Embedded Power System

ETP4830-A1

Introduction

ETP4830-A1 is an AC/DC embedded power system with excellent performance such as high power efficiency, intelligent battery management, remote management, wide range of AC input voltage, etc.

The system can configure 2 pieces of 1U 15A high rectifier modules, and provides 30A rated current output.

ETP4830-A1 can be embedded in 19-inch rack or cabinet.

ETP4830-A1

Features

- Wide range of AC input voltage from 85 Vac to 300 Vac
- Wide operation temperature range of rectifier from – 40℃ to 75℃
- Hot-swappable
- 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

Monitoring unit SMU01A

Monitoring unit SMU01B

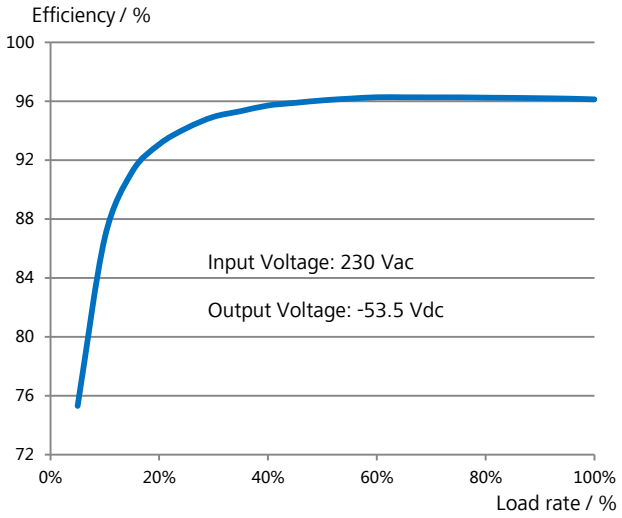
Monitoring unit SMU01C

Scenarios

- Access network
- Transmission network
- Communication network of enterprises

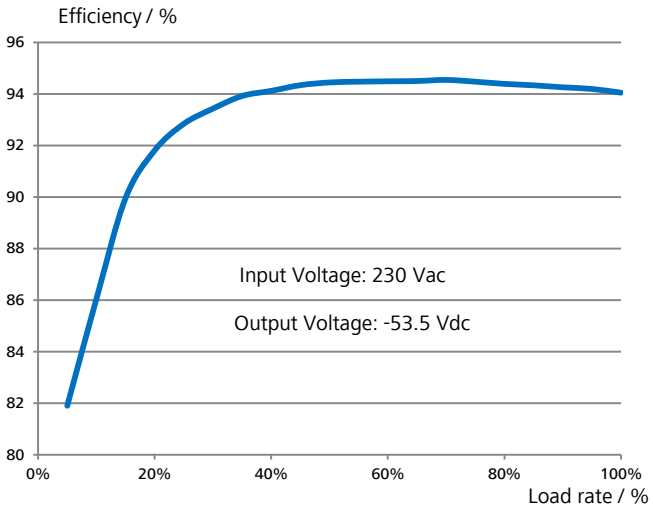
Efficiency Curve

Rectifier -870 W-96%
(R4815G1)



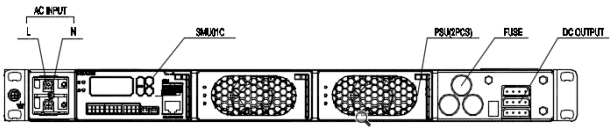
Energy Efficiency Curve

Rectifier -1 kW-94%
(R4815N1)

