

PRODUCT PRESENTATION

PROTECT B.PRO

DATA&IT, C-UPS



AEG
POWER SOLUTIONS

AEG'S COMMERCIAL COMPACT-UPS PRODUCT PORTFOLIO AND FIELD APPLICATION

Surge protection	Home, SoHo	PROTECT BASIC Power strip for all standard applications 	PROTECT TRAVEL Security on the move for safety charging of your devices 	PROTECT ENTERTAINMENT Intelligent protection for entertainment equipment with master-slave-function 	PROTECT TWINPOWER Security for flexible connectivity and safe power supply 	PROTECT BUSINESS Business solution with surge protection and USB-Charger 	PROTECT OFFICE Compact protection for PC and peripheral equipment 
		PROTECT HOME 600 VA Complete protection for multimedia applications 	PROTECT alpha 450 bis 1200 VA Suitable protection for SoHo applications, telephone equipment, NAS systems, PCs 	PROTECT A 500 bis 1400 VA Protection for PCs, workstations and telephone equipment 	PROTECT B 500 bis 1500 VA sinusoidal outputvoltage, Surge protection for telephone, fax, router and network 		
Compact UPS	Office, SoHo, IT segment	PROTECT B.PRO 750 bis 3000 VA Efficient rack / tower UPS for small server and network components with sinusoidal output 	PROTECT C 1000 bis 10000 VA Tower UPS for sensitive networks, intranet and internetserver 	PROTECT D 1000 bis 10000 VA Compact UPS for rack mounted protection of server, network and IT equipment 	PROTECT 1 10000 bis 20000 VA For small data centres, protection of cash till systems & building facilities 	PROTECT 1.M 4000 bis 24000 VA Scalable and modular high performance UPS system for the IT sector 	

CLASSIFICATION ACC. TO UPS PRODUCT NORM IEC 62040-3



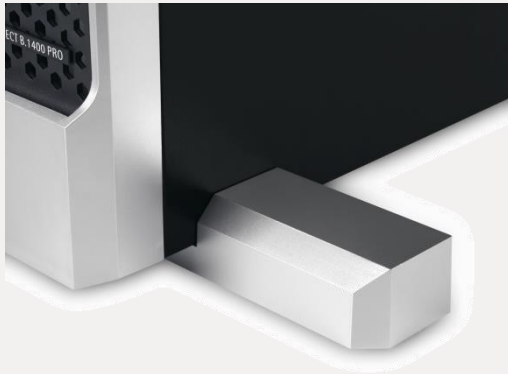
	Voltage Phenomenon		Time	e.g.	IEC 62040-3	UPS solution	Arrester solution
↑ PROTECT B.i.PRO ↓	1.	Outage - blackouts	> 10 ms		VFD Voltage + Frequency Dependent	Classification 3 Offline	—
	2.	Sags / brownouts					—
	3.	Dynamic overvoltage					—
	4.	Undervoltage	continuous		VI Voltage Independent	Classification 2	—
	5.	Overvoltage	continuous			Line-Interactive	—
	6.	Transients (Surge)	< 4 ms		VFI Voltage + Frequency Independent	Classification 1 (true) Online real Double-Conversion	Limited protection via UPS (extended protection recommended (10.)) —
	7.	Frequency variations	sporadic				—
	8.	Voltage distortion (Burst)	periodic				see as well 10. —
	9.	Voltage harmonics	continuous				—
	10.	Lightning	sporadic			—	Surge- and Over-voltage protection (IEC 60364-5-534)

FEATURES / PRODUCT HIGHLIGHTS



RACK/TOWER CONVERTIBILITY

- Rack/ Tower form factor to fit in limited working environment
- Rotatable LCD display (just pull out/ rotate/ slide in)
- Always 2U incl. batteries



PERFORMANCE – MORE POWERFUL SERIES

POWER TYPE RATING AT PF=0.9 LAG FOR ALL PROTECT B.PRO MODELS

- 750 VA / 675 W
 - 1000 VA / 900 W
 - 1400 VA / 1260 W
 - 1800 VA / 1620 W
 - 2300 VA / 2070 W
 - 3000 VA / 2700 W
- More power for modern SPS loads
 - Narrow - graded power steps to fit exactly the UPS power demand



