C		
	Relative humidity	5% to 95% (non-condensing)		
	Altitude	0–4000 m (2000–4000 m, 1°C lower for each additional 200 m)		

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