

» eNSP3-450P-USB «



350 Watt

- » UPS power supply for industrial PC
- » Temperature range 0°C to +60°C
- » USB Interface

eNSP3-450P-USB

350 Watt

The eNSP3-450P-USB combines UPS functions with PC power supply. The UPS shows a conventional PS/2 form factor and can replace all standard PC power supplies. In case of an interruption of the source, the UPS

functions will set up instantaneously and feed the load with energy taken from its external 5.25" battery pack. Communication to the PC is realized thanks to its USB interface.

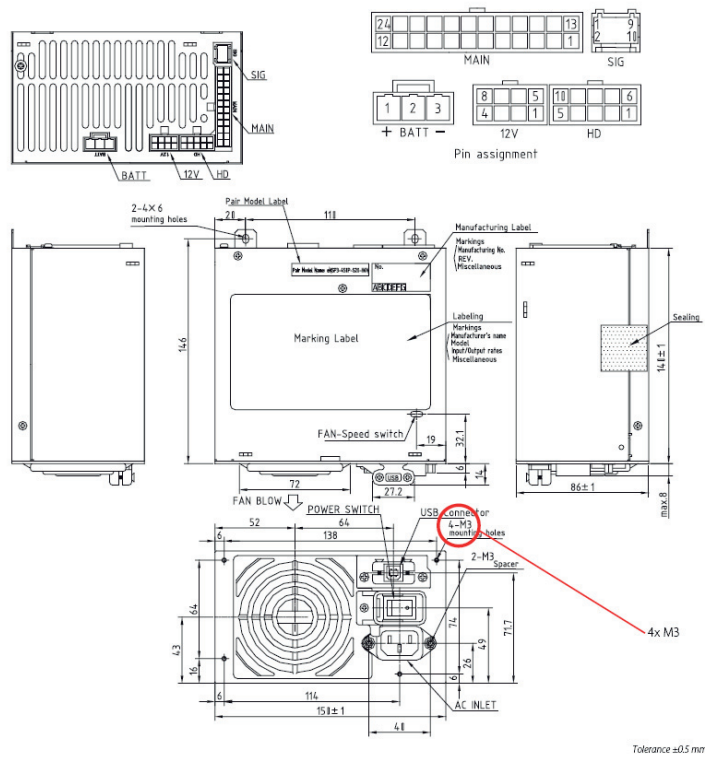
Technical Information

Input voltage	85 - 264 VAC / Active PFC
Input frequency	47 - 63 Hz
Input current	6 A max. (115 VAC), 3 A max. (230 VAC)
Inrush current	<31 A (100 VAC) / <75 A (240 VAC)
Efficiency	77 % typ. (240 VAC)
Power-Good-Signal	Switch on delay 100 - 500 ms Switch off delay 1 ms
Protection	Short circuit protection: at each output Overvoltage protection: +5 V (5.7 - 7.0 V) / +3.3 V (3.6 - 4.3 V) / +12 V (13.4...15.6 V) Switch off
Earth leakage current	<1 mA / 200 VAC
Safety / EMC	CB: IEC 60950-1, UL 60950-1, CE
Operating temperature	0°C to +60 °C
Derating	85 - 90 VAC at 90 % load / 45°C to 60°C 2 % / K
MTBF	83 000 h
Storage temperature	-25°C to +70 °C
Operating humidity	5 % to 90 %
Dimensions	150 x 140 x 86 mm ±0.5 mm
Weight (net)	1.8 kg
Battery types	BP-2423N: (2 x 12 V / 2.3 Ah), maintenance-free lead batteries RBS02A-P24/2.3L: (2 x 12 V / 2.3 Ah), maintenance-free lead batteries, in clip-on frame BS10A-H24/2.0L: NiMH-battery with integrated charger
Back-up time	BP-2423N: app. 2 min. at 100 % charge, app. 6 min. at 50 % charge RBS02A-P24/2.3L: app. 2 min. at 100 % charge, app. 6 min. at 50 % charge BS10A-H24/2.0L: app. 3.5 min. at 100 % charge, app. 11 min. at 50 % charge
Battery charge current	0.5 A max., battery is also charged when the PC is switched off
Battery charger	27.3 V, temperature compensated
Battery control	19 V ±0.5 V „Batterie low“ triggering 17 V ±0.5 V „Shut down“ triggering
Fan switch	HIGH: always full speed LOW: temperature controlled speed