Predecessor PROTECT B.3000
3000 VA / 2100 W

*~ 30% more
active power*



PROTECT B.3000 PRO
3000 VA / 2700 W

MORE EASY TO OPERATE

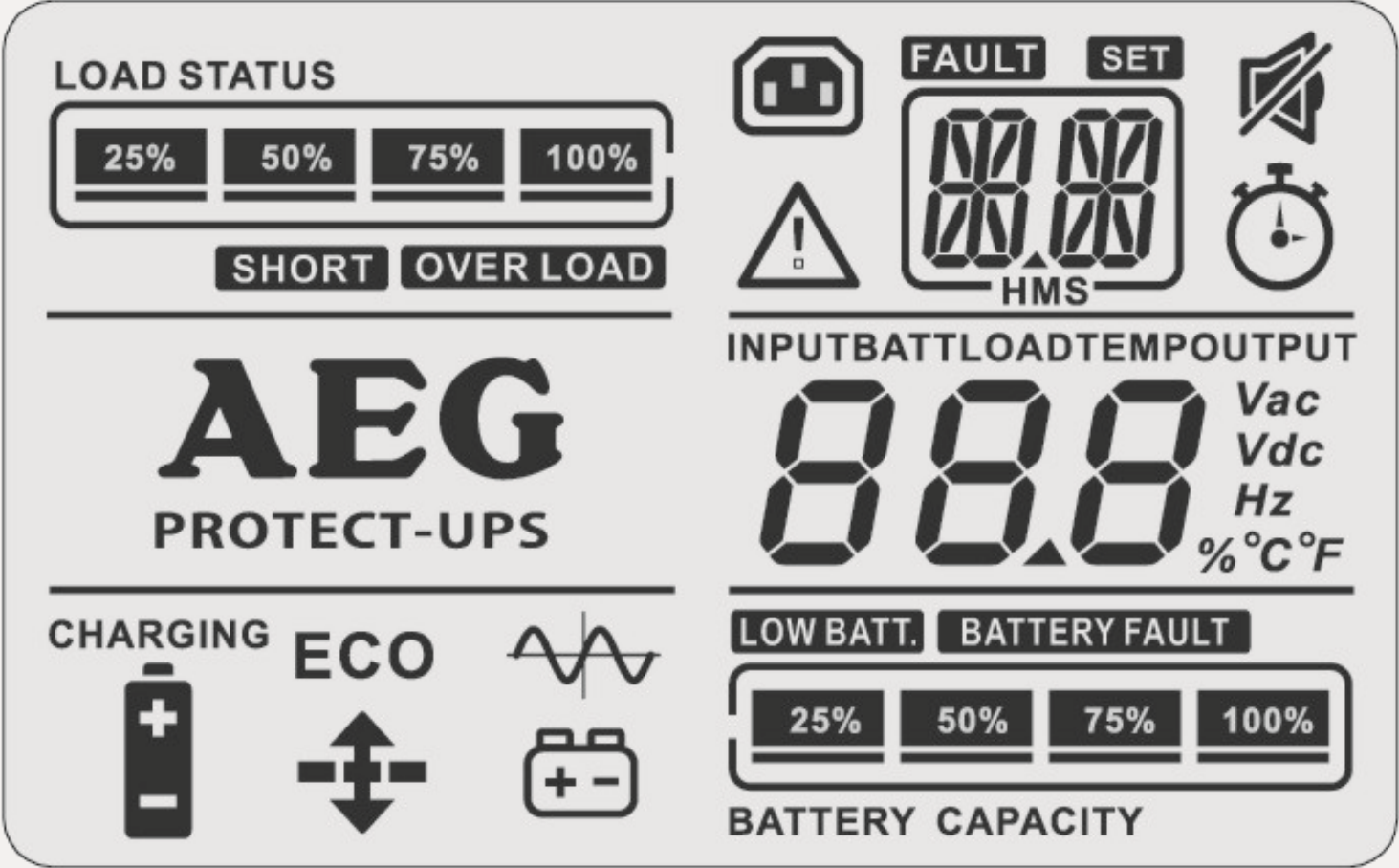


- Measurements
(Input/ output data, load level [%], autonomy time [min.], temperature [°C])
- Settings by panel (output voltage, performance of output segment)
- Alarm messages, e.g. overload, short circuit, low batt, battery fault
- Audible alarm can be disabled

