

UPS


USPS series



Switching power supplies for PCs with UPS function are modern and innovative units. They combine the functions of a switching power supply with an uninterruptible power supply in one housing (called USPS). The batteries are placed in a separate 5.25" box.

The switching power supplies (SPS) can provide a continuous DC power from 300, 350 respectively 400Watts. In battery mode the unit can supply additional 140Watts maximum to the AC output about its inverter, enough for 21" monitors. In whole the unit can provide a power from 500 or 600VA in battery mode.

The dimensions of the SPSs are equal to standard PS/II form factor, the Accu box is same to a 5.25" CD-ROM drive. The SPSs are equipped with an active PFC circuit and supports P4 boards. They provides the usual PC voltages according to ATX specification v2.03.

A sensor does observe continuously the incoming main power voltage. In the event of a mains failure the unit switches immediately, means without any transfer time (online), in battery mode and does supply voltage to the PC without any interrupt. About the batteries will be provided voltage also to the AC output, after the inverter did start to create a 230V voltage with modified sine wave.

The backup time for a PC with connected 15" Monitor ist about 3 to 15 minutes, depend from power need of the PC load.

The unit has an efficiency from about 70% in mains power mode like other power supplies.

The wide range of the mains input voltage from 100 to 240Vac (except AUP-X-300B) allows to be used worldwide. The unit does switch in battery mode at -15% of the nominal voltage (110/230Vac). The mechanical and electrical installation is same to usual PC switching power supplies and very simple.

Protecting functions against overload, short circuit, overvoltages and battery depth discharge as well as integrated filters for main power disturbances guarantee a safely operation.

A LED display on the front panel of the battery pack and acoustical warning signals indicates, that a main power failure does occur or that the battery capacity is weak.

A DB9 interface with closure contacts allows a communication with the PC, sends messages in case of main power failure or battery low condition and can receive a shutdown signal. The required shutdown software is option.

Main features:

- ATX form factor, PS/II size
- pure DC power 300, 350 and 400W
- 140W AC power
- Inverter power 500 and 600VA
- wide input voltage range
- without transfer time for DC (on-line)
- LED's for UPS and mains state
- diverse protection functions
- EMI / RFI filters
- DB9 interface
- CE, RoHS, PFC
- EN 60950

UPS PC Power supply USPS series

Specification

Alle Data are measured at 25°C. Technical Modification reserved.
Print failures or mistakes aren't excluded.

MODEL	USPS	AUP-X-350-V4	AUP-X-400-V4	AUP-X-350-V5	AUP-X-400-V5
INPUT	Nominal Voltage Tolerance Frequency	100 - 240 Vac +15/-15 % 47 ... 63 Hz			
OUTPUT DC	DC power (max.) + 5V (± 5%) + 3,3V (± 5%) + 12V (± 10%) - 5V (± 10%) - 12V (± 10%) + 5V SB Efficiency	350W 32A } ≤185W 26A (30A)	400W 35A } ≤200W 30A (33A)	350W 32A } ≤185W 26A (30A)	400W 35A } ≤200W 30A (33A)
OUTPUT AC	AC power -Voltage -Frequency -Signal -Transfer time	1A 1A 2,2A typ. >97% at normal mode (DC) 140W (max. AC Power) in normal mode same as U _{Input} . in battery mode U _{nominal} ± 5% 50/60 Hz ± 1Hz modified sine wave, PWM < 16ms			
BATTERY	backup time recharge time Type Capacity Battery pack	3 / 12 min. (depend from load), at typical PC-Load: 5-10 min. (w. 15" monitor) 10-16 h (on 90% capacity) maintenancefree, valve regulated, Lead-Acid 2x 12V / 2.5Ah 2x 12V / 2.5Ah 2x 12V / 2.5Ah 2x 12V / 5.0Ah BP-5E (BP-5C, -5H, -5Q option) BP-5C (BP-5E, -5H, -5Q option)			
DISPLAY	LED's for	LINE ON, UPS ON, BATTERY LOW			
PROTECTION and FILTERING	EMI / RFI Over voltages Batt. deep disch. Overload Short circuit	Yes Yes (input protection by fuse) Yes Yes, electronical (135% SPS, 200VA UPS) Yes, automat. shutdown			
WARNING	Battery mode Battery low	Yes, optical and acoustical Yes, optical and acoustical			
PHYSICAL	Weight Dimens. (WxHxD)	ca. 2 Kg (SPS), 3 Kg (battery pack, 5 Kg BP-5Q) 150 x 86 x 140 mm ³ (SPS) 208 x 42 x 145 mm ³ (batt. pack BP-5C/E)			

GENERAL FEATURES

- state of the art technology
- DC outputs w/o. transfer time (on-line)
- Electron. design according to ATX standard V2.03
- easy installation a. operation, similar to conv. SPS
- SPS electronics, converter, inverter a. batterie charger integrated in the same case, batteries in a 5.25" box
- USPS can be installed in IBM compatible PC's, Accupack needs 1x 5.25" CD-ROM drive bay
- automat. restart when main power recovers
- after connection to the mains charging of Accu's starts immediately, PC don't need to be turned on
- maintenance free, sealed lead acid batteries
- DB9 interface reports about UPS and mains states and allows a shutdown of PC (Software as option)
- CE (EMC, LVD), UL, c-UL

- optical and acoustical warning signals, when mains fails or battery low condition occurs
 - integrated EMI/RFI filters
 - patented electronical design, compact dimensions
- Environment conditions:
- Operating/Storage temperature: 0 ~ +50°C / -20 ~ +70°C
 - Rel. Humidity: +20% ~ 95%

Battery packs:

- Standard: BP-5E (Metal front panel, LED display)
- Standard: BP-5E (Plastic front p., switch, LED display)
- hot swap Battery pack also available on need

Ordering hints: for completely systems SPS a. Battery Kit are to order separately, f.e. AUP-X-350-V5 + BP-5C