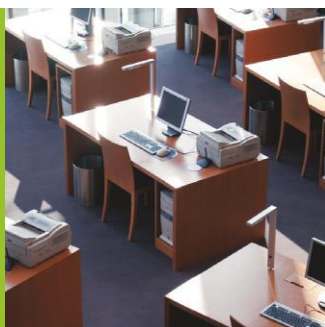


DATA SHEET**EASYLINE AVR USB**

650/850/1200 VA

**FRENCH
OUTPUT OUTLETS****AUTOMATIC VOLTAGE
REGULATION SYSTEM
(AVR)****LCD PANEL****USB COMMUNICATION
INTERFACE**

EASYLINE AVR USB series comprises economical UPS units for protecting home and office computer equipment. They protect the connected equipment against voltage decays and drops, and eliminate the possibility of damage arising from overvoltage in the mains. EVER AVR USB series UPS units are mainly used with **PCs, DTP stations and workstations, cash registers, CCTV and ICT equipment.**

This series features a USB communication interface and automatic mains voltage regulation (AVR). The built-in LCD display allows constant monitoring of the input and output voltage, battery charge level and UPS load, while the cold start function lets you start the UPS disconnected from the mains.

FEATURES

- Automatic voltage regulation system (AVR)
- Built-in LCD panel
- Microprocessor control of parameters
- 2 backup output sockets in French and IEC (EASYLINE 1200 AVR USB) standard
- Automatic restart when mains power is back
- Battery charging when the unit is off
- "Cold start" – option of starting the UPS without connection to the mains
- USB port (USB cable included)
- Telecommunication filter (RJ11 port) (EASYLINE 650 / 850 AVR USB)
- LAN filter (EASYLINE 1200 AVR USB)
- Monitoring and management software PowerSoft Professional

SERVICE

- Door-to-door support
- 2-year warranty for the UPS
- 1-year warranty for batteries
- Execution in 14 working days





TECHNICAL DATA

PARAMETERS \ TYPE	EASYLINE 650 AVR USB	EASYLINE 850 AVR USB	EASYLINE 1200 AVR USB
Part number	T/EASYTO-000K65/00	T/EASYTO-000K85/00	T/ EASYTO-001K20/00
Output Power (Apparent / Active) ¹⁾	650 VA 360 W	850 VA 480 W	1200 VA 600 W
GENERAL DATA AND ENVIRONMENTAL			
Topology	VI (line interactive)		
Number of phases (in/out)	1 / 1		
Housing Type	Tower		
Operating temperature ²⁾	0 ÷ + 40 °C		
Storage temperature	0 ÷ + 40 °C		
Relative humidity during operation	0 ÷ 90 % (non-condensing)		
Relative humidity during storage	0 ÷ 90 % (non-condensing)		
Operating elevation ³⁾	< 2000 m		
Protection level	IP20		
Environment of installation	Office / industrial rooms with low level of pollution		
Cooling	Gravity		
INPUT			
Rated input voltage	230 V AC		
Input voltage range and tolerance	170 ÷ 280 V AC ± 7 %		
Input voltage rated frequency	50 Hz		
Input voltage frequency range and tolerance	45 ÷ 55 Hz ± 1 Hz		
Transfer thresholds: Mains – UPS	170 ÷ 280 V AC ± 7 %		
OUTPUT			
Rated output voltage	230 V AC		
Output voltage range and tolerance - normal mode	230 V AC ± 10 %		
Output voltage range and tolerance - battery mode	230 V AC ± 10 %		
Automatic Voltage Regulation (AVR)	+/- 10%		
Shape of output voltage (battery mode / normal mode)	Stepped approximation of sine wave / Same as input		
Output voltage rated frequency	50 Hz		
Output frequency range and tolerance – mains operation mode	Synchronously		
Output frequency range and tolerance – battery mode	50 Hz ± 1Hz		
Output voltage filtering	RC		
Transfer thresholds: UPS– Mains	176 V ÷ 274 V AC ± 7 %		
Transfer time to battery mode	< 6 ms		
Transfer time to normal mode	0 ms		
BATTERIES AND TYPICAL RUNTIME			
Internal Batteries	12 V / 7 Ah VRLA	12 V / 9 Ah VRLA	12 V / 7 Ah VRLA
Number of internal batteries	1	1	2
Maximum overall internal batteries capacity	7 Ah	9 Ah	7 Ah
Backup time – internal batteries (80 % / 50 % Pmax)	2 / 8 min	2 / 6 min	4,5 / 11 min
Nominal voltage DC circuit	12 V DC	12 V DC	24 V DC
Internal batteries maximum charging time – after discharging at 80 % Pmax *	6 h		

* Charging time to 90% battery capacity.