Ordering Information

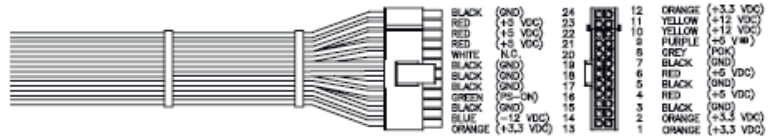
Article No.	Output voltage	Output current min	Output current max	Load regulation	Ripple & Noise
eNSP3-450P-USB	+3.3 V	0 A	20 A	±4 %	50 mV
	+5 V	0 A	22 A	±4 %	50 mV
	+12 V	0 A	22 A	±5 %	120 mV
	-12 V	0 A	0.5 A	±5 %	120 mV
	-5 V	0 A	2 A	±5 %	100 mV

Drawing ENSP3-450P-USB



Cable harness ENSP3-450P-USB

CB-ENSP3-20+4, 500 mm



CB-ENSP3-4+4, 550 mm



CB-ENSP3-HSF

HD, 460 mm

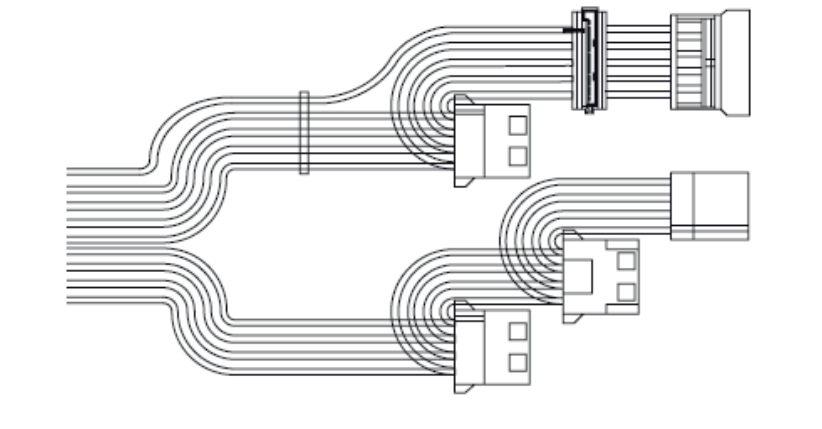
SATA, 150 mm

SATA, 200 mm

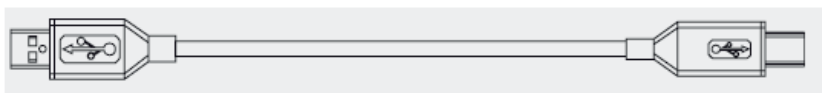
HD, 400 mm

HD, 150 mm

FDD, 150 mm



CB-USB01, 500 mm



PIN Functions

PIN	MAIN	HD	-SIG	12 V	USB	BATT
1	+3.3 V Sense	+3.3 V	AC Fail	COM	V BUS	Batt +
2	+3.3 V	+5 V	Shut down	COM	D-	Charge cont.
3	COM	COM	Batt low	COM	D+	Batt -
4	+5 V	COM	N.C.	COM	COM	
5	COM	+12 V	Fan M	+12 V		
6	+5 V	+3.3 V	PS_ON	+12 V		
7	COM	+5 V	COM	+12 V		
8	PWR_OK	COM	+3.3 V Sense	+12 V		
9	+5 V	COM	N.C.			
10	+12 V	+12 V	+5 V			
11	+12 V					
12	+3.3 V					
13	+3.3 V					
14	-12 V					
15	COM					
16	PS_ON					
17	COM					
18	COM					
19	COM					
20	N.C.					
21	+5 V					
22	+5 V					
23	+5 V					
24	COM					

Ordering Information

Article No.	Description
BP-2423N	Batterypack with lead-batteries 24 V / 2.3 Ah
RBS02A-P24/2.3L	Batterypack with lead-batteries, removable (clip-on frame)
BS10A-H24/2.0L	Batterypack with NiMH-batteries 24 V / 2.0 Ah
RUPS 2000-B1	UPS-Management-Software (CD-ROM)
ENSP3-USB-INT	Internal USB interface holder
ENSP3-REBOOT	Automatic startup PC board

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