

# Indoor Integrated Power System

## TP48200B-N20B2

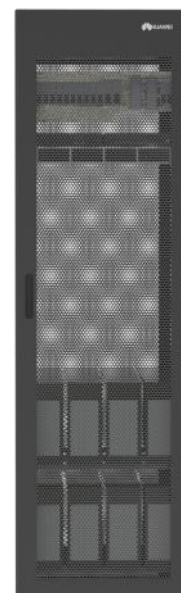


### Introduction

TP48200B-N20B2 is an AC/DC indoor integrated power system with 200A rated output current. It can accommodate 4x1U 48V/50A high efficiency rectifiers/solar supply units, 2~4 groups of batteries and 0~16U user space in maximum.

### Features

- Compatible with solar supply unit (SSU), making efficient use of solar energy to save electricity consumption in maximum
- 1U rectifier: high density(42.7W/inch<sup>3</sup>), high efficiency(>96%), excellent high temperature performance(fully output below 55°C)
- Can accommodate 2~4 groups of batteries and 0~16U user space for main equipments/48-24V secondary power, providing better use of space
- Compatible with high-temperature batteries, saving site cooling cost by increasing cooling temperature
- Intelligent battery management functions, helping prolong battery lifespan
- Battery anti-reversed polarity function to avoid the danger caused by reversed polarity connection
- Abundant I/O ports, including 5 AI, 9 DI and 8 dry contact output
- Realizing centralized and remote site monitoring by zero additional hardware cost through in-band transmission



TP48200B-N20B2

### Application Scenarios

- Wireless access network
- Fixed access network
- Convergence network
- Enterprise communication network

## Specifications

Product Type		TP48200B-N20B2
System	Dimension	600mm(W)×600mm(D)×2000mm(H)
	Weight	≤100kg (without rectifier modules or batteries)
	Cooling mode	Natural cooling
	Installation mode	Ground installation (Antistatic floor or ground installation)
	Cabling mode	Top inlet and top outlet
	Maintenance mode	Front operation and maintenance; support installation against the wall (≥100mm)
	Protection level	IP20
	Battery space	16U(2 groups×150Ah)
	User space	16U
AC Distribution	Input mode	220/380V three-phase four-wire 220V single-phase
	Input voltage	85~300VAC (L-N)
	Input frequency	45~66Hz, rated value: 50Hz/60Hz
	Input capacity	MCB: 1x63A/3P
	SPD	20kA/40kA, 8/20μs
DC Distribution	PVDU input(optional with SSU)	MCB: 4×63A/1P
	Output voltage	-42~-58VDC, rated value: -53.5VDC
	Maximum capacity	12kW(4×3000W)
	Battery branch	MCB: 2x125A/1P
	LLVD branch	MCB: 2x80A/1P, 1x32A/1P, 2x20A/1P;
	BLVD branch	MCB: 2x32A/1P, 3x16A/1P, 1x10A/1P;
SPD	10kA/20kA, 8/20μs	
Rectifier / Solar Supply Unit	Max. output power	3000W
	Max. configurable num. of SSU	2 pcs
	Power efficiency	PSU: >96%* SSU: up to 98.5%
	Dimensions	105mm(W)×281mm(D)×40.8mm(H)
	Weight	≤2kg
Controller	Signal input	5 AI(Battery temp., ambient temp., ambient humidity, temp1, temp.2) 9 DI(Water, smoke, gate, 6 common DI)
	Alarm output	8 dry contacts
	Communication port	RS232, RS485, FE
	Storage capacity	Up to 50000 historical records and alarm
	Display mode	LCD
Environment	Operating temperature	-10°C~+45°C(including batteries)
	Storage temperature	-40°C ~+70°C
	Operating humidity	5%~95%(non-condensing)
	Altitude	0~4000m

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

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# Indoor Mini Power System

TP48300B-N04C2



## Introduction

TP48300B-N04C2 is a type of mini -48 Vdc power systems, which can accommodate 6×1U 50A high efficiency rectifier modules, the maximum output current is 300A. With advantage of features like compact size, easy to install, compatible with battery rack stacking and standard open rack, excellent function of BMS, intelligence dormancy and remote management, etc.

