K-FACTOR
THE VOLTAGE YOU NEED

ERT1

SINGLE PHASE 1kVA-10kVA

SINGLE PHASE
UNINTERRUPTIBLE POWER SUPPLIES
PURE SINE WAVE
ON LINE, DOUBLE CONVERSION
TECHNICAL SPECIFICATION

ON LINE UNINTERRUPTIBLE POWER SUPPLIES ERT1
Pure sine wave, double conversion
CONVERTIBLE RACK-TOWER

The **ERT1 CONVERTIBLE RACK** series is available in ratings from 1 KVA to 10 KVA with digitally controlled double conversion On-Line technology. Thanks to its versatility, this series is suitable for supplying any electrical and electronic system even in critical situations, as well as the possibility of using it as a 50 / 60Hz frequency converter or in combination with motor current generators.

ERT101K ERT101.5K ERT103K

MAIN FEATURES

ERT102K

ERT106K ERT110K

• DOUBLE CONVERSION UPS

A true DOUBLE CONVERSION UPS that will provide perfect current, for complete high-quality protection for your sensitive devices, such as PC networks (Networks), Small Computing Centres, Servers, Telecommunications, Health / Hospital Appliances, and in industrial applications in general.

• OUTPUT POWER FACTOR ϕ 1.0

Comparing this ON-LINE UPS line with the competition on the market, we can say that ERT1 UPS have the best output Power Factor 1.0. They offer high performance and efficiency for critical applications.

• WIDE INPUT RANGE (110 V -300 V)

ERT1 is capable of providing stable and clean current to connected equipment even in very critical and unstable environments.

• HOT BATTERY REPLACEMENT (MODELS 1:3KVA)

ERT1 is able to provide stable and clean current to connected equipment even during battery replacement.

• PROGRAMMABLE OUTLETS

With the programmable output sockets, the user can easily control part of the load connected to the UPS. During power outages, this function allows the user to increase the autonomy of the batteries and dedicate it to the exclusive protection of some critical devices, by interrupting the power supply to non-essential equipment.

Programmable outlets

connect non-essential appliances.

• FREQUENCY CONVERTER FUNCTIONS 50/60 Hz

It sets the output frequency at 50Hz or 60Hz regardless of the input frequency and eliminates the By-Pass.

• (EPO) Emergency Power Off

This function is used to shut down the UPS by the staff in the event of a fire and other emergency situations.

• CONTEMPORARY USE OF SNMP+USB+RS-232

This function allows you to use communication from all USB, RS-232 and SNMP ports simultaneously (optional SNMP card).

• BATTERY CHARGER TO OPTIMIZE THE BATTERY PERFORMANCE

. The ERT1 01-03K series is equipped with a 2-step battery charger to ensure maximum autonomy. It also regulates the charging voltage according to the working temperature. All these measures have been designed to extend the life of the batteries installed in the UPS over time.
. The ERT1 06-10K UPS are equipped with an extendable 3-step battery charger, to optimize battery performance. This feature prolongs the autonomy and optimizes the battery recharging time, furthermore the extension of the battery charger is essential for recharging batteries with higher power used to obtain long autonomy.

• MANUAL BY-PASS FOR THE MAINTENANCE OF UPS FROM 6KVA

The manual By-Pass ensures the lack of voltage inside the UPS for maintenance, ensuring power to the connected equipment.

• PARALLEL REDUNDANTE FUNCTION FOR UPS FROM 6 TO 10KVA

ERT106K and ERT110K can work in redundant parallel up to 3 units, this increases the power capacity, working safety without service interruption.

• RACK 19" / TOWER design

The ERT1 series is called "convertible", that is, it can be installed in RACK 19 "or TOWER version, with the easy rotation of the LCD display, making it the ideal system for the" backup power protection solution "for servers, rescue systems, network equipment and other types of loads.

• Power Factor Correction up to 0.99

The PFC improves the quality of the absorbed current and increases the energy efficiency, with the consequent economic savings

• Communication

Software for all operating systems and network environments. VIEWPOWER supervision and shutdown platform