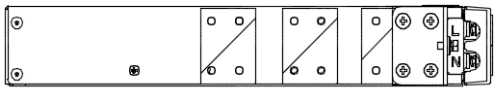


Energy Efficiency Curve

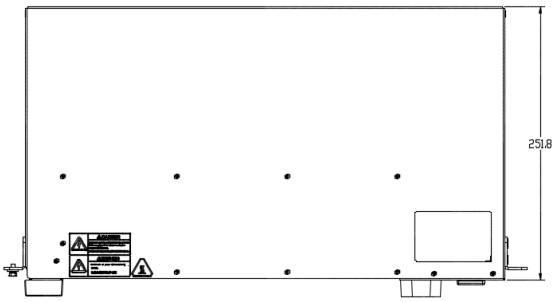
Dimension Drawings



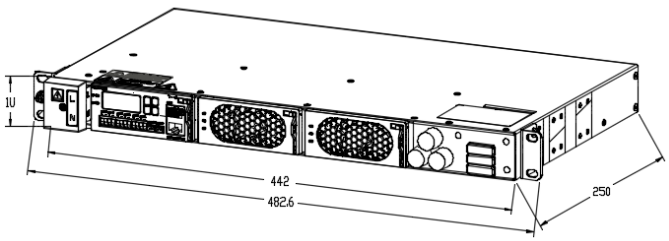
Front View of ETP4830-A1



Side View of ETP4830-A1

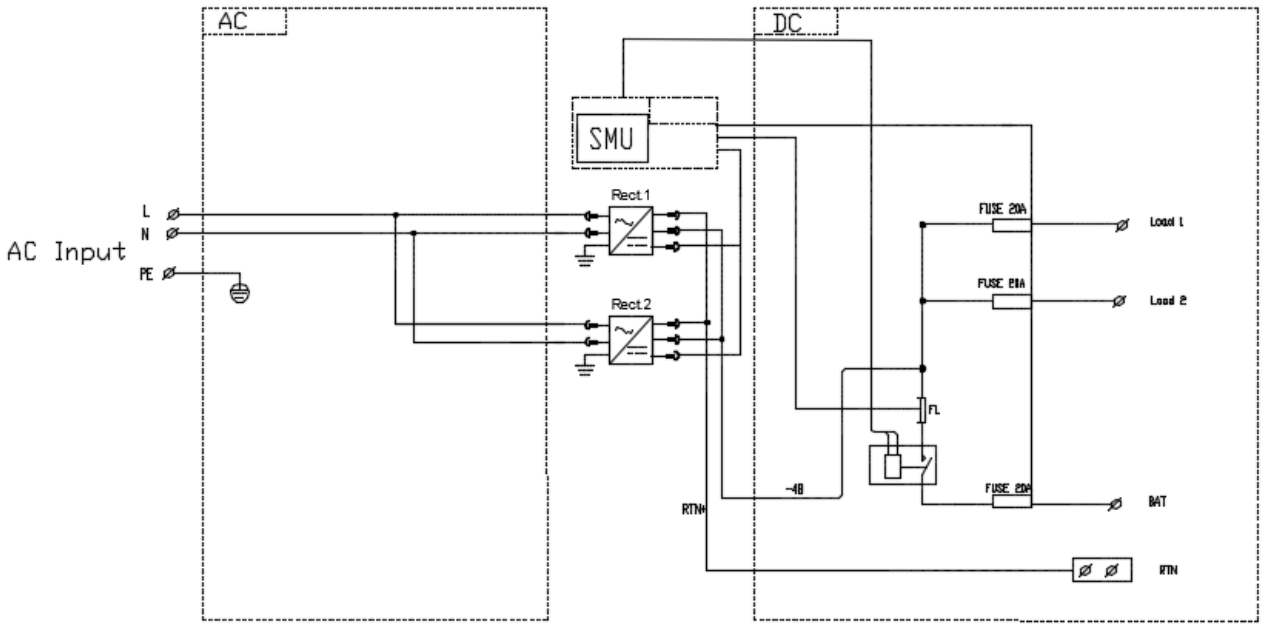


Top View of ETP4830-A1



Overview of ETP4830-A1

Schematic Diagram



ETP4830-A1

Specifications

Product Type		ETP4830-A1
System	Dimension	442 mm (W) × 255 mm (D) × 43.6 mm (1U,H)
	Weight	≤ 8 kg (fully loaded)
	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	AC Input Voltage	85–300 Vac, rated value: 220 Vac, 220 Vac single-phase or 110 Vac dual-live wire
	Input Frequency	45–66 Hz, rated value: 50/60 Hz
	Input Capacity	-
Output	AC Output	-
	Output Voltage	42–58 Vdc, rated value: 53.5 Vdc
	Maximum Capacity	2 kW
	Battery Breakers	1 × 20 A (fuse)
	LLVD Breakers	-
	BLVD Breakers	2 × 20 A (fuse)
	SPD	-
EMC & Safety	EMC	CISPR 22/EN 55022, IEC 61000-3-2, IEC 61000-3-3, EN61000-4-11
	Safety	IEC/EN60950-1/GB 4943
Environment	Operating Temperature	-40°C to +70°C (NOTE: The system can run for 8 hours at 70°C)
	Storage Temperature	–40℃ to +70℃
	Operating Humidity	5% – 95% (non-condensing)
	Altitude	0 – 4000 m (When the altitude ranges from 2000 m to 4000m, the operating temperature decreases by 1°C for each additional 200 m)

Product Type		R4815G1	R4815N1
Rectifier	Efficiency	> 95% (60% to 100% load) > 96% Max	> 93% (30% to 100% load) > 94% Max
	Maximum Power	870 W (176 to 300 Vac)	1000 W (176 to 300 Vac)
	Input Voltage	85 to 300 Vac	
	Working Temperature	-40 ℃ to +75 ℃ (full output below 65℃), ETS EN 300-019	-40 ℃ to +75 ℃ (full output below 55℃), ETS EN 300-019
	Dimension	95.5 mm(W) × 208 mm(D) × 40.8 mm(H)	
	Weight	≤1.2 kg	≤1.1 kg
	Cooling Mode	Forced Air cooling (Built-in fan)	
	Power Factor	≥ 0.98 (> 50% load at 230 Vac)	≥ 0.98 (> 50% load at 230 Vac), ≥ 0.99 (100% load at 230 Vac)
	THD	≤ 5% (> 65% load at 230 Vac)	≤ 5% (> 50% load at 230 Vac)

Product Type		SMU01A	SMU01B	SMU01C
Controller	Signal Input	7 digital inputs (need interface Unit MUE02A or MUE02B)	7 digital inputs (need interface Unit MUE02A or MUE02B), 1 analog input	2 digital inputs, 2 analog inputs
	Alarm Output	8 dry contacts (need interface Unit MUE02A or MUE02B)		4 dry contacts
	Communication Port	RS232, RS485, FE	RS232, RS485	
	Display Mode	LCD		

HUAWEI TECHNOLOGIES CO., LTD.

Huawei Industrial Base

Bantian Longgang

Shenzhen 518129, P.R. China

Tel: +86-755-28780808

www.huawei.com