## Features

- **Flexible installation:** battery rack stacking, 19/21/23 inches open rack, ground, DFMU cabinet or wall-mounted optional
- **System complies with CE standard:** rectifier complies with UL, CE, TUV standards
- **1U high efficiency rectifier(>96%):** fully output below 55°C
- **Provides comprehensive battery management**
- **System efficiency promotion:** support intelligent dormancy technology
- **Easy installation:** hot-swappable system modules
- **Supports NetEco network management system and in-band/out-band networking:** reduces operation expenditure



TP48300B-N04C2

## Scenarios

- Wireless access network
- Fixed access network
- Convergence network
- Enterprise communication network

## Specifications

Product Type	TP48300B-N04C2	
System	Dimensions	442mm (W) × 360mm (D) × 546mm (H)
	Weight	≤30 kg (Without rectifier modules)
	Cooling mode	Natural cooling
	Installation mode	On the battery rack, 19/21/23 inches open rack, ground, DFMU cabinet, wall-mounted
	Cabling mode	Top inlet and top outlet
	Maintenance mode	Front and top operation and maintenance
	Noise level	≤55 dB (At ambient temperature 25°C)
	Protection level	IP20
AC Distribution	Input mode	220/380 Vac three-phase four-wire; 220 V single-phase
	Input voltage	85 Vac ~ 300 Vac
	Input frequency	45~66 Hz, rated 50 Hz/60 Hz
	Input distribution	1 × 63 A/3P (MCB)
	SPD	20 kA/40 kA, 8/20 μs
DC Distribution	Output voltage	-42~-58 Vdc, rated -53.5 Vdc
	Maximum capacity	18 kW (6 × 3000 W)
	Battery branch(fuse)	2 × 160 A (fuse)
	LLVD branch(MCB)	1 × 100 A/1P, 2 × 80 A/1P
	BLVD branch(MCB)	1 × 63 A/1P, 1 × 32 A/1P, 2 × 16 A/1P
SPD	10 kA/20 kA, 8/20 μs	
Rectifier	Rated power	3000 W(176 Vac ~ 290 Vac)
	Power efficiency	>96%
	Working temperature	-40°C ~ +75°C
	Dimensions	105mm (W) × 281mm (D) × 40.8mm (H)
	Weight	<2 kg
	Power factor	≥0.99
	THD	≤5%
Controller	Signal input	3 AI (Battery temp., ambient temp., ambient humidity) 9 DI (Water, smoke, gate, 6 common DI)
	Alarm output	8 dry contacts
	Communication port	RS232, RS485, FE
	Storage capacity	Up to 2000 historical records
	Display mode	LCD
Environment	Operating temperature	-10°C ~ +50°C
	Storage temperature	-40°C ~ +70°C
	Operating humidity	5% ~ 95%(Non-condensing)
	Altitude	0 ~ 4000m

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# Indoor Integrated Power System

## TP48400B-N20B3

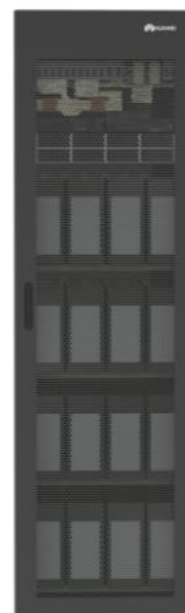


### Introduction

TP48400B-N20B3 is an AC/DC indoor integrated power system with 400A rated output current. It can accommodate 8x1U 48V/50A high efficiency rectifiers and 4 groups of batteries in maximum.

### Features

- 1U rectifier: high density(42.7W/inch<sup>3</sup>), high efficiency(>96%), excellent high temperature performance(fully output below 55°C)
- Can accommodate 4 groups of batteries, providing better use of space
- Compatible with high-temperature batteries, saving site cooling cost by increasing cooling temperature
- Intelligent battery management functions, helping prolong battery lifespan
- Battery anti-reversed polarity function to avoid danger caused by reversed polarity connection
- Abundant I/O ports, including 5 AI, 9 DI and 8 dry contact output
- Realizing centralized and remote site monitoring by zero additional hardware cost through in-band transmission



TP48400B-N20B3

### Application Scenarios

- Wireless access network
- Fixed access network
- Convergence network
- Enterprise communication network