Notes:

1) For standard operation, the load applied to the output must not exceed 80% of the value in the table. The power margin is necessary to ensure continuous work of the connected devices in the case of instantaneous surges of the load

2) For UPS with internal batteries 5 ÷ 35 °C. Constant exposure of the battery module to temperatures of +25°C reduces the battery life.

3) The permitted maximum load of the power supply unit decreases with the height above the sea level above the limit specified above.

EASYLINE AVR USB

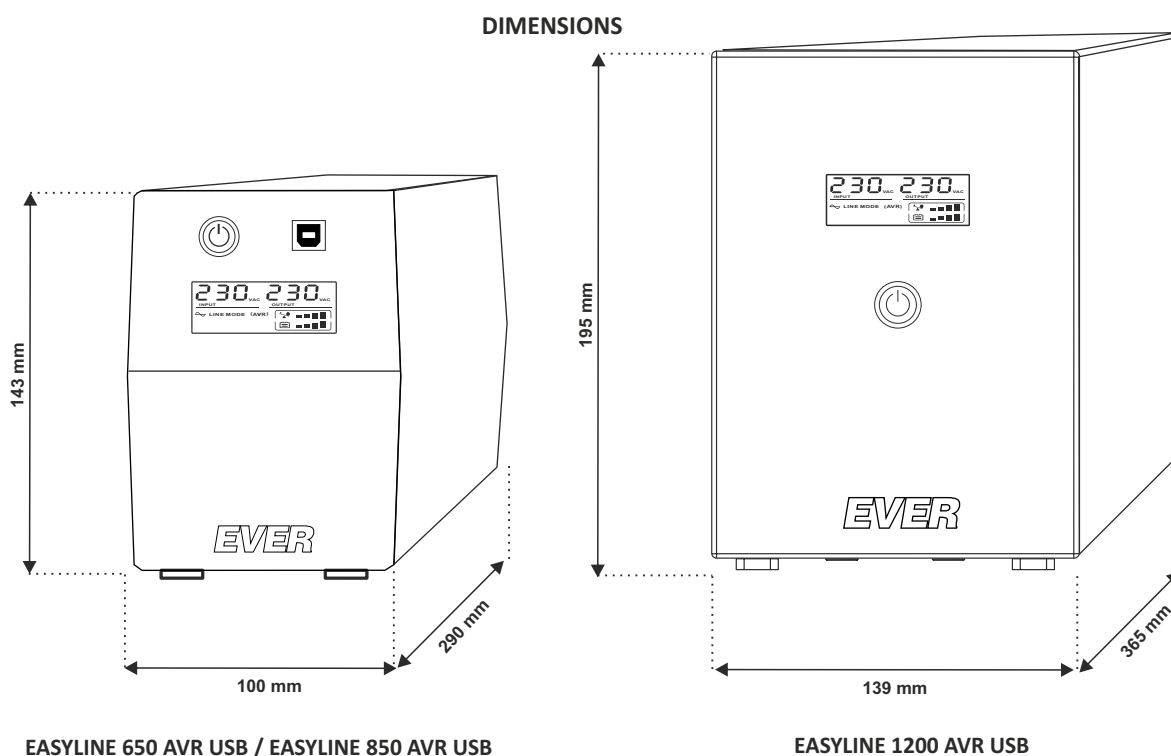
650/850/1200



TECHNICAL DATA

Note: The manufacturer reserves the right to modify the above parameters without prior notification.

PARAMETERS \ TYPE	EASYLINE 650 AVR USB	EASYLINE 850 AVR USB	EASYLINE 1200 AVR USB
Part number	T/EASYTO-000K65/00	T/EASYTO-000K85/00	T/ EASYTO-001K20/00
Output Power (Apparent / Active) ¹⁾	650 VA 360 W	850 VA 480 W	1200 VA 600 W
MECHANICAL SPECIFICATIONS			
Dimensions (H x W x D)	143 x 100 x 290 mm		195 x 139 x 365 mm
Net Weight	4,4 kg	5,2 kg	8,9 kg
Gross Weight	4,8 kg	5,6 kg	10,2 kg
Transport Dimensions (H x W x D)	230 x 140 x 345 mm		300 x 230 x 450 mm
Position in which devices transported	Vertical		
Output cables maximum length	< 10 m		
PROTECT			
Input over current protection	Protection of electrical installation		Short-circuit protection – Circuit breaker 8A / 250 V AC
Output over current protection	Electronic short-circuit and overload protection		
ACCESSORY AND EXTRA FUNCTIONS			
Power supply connection	Power cord ended with plug with ground terminal 16 A (PN-E-93201:1997) + uni-schuko		IEC320 C14
Output connection (number and type of sockets)	2 x PN-E-93201		2 x PN-E-93201 2 x IEC 320 C13 (10 A)
Signalling	Acoustic and optical; LCD display		
Communications interfaces	USB		
Telecom filter – RJ11	Yes		No
LAN filter – RJ45	No		LAN 10/100 Base-T
Software	PowerSoft Professional		
CERTIFICATION			
Declarations	CE		
Standards	PN-EN 62040-1:2009, PN-EN 62040-2:2008		