- Status display
- Separate bargraphs for load level & battery capacity



INFORMATION ON LCD DISPLAY



DISPLAY MESSAGES (SAMPLES)



Normal operation

66% load / battery fully charged



UPS switched to battery operation

6min. remaining
autonomy time



5min. autonomy time
battery voltage 43.9V

MODEL VARIETY



all models
with integrated battery system

750 VA



1000 VA



1400 VA



1800 VA



2300 VA



3000 VA



1000 VA plus
battery extension



1800 VA plus
battery extension



3000 VA plus
battery extension



REAR VIEW

PROTECT B.750PRO/ B.1400PRO



B.1000PRO/ B.1800PRO/ B.3000PRO
with connector for battery extension



Fig. shows B.1800PRO with B.1800BP PRO

PROTECT B.2300 PRO / PROTECT B.3000 PRO
(B.3000PRO with connector for ext.battery pack)



- 2 outlet segments (1 segment programmable)
- Overvoltage protection for data interface, phone, fax, modem and network (RJ11&RJ45)
- Speed controlled fans
($\leq 45\text{dB(A)}$ at ECO mode & max. 70% load)
- Emergency Power Off contact
- Dual- monitoring communication interface
(RS232 or USB in parallel to mini- slot)

BATTERY PACKS / -EXTENSION (BP)



Height: 2U



- Strong 2 stage battery charger for quick battery recharge
- Autom. battery check (weekly)

Autonomy time (pf = 0.9 lag.)
Data at full load / half load [min.]

	B.750 PRO	B.1000 PRO	B.1400 PRO	B.1800 PRO	B.2300 PRO	B.3000 PRO
UPS with integrated battery system	3.5 / 10	3.5 / 11	5 / 13	4.5 / 13.5	3.5 / 13.5	4 / 11
UPS with integrated battery system plus additional battery extension	---	14 / 36	---	17.5 / 43.5	---	15 / 36

Height: 2x2U



- Automatic detection of possibly connected battery pack extension
- High-grade battery system (proprietary brand)
- All models equipped with temperature compensated float charging voltage

AUTONOMY TIME DATA AT PART LOAD



NEW

NEW

NEW

PROTECT B.PRO at pf = 0.9 lag. and at ...		< < < < < Autonomy time at > > > > >				
		~ 10% load	~ 25% load	~ 50% load	~ 75% load	100% load
PROTECT B.750 PRO (750 VA) with integrated battery system		= 70 W 77 min.	= 170 W 25 min.	= 340 W 10 min.	= 500 W 6.5 min.	= 675 W 3.5 min.
NEW	PROTECT B.1000 PRO (1000 VA) with integrated battery system	= 90 W 68 min.	= 225 W 23 min.	= 450 W 11 min.	= 675 W 6.5 min.	= 900 W 3.5 min.
	with 1 x PROTECT B.1000 BP PRO	207 min.	72 min.	36 min.	22 min.	14 min.
PROTECT B.1400 PRO (1400 VA) with integrated battery system		= 125 W 90 min.	= 315 W 33 min.	= 630 W 13 min.	= 945 W 8.5 min.	= 1260 W 5 min.
NEW	PROTECT B.1800 PRO (1800 VA) with integrated battery system	= 160 W 85 min.	= 405 W 32 min.	= 810 W 13.5 min.	= 1215 W 8 min.	= 1620 W 4.5 min.
	with 1 x PROTECT B.1800 BP PRO	258 min.	99 min.	43.5 min.	27.5 min.	17.5 min.
PROTECT B.2300 PRO (2300 VA) with integrated battery system		= 210 W 100 min.	= 520 W 32 min.	= 1035 W 13.5 min.	= 1550 W 6.5 min.	= 2070 W 3.5 min.
NEW	PROTECT B.3000 PRO (3000 VA) with integrated battery system	= 270 W 80 min.	= 675 W 26 min.	= 1350 W 11 min.	= 2025 W 6.5 min.	= 2700 W 4 min.
	with 1 x PROTECT B.3000 BP PRO	243 min.	81 min.	36 min.	23 min.	15 min.

