

ETP23003-C1A1

Introduction

ETP23003-C1A1 is a AC & DC embedded power system with new architecture. Based on the integrated and all-scenario power platform, ETP23003-C1A1 adopts all-modular hardware design. It supports multiple energy (solar, grid) access and scheduling, and supports multi-mode AC & DC output.

ETP23003-C1A1's maximum DC power is 8 kW and maximum AC power is 3 kVA. ETP23003-C1A1 supports 19-inch rack installation and supports IP networking.



ETP23003-C1A1

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



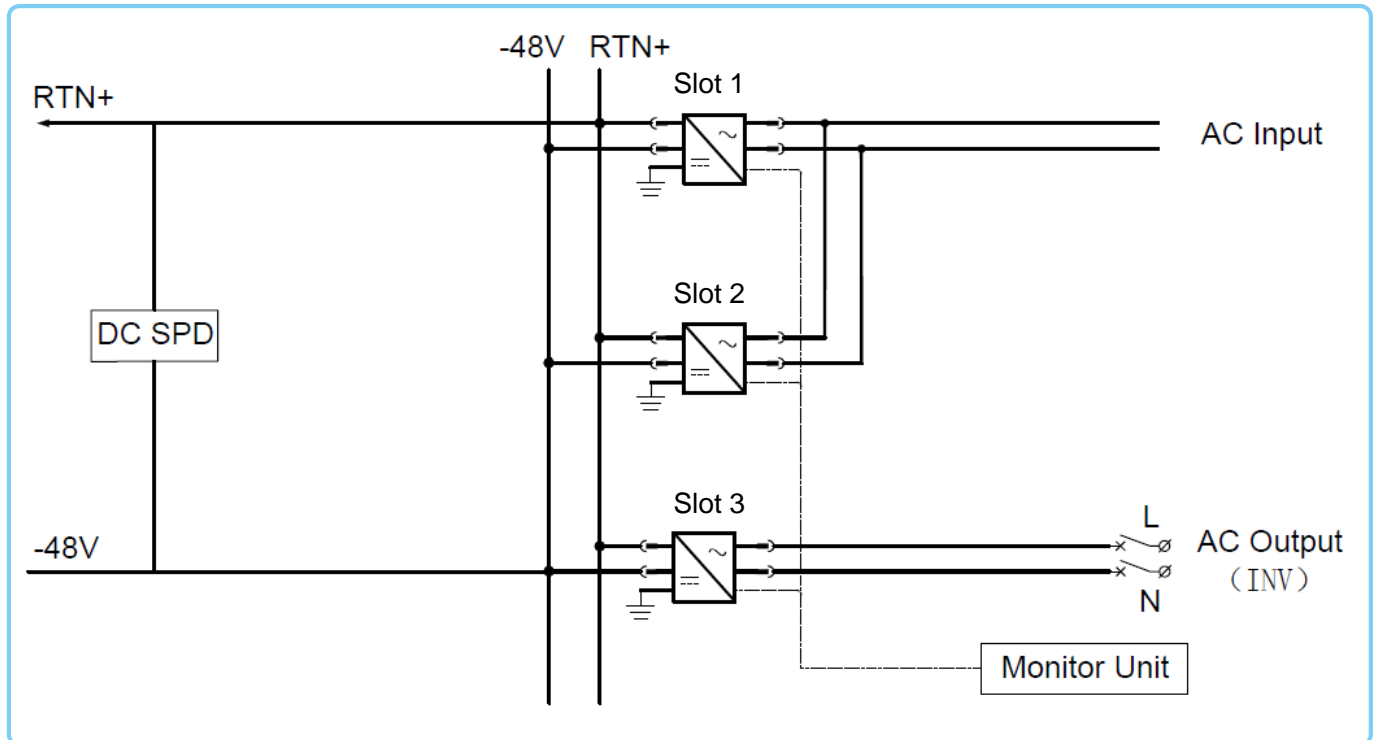
	NO.	Name	Description
Front side	1~2	Rectifier slot	Compatible: <ul style="list-style-type: none">• AC-DC rectifier: 3 kW rectifier, 4 kW rectifier• Solar power module: 3 kW SSU, 4 kW SSU, 4 kW PCU• Multi-mode low-voltage power module: MIMO module (12/24/36V DC ; 24V AC)• Intelligent power distribution expansion module: iDCDU module
	3	Inverter slot	Compatible: <ul style="list-style-type: none">• DC-AC inverter: 3 kVA inverter• Multi-mode low-voltage power module: MIMO module (12/24/36V DC ; 24V AC)• Intelligent power distribution expansion module: iDCDU module
	4	Main monitoring module	SMU11B
	5	Battery port	1 × 150 A OT terminal
Back side	6	AC output	1 x 16A socket
	7	AC input	48A single-phase AC input

Features

- **High power density**
8 kW DC / 3 kVA AC (maximum), 1U high
- **Unified intelligent power system**
Multiple energy inputs (solar, grid) and multiple output modes (AC: 24/220 V; DC: 12/24/36/48/57 V)
- **Hot-swappable**
The rectifiers and inverters are hot-swappable
- **Intelligent management**
Remote online O&M, reducing site visits and O&M costs

Electrical schematic diagram

ETP23003-C1A1Electrical schematic diagram



Specifications

Product Type		ETP23003-C1A1
Basic Parameters	Dimensions (W × D × H)	482.6 mm × 330 mm × 1U
	Weight	≤ 5 kg (excluding rectifiers)
	Installation Mode	19-inch rack installation
	Cabling Mode	Front & back cabling
	Maintenance Mode	Front
	Protection Level	IP20
AC Input	AC Mode	Single-phase 85-300 Vac
	Frequency	45Hz~66Hz, default 50/60 Hz
	Input Current	Max. 48A
AC Output	Capacity	3kVA
	Output Voltage	Single-phase 220 V AC
	Frequency	50Hz/60Hz
	AC Output Branch	1 x 16A socket
	AC SPD	3KA/5kA (8/20 μs)
DC Output	Capacity	8kW
	Output Voltage	42V~58V DC, default 53.5V DC
	Batt. Branch	1 × 150 A OT terminal
	DC SPD	10kA/20kA (8/20μs)

Specifications

Product Type			ETP23003-C1A1
Inverter Module	Model		I23003G1
	DC Input	Current	Max. 85 A
		Voltage	43.2 V - 58 V
	Output voltage		220 Vac \pm 2%
	Output frequency		50Hz \pm 1%
	Inverter capacity		3kVA/PCS
	Peak efficiency		\geq 94%
	Output power factor		0.8
	Overload capability		105% \leq Load \leq 125%: > 1 minute
Rectifier	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%
	Operating temperature		-40°C - +75°C
	Dimensions (H x W x D)		105 mm \times 269 mm \times 40.8 mm
	Weight		\leq 2.2kg
	Power factor		\geq 0.99
	Harmonics		\leq 5%
MIMO Module	Model		M48500N1
	12 V DC output current/power		2 \times 6 A, total power < 100 W
	24 V DC output current/power		2 \times 8 A, total power < 200 W
	24 V AC output current/power		4 \times 3 A, total power < 200 W, 50Hz
Environment	Operating temperature		-40°C - +65°C 80% load @ 50°C to 65°C. The system can be started @ -40°C to -33°C.
	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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