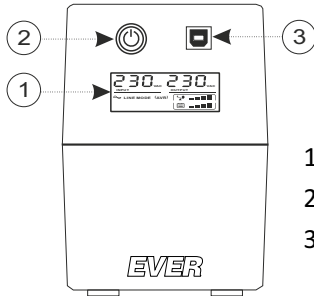


EASYLINE AVR USB

650/850/1200

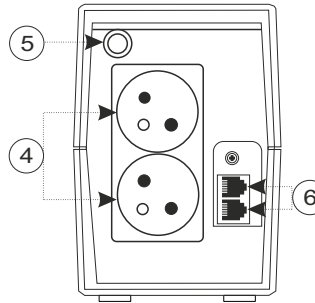


FRONT PANEL



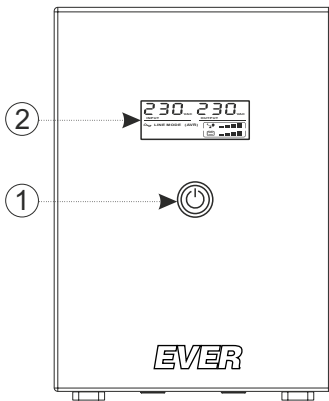
- 1) LCD Display
- 2) Power switch
- 3) Port for communication with a PC - USB

REAR PANEL

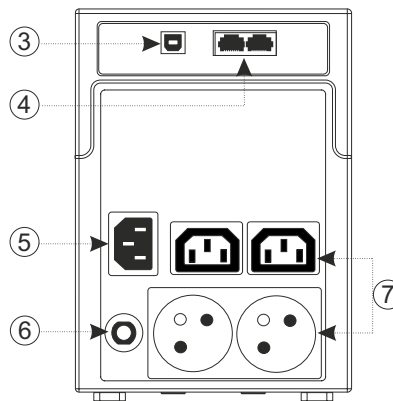


- 4) Outlet socket
- 5) Power cord
- 6) Telephone filter RJ11

EASYLINE 650 AVR USB / EASYLINE 850 AVR USB



- 1) Power switch
- 2) LCD Display

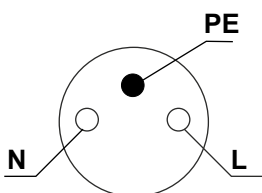


- 3) Port for communication with a PC - USB
- 4) LAN filter RJ45
- 5) Power cord socket IEC 320 C14
- 6) Circuit breaker
- 7) Outlet sockets:
2 x IEC 320 C13
2 x PN-E-93201

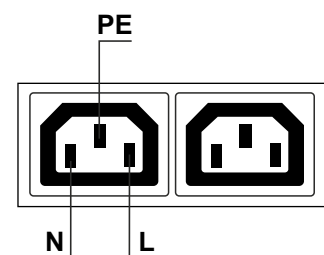
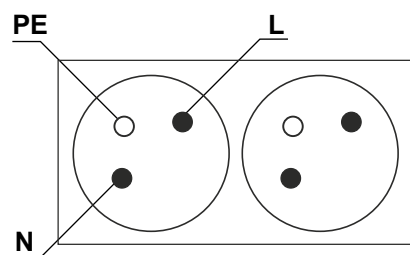
EASYLINE 1200 AVR USB

LAYOUT OF TERMINALS

POWER SOCKET PIN CONFIGURATION



OUTPUT SOCKET PIN CONFIGURATION

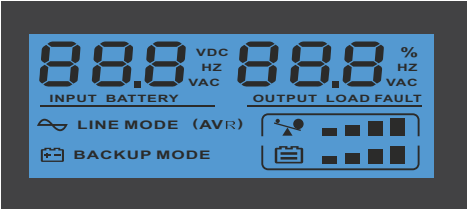


EASYLINE AVR USB

650/850/1200



COMPLEX LCD PANEL



DESCRIPTION OF LCD DISPLAY ICONS

ICON / SCREEN	DESCRIPTION
	Load capacity indication - 4-grade scale (further segments light up along with increasing load).
	Battery charging level indication - 4-grade scale (further segments light up along with increasing battery charge level).
INPUT OUTPUT	Display of input and output parameters (voltage, frequency).
	Test window of the LCD display shown during the 3 seconds.
	The UPS operates in normal mode (supplied from mains power). The message is displayed. LINE MODE
	Signaling of AVR activity. Icon flashes every 1 second.
	The UPS operates in buffer (battery) mode. Icon flashes every 1 second.
	Indication of power supply in charging mode. In this mode, the power supply does not provide power to the output terminals. This situation occurs when UPS is not switched on with front panel power button but it is plugged to power supply socket.
	In case of a fault other than overload or short circuit following message is active FAULT