AUTONOMY TIME DATA AT PART LOAD



NEW

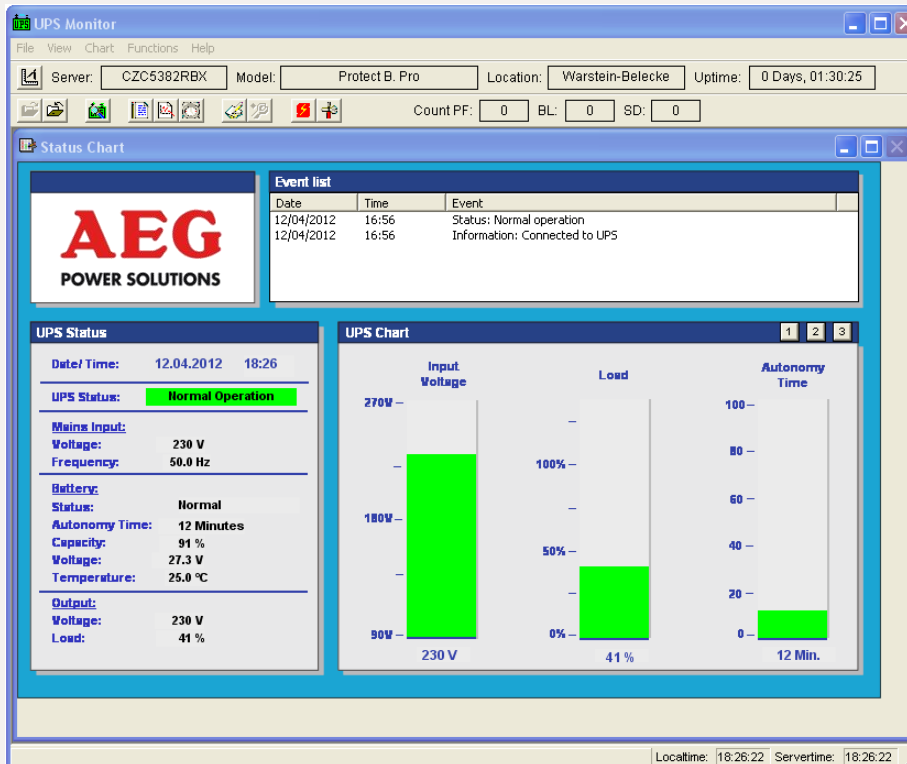
NEW

NEW

PROTECT B.PRO at pf = 0.7 lag. and at ...		< < < < < Autonomy time at > > > > >				
		~ 10% load	~ 25% load	~ 50% load	~ 75% load	100% load
NEW	PROTECT B.750 PRO (750 VA) with integrated battery system	= 50 W 101 min.	= 130 W 34 min.	= 260 W 15 min.	= 390 W 9 min.	= 525 W 5.5 min.
	PROTECT B.1000 PRO (1000 VA) with integrated battery system	= 70 W 90 min.	= 175 W 30 min.	= 350 W 15 min.	= 525 W 9.5 min.	= 700 W 5.5 min.
	with 1 x PROTECT B.1000 BP PRO	273 min.	93 min.	48 min.	31.5 min.	19.5 min.
NEW	PROTECT B.1400 PRO (1400 VA) with integrated battery system	= 100 W 120 min.	= 245 W 45 min.	= 490 W 19 min.	= 735 W 12 min.	= 980 W 7 min.
	PROTECT B.1800 PRO (1800 VA) with integrated battery system	= 125 W 115 min.	= 315 W 43 min.	= 630 W 20 min.	= 945 W 12 min.	= 1260 W 7 min.
	with 1 x PROTECT B.1800 BP PRO	348 min.	132 min.	63 min.	39 min.	23 min.
NEW	PROTECT B.2300 PRO (2300 VA) with integrated battery system	= 160 W 130 min.	= 400 W 45 min.	= 805 W 20 min.	= 1205 W 10 min.	= 1610 W 6 min.
	PROTECT B.3000 PRO (3000 VA) with integrated battery system	= 210 W 110 min.	= 525 W 35 min.	= 1050 W 15 min.	= 1575 W 10 min.	= 2100 W 6 min.
	with 1 x PROTECT B.3000 BP PRO	333 min.	108 min.	48 min.	33 min.	21 min.