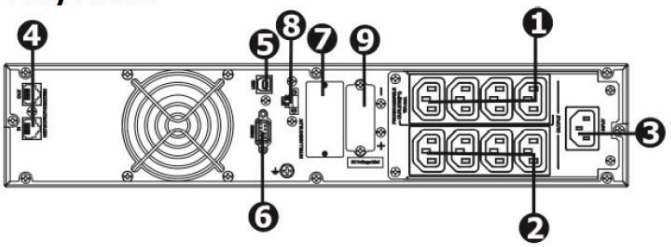
24 MONTHS GUARANTEE

ERT101K-ERT101.5K-ERT102K

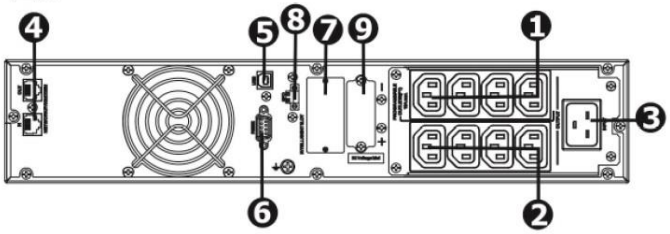
ERT103K

ERT106K-ERT110K

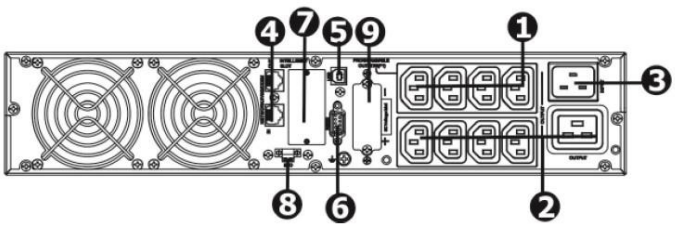
1K/1.5K

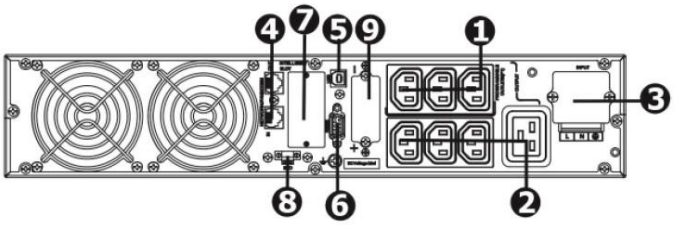


2K

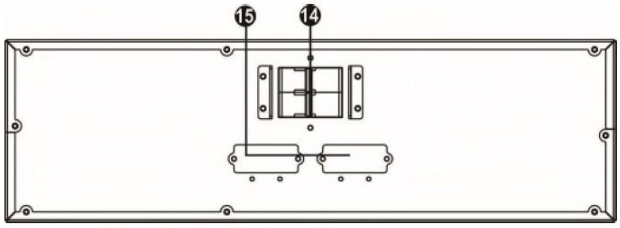


3K



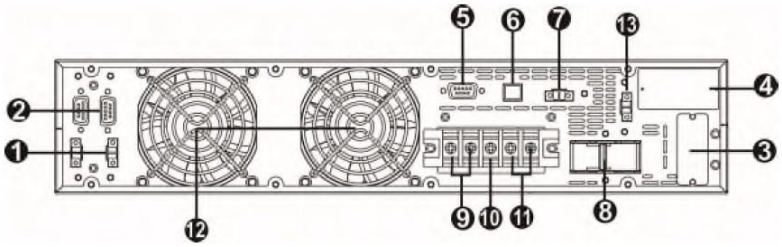


1. Programmable outputs: connection of non-critical loads
2. Output sockets: connection of essential loads
3. AC input connection
4. Network / Fax / Modem Security
5. USB communication port
6. RS232 communication port
7. SNMP intelligent slot
8. Emergency Power Off (EPO) Connector
9. External battery connection



3U battery pack

UPS Rear Panel



1. 1. Current sharing port (available only for models for parallel operation)
2. 2. Parallel port (only available for models for parallel operation)
3. 3. External battery connector
4. 4. SNMP intelligent slot
5. 5. RS232 communication port
6. 6. USB communication port
7. 7. Emergency Power Off (EPO) Connector
8. 8. Input switch
9. 9. Output terminals
10. 10. Earth
11. 11. Input terminals
12. 12. Cooling fan
13. 13. External bypass switch for maintenance
14. 14. Battery pack output switch
15. 15. External battery connection

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K-FACTOR
THE VOLTAGE YOU NEED

Electric transformers
Voltage Stabilizers
Frequency converters
UPS, Inverters, Power supplies

