

# ZGR EFFICIENT RT 1 - 3 KVA

ONLINE SINGLE-PHASE UPS



always ON

PF 0.9

## EFFICIENT RT in compact and convertible format Rack/Tower.

EFFICIENT RT are high density dual conversion Online UPS, adapted to power a wide range of devices such as servers, storage systems, VoIP telephone devices, network and medical systems, as well as industrial scope.

It is ideal to supply and protect Blade Server systems thanks to its high power factor. The height of only 2U makes the EFFICIENT RT range perfectly integrated into 19" rack cabinets.

ZGR has always been concerned about energy savings and has introduced in all UPS series the ECO function that minimizes consumption during normal operation and improves efficiency.



### APPLICATIONS



INDUSTRY



EMERGENCY



DOMESTIC USE



DATA CENTERS



RAILWAY SECTOR

## CHARACTERISTICS

- » Power factor of 0,9
- » Rack/tower format
- » SNMP communications cards and dry contacts
- » Long autonomy models
- » 1, 2 and 3 kVA models
- » Pure sinewave output
- » 3-level smart charger
- » LCD screen
- » Cold Start and Auto Restart function
- » Self battery and UPS status diagnosis
- » Frequency conversion function 50 Hz <-> 60 Hz
- » Management and monitoring
  - Via software
  - USB/RS232 connection
- » ECO function
  - Minimizes the UPS self consumption.
- » Outputs Off function
  - Power shedding function guarantees autonomy to priority
- » Double conversion online (Rectifier/Inverter)
  - It completely insulates the consumption of voltage, frequency and noise variations from the power grid.

ZGR EFFICIENT RT ONLINE SINGLE-PHASE UPS

TECHNICAL SPECIFICATIONS			
Model	ZGR EFFICIENT RT 1	ZGR EFFICIENT RT 2	ZGR EFFICIENT RT 3
Power	1000VA / 900W	2000 VA / 1800W	3000 VA / 2700W
Power factor	0,9		
INPUT ELECTRICAL CHARACTERISTICS			
Voltage range	162 - 290Vac (allows use with generators) single phase		
Frequency	45 - 65 Hz (auto detecting)		
Power factor in input	> 0,99		
OUTPUT ELECTRICAL CHARACTERISTICS			
Nominal voltage	208 / 220 / 230 / 240Vac single phase		
Frequency (battery mode)	50 / 60 Hz $\pm$ 0,02 Hz		
Waveform (battery mode)	Pure sinewave		
THD harmonic distortion (100% load)	< 3 % linear / < 5 % non linear		
Transfer time	0ms battery / < 4 ms bypass		
Permissible peak current	3:1		
EFFICIENCY			
Inverter mode	Up to 90 %		
BATTERY			
Type / Capacity for standard models	24 V / 9 Ah (36 V -LBT)	48 V / 9 Ah (72 V -LBT)	72 V / 9 Ah (96 V -LBT)
Hot Swap	Yes <sup>(1)</sup>		
Charge time	5 h / 90 % (from a full discharge)		
Protection	Overload and deep discharge		
Autonomy	10 mins up to several hours (extendable with additional battery modules)		
MONITORING			
Informative	LED + LCD display		
Alarms	Acoustics depending on alarm		
Software	Windows / Linux / MAC		
CONNECTIONS			
Input	1x IEC / 1x Anderson (long models LBT autonomy)		
Output	Up to 4+4 IEC (4 IEC with programmable output)		
Protection	Modem / LAN RJ45		
Communication	USB and RS232 (software monitoring)		
Intelligent port	Yes (SNMP optional / relays optional)		
FUNCTIONS			
On/OFF with battery (Cold Start)	Yes (allows UPS to run without mains power)		
Auto Restart	Yes (restarts UPS functions after a failure or deep battery discharge)		
Parallelable	No		
Frequency converter 50-60Hz	Yes		
Programmable outputs	Yes		
ENVIRONMENTAL AND MECHANICAL CHARACTERISTICS			
Rack mounting guides	Optional		
Cooling	Forced with fans (PWM speed control)		
Operation temperature	0 - 40 °C		
Noise level (at 1 m)	< 50 dB		
Relative humidity	0 - 95 % without condensation		
Dimensions for long-range models (WxHxD)	440 x 86,5 x 325 mm	440 x 86,5 x 460 mm	440 x 86,5 x 600 mm
Weight approx. for standard models	11,3 kg	19,1 kg	24,4 kg
Dimensions for long-range models (WxHxD)	440 x 86,5 x 325 mm	440 x 86,5 x 435 mm	440 x 86,5 x 435 mm
Weight approx. for models long range	5,6 kg	8,3 kg	8,6 kg
STANDARDS			
Marking	CE		
Directives	Low voltage directive: 2014/35/EU, EMC directive: 2014/30/EU		
Standards	Safety: EN 62040-1, EMC: EN 62040-2, Accordance: EN 62040-3		



IEC 62040 - 3



<sup>(1)</sup> Battery easily replaceable by the user in Rack model (RT).  
 \* Vertical or horizontal mounting in Rack model (RT).  
 \* These specifications may change without notice.

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