SOFTWARE PACKAGE "COMPUWATCH" INCLUDED

... for Windows / Linux / Mac OS X / Unix a.o.
included in the delivery as standard



The screenshot shows the 'UPSMAN' window with the 'Event Configuration Overview' tab selected. It displays a table for configuring event notifications. The table has columns for 'Events (1)' and various notification methods: Message, Acoustic Message, Send E-Mail, Send SMS, Send RCMMD, Execute Program, MS Log, Send Shutdown, Log Event, Send Trap, and Custom. The 'Events (1)' column lists various events, and the notification columns show 'X' marks indicating which methods are configured for each event.

Events (1)	Message	Acoustic Message	Send E-Mail	Send SMS	Send RCMMD	Execute Program	MS Log	Send Shutdown	Log Event	Send Trap	Custom
Battery operation	X										
Battery operation res	X										
System shutdown	X										
UPSmanager started	X										
UPS connection lost	X										
UPS connection res	X										
Overload	X										
Overload restored	X										
Overtemperature	X										
Overtemp. restored	X										
Battery low	X										
Scheduler Shutdown	X										
Input bad	X										
General alarm	X										
Load > 80 %	X										

The screenshot shows the 'Extended Commands' dialog box. It contains two sections: 'UPS Control Function' and 'Battery Test'. The 'UPS Control Function' section has 'Start' and 'Cancel' buttons. The 'Battery Test' section also has 'Start' and 'Cancel' buttons. Below these sections, there is a red warning message: 'Attention: Power up reset of load is being carried out! UPS OFF in 1 min. / UPS ON in 2 min.!'.

BATTERY CONNECTION



Front panel incl. LCD display
remains to the UPS unit
(hot-swappable process)

