PHASAK

DATA SHEET

External battery bank 48 V / 72 V · 19" rack 2U / tower

PH 8321 · PH 8331



PH 8321 · 48 V · for UPS PH 8320 · **PH 8331** · 72 V · for UPS PH 8330

For Smart 19" Series online UPS · PH 8320 (2000 VA) and PH 8330 (3000 VA) · supplied without batteries

48 · 72 V	8 · 12	40 A	2U	8 h
battery voltage · PH 8321 / PH 8331	12 V / 9 Ah batteries · not included	GPS40 battery connector	19" rack · 430 / 610 mm deep · tower	recharge to 90 % from the UPS

The PH 8321 and PH 8331 modules extend the runtime of the Smart 19" Series double-conversion online UPS without changing the unit: PH 8321 (48 V) for the 2000 VA PH 8320 and PH 8331 (72 V) for the 3000 VA PH 8330. They share the UPS format (19" rack 2U, also installable as a tower using the ears as base stands) and feature a 40 A battery connector, a protection fuse replaceable from the rear panel and an input connector for daisy-chaining additional modules. They are supplied empty: they take 8 or 12 × 12 V / 9 Ah batteries (PHASAK PHB 1209) in a removable pack held by straps.

Reference	Compatible UPS	Voltage	Batteries (not included)	Dimensions (H × W × D)	Weight w/o batteries	EAN
PH 8321	PH 8320 · 2000 VA	48 V	8 × 12 V / 9 Ah	88 × 438 × 430 mm	6.2 kg	0745604518086
PH 8331	PH 8330 · 3000 VA	72 V	12 × 12 V / 9 Ah	88 × 438 × 610 mm	8.3 kg	0745604518079

FEATURES

- Extended runtime without replacing the UPS: direct connection to the external battery connector of the PH 8320 / PH 8330
- Daisy-chainable: covered input connector to add further modules in cascade
- 40 A GPS40 battery connector · battery cable and earth cable included
- Overload-protection fuse, replaceable from the rear panel
- Same 2U chassis as the UPS: 430 mm (PH 8321) or 610 mm (PH 8331) deep · rack ears included, which also serve as tower base stands
- Supplied without batteries: 8 or 12 × 12 V / 9 Ah units (PHB 1209) in a removable pack
- Steel enclosure with front ventilation grille · 0 – 40 °C · 0 – 90 % RH non-condensing
- PHASAK 3-year warranty

Front panel

2U chassis with ventilation grille · common to both models



Same format as the Smart 19" Series UPS · 438 mm wide without ears

Package contents

Batteries not included

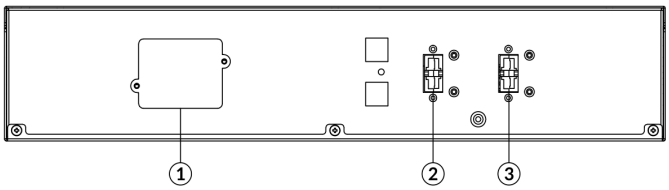
	Battery module	1
	User manual	1
	Battery cable (GPS40 – GPS40)	1
	Rack-mount ears	2
	Flat-head screws M4×8L	8
	Pan-head screws M5×12L	4
	Screw-hole dust covers	8
	Earth cable	1

Technical specifications	PH 8321	PH 8331
GENERAL		
Type	External battery module for online UPS	
Compatible UPS	PH 8320 · 2000 VA	PH 8330 · 3000 VA
Format	19" rack 2U · tower installation possible	
Warranty	3 years	
BATTERIES		
Nominal battery voltage	48 V DC	72 V DC
Batteries accepted	8 × 12 V / 9 Ah (2 strings of 4)	12 × 12 V / 9 Ah (2 strings of 6)
Battery type	Valve-regulated lead-acid (VRLA) 12 V / 9 Ah · compatible with PHASAK PHB 1209	
Batteries included	No · removable pack held by steel straps	
Recharge time	8 h to 90 % (through the UPS, indicative)	
CONNECTION AND PROTECTION		
Battery connector	GPS40 · 40 A	
Battery cable	GPS40 – GPS40, black · included	GPS40 – GPS40, red · included
Daisy-chaining	Covered input connector for additional modules	
Overload protection	Replaceable fuse, accessible from the rear panel	
Earth	Earth cable included · terminal on the rear panel	
PHYSICAL AND ENVIRONMENT		
Dimensions (H × W × D)	88 × 438 × 430 mm	88 × 438 × 610 mm
Weight without batteries	6.2 kg	8.3 kg
Weight with batteries (indicative)	≈ 24.6 kg	≈ 36.0 kg
Operating temperature	0 – 40 °C	
Relative humidity	0 – 90 % non-condensing	
EAN	0745604518086	0745604518079
CONTENTS AND ACCESSORIES		
Package contents	Module · battery cable · earth cable · 2 rack ears · 8 M4×8L screws · 4 M5×12L screws · 8 hole covers · user manual	
Compatible batteries	PHASAK PHB 1209 · 12 V / 9 Ah · 8 pcs (PH 8321) · 12 pcs (PH 8331)	
Optional accessory	PHASAK PH 9112 adjustable rail kit · depth 464 – 738.6 mm · EAN 0745604517836	

Weight with 8 / 12 × 12 V / 9 Ah batteries fitted. Batteries are not included.

Rear panel

Figure from the user manual



Common to PH 8321 and PH 8331

① Replaceable fuse cover (replacement by qualified personnel)

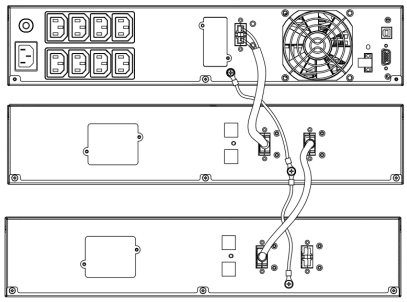
② Battery output connector: to the UPS or to the previous module

③ Input connector (covered): to daisy-chain the next module

⏚ Earth terminal

Cascade connection

UPS + battery modules



The first module connects to the external battery connector of the UPS; the next ones, to the input connector of the previous module. Earth cable on every module.

Installation

Summary of the user manual

Rack mounting	On rails (PH 9112 kit) and secured at the front with the 4 M5×12L screws; takes 2U (positions 1 to 6).
Tower mounting	With the ears screwed to the bottom as base stands and covers in the unused holes.
Connection	With the UPS switched off: battery cable to the external battery connector of the UPS and earth cable with screws. Only with the UPS of the same voltage.
Batteries	Installation and replacement by qualified personnel, with the module disconnected: top cover, straps, removable pack.