## Specifications

Product Type		TP48400B-N20B3
System	Dimension	600mm(W)×600mm(D)×2000mm(H)
	Weight	≤100kg(without rectifier modules or batteries)
	Cooling mode	Natural cooling
	Installation mode	Ground installation(antistatic floor or ground installation)
	Cabling mode	Top inlet and top outlet
	Maintenance mode	Front operation and maintenance; support installation against the wall (≥100mm)
	Protection level	IP20
	Battery space	32U(4 groups×150Ah)
AC Distribution	Input mode	220/380V three-phase four-wire
	Input voltage	85~300VAC (L-N)
	Input frequency	45~66Hz, rated value: 50Hz/60Hz
	Input capacity	MCB: 1x63A/3P
	SPD	20kA/40kA, 8/20μs
DC Distribution	Output voltage	-42~-58VDC, rated value: -53.5VDC
	Maximum capacity	24kW(8×3000W)
	Battery branch	MCB: 4x125A/1P
	LLVD branch	MCB: 2x100A/1P, 2x63A/1P, 4x32A/1P, 2x16A/1P
	BLVD branch	MCB: 4x63A/1P, 2x16A/1P, 2x10A/1P
	SPD	10kA/20kA, 8/20μs
Rectifier	Max. output power	3000W
	Power efficiency	PSU: >96%*
	Dimensions	105mm(W)×281mm(D)×40.8mm(H)
	Weight	≤2kg
Controller	Signal input	5 AI(Battery temp., ambient temp., ambient humidity, temp1, temp.2) 9 DI(Water, smoke, gate, 6 common DI)
	Alarm output	8 dry contacts
	Communication port	RS232, RS485, FE
	Storage capacity	Up to 50000 historical records and alarm
	Display mode	LCD
Environment	Operating temperature	-10°C~+45°C(including batteries)
	Storage temperature	-40°C ~+70°C
	Operating humidity	5%~95%(non-condensing)
	Altitude	0~4000m

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

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# Indoor Integrated Power System

## TP48600B-N20B1



### Introduction

TP48600B-N20B1 is an AC/DC indoor integrated power system with 600A rated output current. It can accommodate 12x1U 48V/50A high efficiency rectifiers and 3 groups of batteries in maximum.

### Features

- 1U rectifier: high density( $42.7W/inch^3$ ), high efficiency(>96%), excellent high temperature performance(fully output below 55°C)
- Can accommodate 3 groups of batteries, providing better use of space
- Compatible with high-temperature batteries, saving site cooling cost by increasing cooling temperature
- Intelligent battery management function helps to prolong battery lifespan
- Battery anti-reversed polarity function to avoid the danger of device caused by reversed polarity
- Realizing centralized and remote site monitoring by zero additional hardware cost through in-band transmission



TP48600B-N20B1

### Application Scenarios

- Wireless access network
- Fixed access network
- Convergence network
- Enterprise communication network

## Specifications

Product Type		TP48600B-N20B1
System	Dimension	600mm(W)×600mm(D)×2000mm(H)
	Weight	≤130kg (without rectifier modules or batteries)
	Cooling mode	Natural cooling
	Installation mode	Ground installation (Antistatic floor or ground installation)
	Cabling mode	Top inlet and top outlet
	Maintenance mode	Front operation and maintenance; support installation against the wall (≥100mm)
	Protection level	IP20
	Battery space	24U(3 groups×150Ah)
AC Distribution	Input mode	Default: 220/380V three-phase four-wire; Can transform to 220V three-phase three-wire on site
	Input voltage	85~300VAC
	Input frequency	45~66Hz, rated value: 50Hz/60Hz
	Input capacity	MCB: 1x125A/3P
	SPD	20kA/40kA, 8/20μs
DC Distribution	Output voltage	42~58VDC, rated value: 53.5VDC
	Maximum capacity	36kW(12×3000W)
	Battery branch	Fuse: 4x250A
	LLVD branch	Fuse(NT00): 4x160A MCB: 2x63A/1P, 6x32A/1P, 2x10A/1P
	BLVD branch	MCB: 2x63A/1P, 2x32A/1P, 2x10A/1P
	SPD	10kA/20kA, 8/20μs
Rectifier	Max. output power	3000W
	Power efficiency	PSU: >96%*
	Dimensions	105mm(W)×281mm(D)×40.8mm(H)
	Weight	≤2kg
Controller	Signal input	5 AI(Battery temp., ambient temp., ambient humidity, temp1, temp2) 9 DI(Water, smoke, gate, 6 common DI)
	Alarm output	8 dry contacts
	Communication port	RS232, RS485, FE
	Storage capacity	Up to 50000 historical records and alarm
	Display mode	LCD
Environment	Operating temperature	-10°C~+45°C( including batteries)
	Storage temperature	-40°C~+70°C
	Operating humidity	5%~95%(non-condensing)
	Altitude	0~4000m

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

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