TECHNICAL SPECIFICATION

MODEL			ERT101K	ERT101.5K	ERT102K	ERT103K
POWER			1000VA/1000W	1500VA/1500W	2000VA/2000W	3000VA/3000W
INPUT DATA						
Voltage		Rated voltage	200/208/220/230/240Vac single phase			
		Voltage range	110-300Vac ±5% a 50% load 160-300Vac ±5% a 100% load			
		Low voltage threshold	170Vac ±5%			
		High voltage threshold	290Vac ±5%			
Frequency range			40Hz : 70Hz ±5%			
Number of phases			Single phase with neutral			
PF Power factor			≥ 0.99 at rated voltage (100% load)			
Harmonic Distortion THDi%			≥ 5% @ rated voltage			
OUTPUT DATA						
Voltage			200/208/220/230/240Vac single phase			
Voltage tolerance (battery mode)			±1%			
Frequency (syncronisation range)			47Hz : 53Hz or 57Hz : 63 Hz			
Frequency (battery mode range)			50Hz ± 0.1Hz or 60Hz ± 0.1Hz			
Crest Factor			3 : 1			
Harmonic distortion			≤ 2% THD (linear load) ≤ 4% THD (non linear load)			
Transfer time		Line to battery	Zero			
		In verter to by-pass	4 ms (typical)			
Wave form (battery mode)			PURE SINE WAVE			
EFFICIENCY						
With line voltage			89%		91%	
Battery			≈ 88 ÷ 90%			
BATTERIES						
Standard model		Battery type	12V / 9 Ah	12V / 9 Ah	12V / 9 Ah	12V / 9 Ah
		No. Of batteries	2	3	4	6
		Typical charging time	4 h for 90% capacity			
		Charging current (max)	2 A @ 12 A settable			2 A @ 8 A settable
		Charging voltage	27.4Vdc ±1%	41.1Vdc ±1%	54.8Vdc ±1%	82.1Vdc ±1%
SIGNALS						
LCD Panel			UPS state – Load level – battery level – input/output voltage – battery discharge time – fault			
ALARMS						
Battery operated			Beep every 5”			
Low battery			Beep every 2”			
Overload			Beep every 1”			
Fault			Continuous beep			
Dimensions and weight						
Standard model		Dimensions DxWxH mm	410x438x88	410x438x88	510x438x88	630x438x88
		Net weight kg.	12	15	20	28
Model without battery		Dimensions DxWxH mm	410x438x88	410x438x88	510x438x88	510x438x88
		Net weight kg.	7	8	10	13
ENVIRONMENTAL CONDITIONS						
Humidity			20 ÷ 90% RH @ 0 ÷ 40°C (without condensation)			
Noise			< 50Dba @ 1 m.			
INTERFACES						
Smart RS232/USB			Windows family, linux, Unix, Mac			
Optional SNMP			Power management for SNMP manager and web browser			

Technical data and images may be subject to a change without notice

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TECHNICAL SPECIFICATION

MODEL			ERT106K	ERT110K
POWER			6KVA/6KW	10KVA/10KW
INPUT DATA				
Voltage	Rated voltage		200/208/220/230/240Vac single phase	
	Voltage range		110-300Vac ±5% a 50% load 176-300Vac ±5% a 100% load	
	Low voltage threshold		170Vac ±5%	
	High voltage threshold		290Vac ±5%	
Frequency range			46:54Hz @ 50Hz / 56:64Hz @ 60Hz	
Number of phases			Single phase with earth	
PF Power factor			≥ 0.99 at rated voltage (load 100%)	
Harmonic Distortion THDi%			< 4% @ 100% del carico, < 6% @ 50% load	
OUTPUT DATA				
Voltage			200/208/220/230/240Vac single phase	
Voltage tolerance (battery mode)			±1%	
Frequency (syncronisation range)			46Hz : 54Hz or 56Hz : 64 Hz	
Frequency (battery mode range)			50Hz ± 0.1Hz or 60Hz ± 0.1Hz	
Crest Factor			3 : 1	
Harmonic distortion			≤ 2% THD (linear load) ≤ 4% THD (non linear load)	
Transfer time	Line to battery		Zero	
	Inverter to by-pass		Zero	
Wave form (battery mode)			PURE SINE WAVE	
EFFICIENCY				
With line voltage			94%	
Battery			92%	
BATTERIES				
Standard model	Battery type		12V / 7.2 Ah	12V / 9 Ah
	No. Of batteries		20	20
	Typical charging time		7 h at 90% capacity	9 h at 90% capacity
	Charging current (max)		1.0 A @ 4.0 A	
	Charging voltage		273.0Vdc	
SIGNALS				
LCD Panel			UPS state – Load level – battery level – input/output voltage – battery discharge time – fault	
ALARMS				
Battery operated			Beep every 5”	
Low battery			Beep every 2”	
Overload			Beep every 1”	
Fault			Continuous beep	
Dimensions and weight				
Standard model	Dimensions DxWxH mm		UPS 610X438X88 (2U)+ batt. 600x438x133 (3U)	UPS 610X438X88 (2U)+ batt. 600x438x133 (3U)
	Net weight kg.		17+57	20+63
Model without battery	Dimensions DxWxH mm		610x438x88 (2U)	668x438x88 (2U)
	Net weight kg.		17	20
ENVIRONMENTAL CONDITIONS				
Humidity			0 ÷ 95% RH @ 0 ÷ 40°C (without condensation)	
Noise			< 58Dba @ 1 m.	< 60Dba @ 1 m.
INTERFACES				
Smart RS232/USB			Windows family, linux, Unix, Mac	
Optional SNMP			Power management for SNMP manager and web browser	

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