Easy handling, e.g.
flip-over front cover



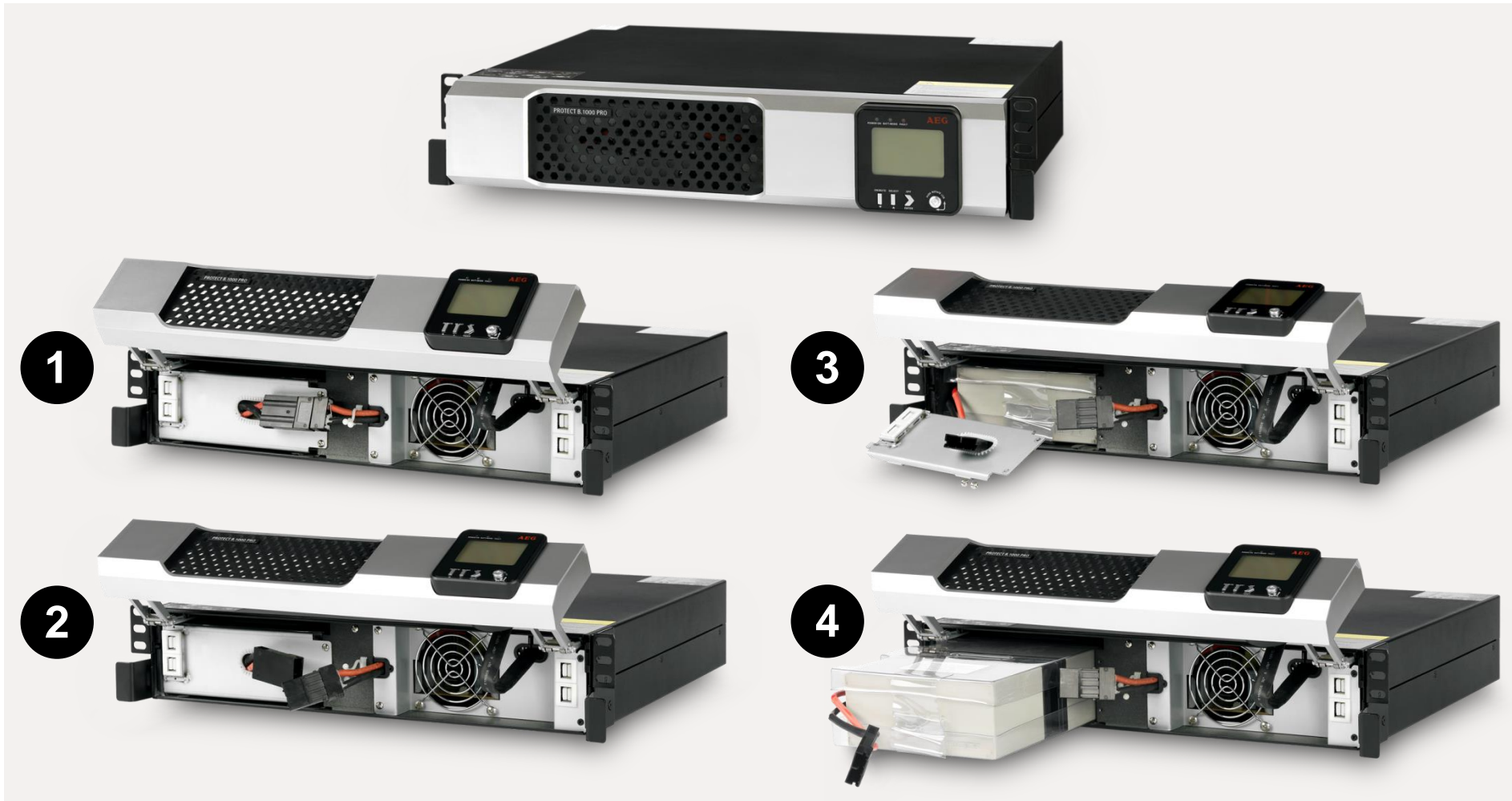
Front cover opening
without tool necessity

Connection for
internal battery
with fixed polarity
(+ / -)

During the whole process the
UPS can stay mounted in the
network rack! You don't have
to disassemble anything !



EASY BATTERY REPLACEMENT E.G. INTEGRATED SLIDE-IN UPS BATTERY



SHIPMENT PROTECT B.750 PRO UP TO PROTECT B.1800 PRO

AEG

PROTECT B.1000 PRO



1 x PROTECT B.1000 PRO
2 x rack mounting brackets



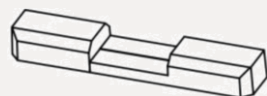
2 x mains cords
(EU & UK)



1 x RS232 cable



1 x USB cable



2 x device stands



2 x load cords



1 x operating instruction
(german/english)



1 x CompuWatch CD



5 x CompuWatch licenses

SHIPMENT PROTECT B.2300 PRO AND PROTECT B.3000 PRO

AEG

PROTECT B.3000 PRO



1 x PROTECT B.3000 PRO
2 x rack mounting brackets



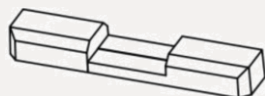
2 x mains cords
(EU & UK)



1 x RS232 cable



1 x USB cable



2 x device stands



3 x load cords
2x10A / 1x16A



1 x operating instruction
(german/english)



1 x CompuWatch CD



5 x CompuWatch licenses

COMPETITIVENESS • SUM UP



- **More active power**
(pf of 0.9 lagging, suitable for all kind of critical loads)
- **Compact size (only 2U for all models), modern solid look**
(integrated battery, metal case, Rack- / Tower convertible)
- **Easiest intuitive operation**
(rotatable LCD display with UPS status and measurements, autonomy time in minutes, programmable outlet segment)
- **Strong battery charger with intelligent battery management**
(two stage technology incl. temperature compensation)
- **Battery pack extensions for 1000 VA / 1800 VA / 3000 VA**
Easy "hot-swappable" battery replacement for all models
("flip-over" panel - UPS can stay in the rack completely)
- **Highest communication flexibility (dual-monitoring interface)**