

Technical Specifications	Whad 800	Whad 1000
Technology	on line double conversion	
Nominal Power	800 VA	1000 VA
Active Power	560 W	700 W
Nominal input voltage	230 V	
Input voltage range	184 V ÷ 265 V al 100% load	
Minimum operating voltage on mains power	100 V al 50% load	
Input frequency	50/60 Hz ± 2% with autosensing	
Input power factor	> 0.99 from 20% of applied load	
Output voltage	230 V ± 1% with selection in 1V steps	
Output frequency	50/60 Hz ± 1%	
Output voltage THD	< 1%	
Batteries	4 sealed, maintenance-free, lead acid 12V 5.4Ah batteries	
Total number of batteries	4	4
Autonomy at 80%	17'	13'
Autonomy at 50%	32'	26'
By-pass	Automatic	Automatic
Overload capacity (on mains)	300% for 1 second without intervention of By-Pass 200% for 5 seconds without intervention of By-Pass	
Acoustic noise at 1 m	<40 dBA	<40 dBA
Net weight	12 Kg	12 Kg
Dimensions (w x h x d)	88x355x390 mm	
Standards	EN 62040 - 1-1, EN 50091-2, EN 62040-3	
Computer interface	RS 232	
Output sockets	1 IEC + universal multiple extension socket supplied as standard	

# Uninterruptible Power Supplies

*Unterbrechungsfreie Stromversorgungen*

*Sistemas de alimentación ininterrumpida*

*Gruppi di Continuità*

*Onduleurs*

Data and technical specifications may be changed without notice.

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**UPS**  
MetaSystem

SERVICE AND WARRANTY



**WHAD UPS is covered by two years warranty against any manufacturing faults.**

**For more information regarding customer care, please contact your local dealer.**



www.metasystem.it



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CERTIFICATO DA DNV  
ISO 9001 / 2000

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Whad





**WHAD UPS are the evolution of on line double conversion UPS** for small and medium power applications. Like all MetaSystem UPS, WHAD's not only stand out for their cutting-edge technology but also for their innovative and outstanding design. Thanks to their extremely small footprint and their long, tall and slim format, they take up a minimum of space under your desk and are an attractive and eye-catching feature when placed in full view.

**But WHAD's are much more than this!**

They are true on line double conversion UPS (VFI) combining the performance of top-quality UPS with a small cabinet and a very convenient price.

They can supply 800 VA or 1000 VA of power, offering high levels of electrical protection for appliances whose consumption of energy isn't excessively high. Not only that - their particularly convenient price makes them unbeatable even if you compare them to the Line Interactive UPS.

MetaSystem's technology is designed and made in Italy. It has been used for the WHAD's, making it possible to optimise our production processes by reducing the time needed and as a result our costs, while increasing product reliability. The UPS have just one board, combining power, control logic and diagnostics.

WHAD's are extremely versatile and can be used to protect small networks, servers, phone/data systems, office automation and networking applications or even for industrial automation, security and surveillance.

**THE TASK**

Computer security is not just about "technology". A correct approach to computer security demands solutions that offer 360-degree cover against any of the possible risks. As a matter of fact, the unity and accessibility of your data could be under threat from your mains power supply.

While "known" black-outs are just a tiny percentage of actual electrical problems, they are an issue affecting the operation of a computer much more than problems caused by component malfunction, faulty parts or the mechanical 'hiccups' of appliances.

A computer system is frequently subjected to lots of other serious types of electrical interference, putting its performance at risk: by giving these systems an unbroken supply of quality electricity, you are avoiding a whole string of other costs.

Only part of these costs are purely monetary and can, therefore, be considered actual overheads: it's a mistake to underestimate the impact of "non-monetary" costs, linked to the quality, availability and continuity of the tools and appliances you use at work, ultimately reflecting over your entire business.

The concept of security should be understood in wider terms, from Rapid Restart to Business Continuity: consequently, the cost of Security translates into investments aimed at reducing your TCO – Total Cost of Ownership.

**THE SOLUTION**

Only on line double conversion UPS (VFI) can protect electronic appliances against all forms of electrical interference. Unlike line interactive products, which only "take action" if there is a blackout or a macroscopic variation in the voltage, on line double conversion UPS protect the connected loads all the time, supplying them with an uninterrupted source of quality power (230 V +/- 1%).

WHAD's are on line double conversion UPS (VFI), giving you protection against any type of disturbance to the power supply and eliminating any malfunction caused by the mains power supply - at source. As a result, you also eliminate all of the direct and indirect costs resulting from machine downtime. WHAD's are the perfect solution for servers, small networks and critical applications in general.



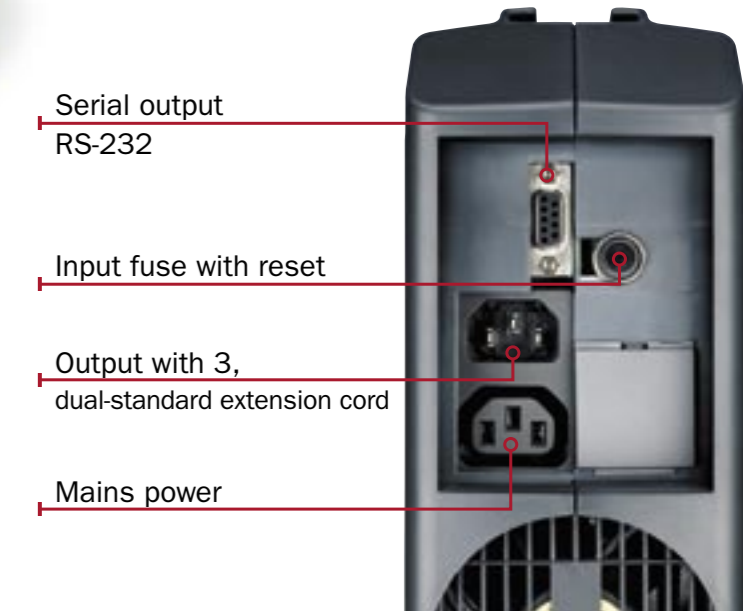
**WHAD UPS** come complete with a serial port so you can use UPS Communicator software for local or remote shutdown. There is also a magneto-thermal switch on the back of the cabinet so resetting the appliance is easy. The various versions are also supplied with a useful, universal Italian/Schucko standard, 3-socket output extension cord.



**All in one:** Electronic circuit board: control, PFC, booster, inverter, battery charger, input-output filter, by-pass.



Dual-standard (Italian schucko)



Thanks to their on line double conversion technology, WHAD's guarantee totally stable protection, sinusoidal waveform, both when running on mains or battery power, and the inhibition of any power problem whether in terms of voltage, frequency or wave form.



Type of fault	Causes	Effects
 <b>BLACK-OUT</b>	Mains power failure	System crash
	Total black-out of mains power	Faulty files
		Loss of data
 <b>OVERVOLTAGE</b>	Over voltage	Overheating
	Permanent > 10%	Stress
 <b>SKIPES</b>	Spikes	Processing errors
	Overvoltage > 10%	System crash
 <b>BROWN-OUT</b>	Sags in voltage in excess of 20% for a given time	Overheating
		Stress
 <b>OSCILLATION</b>	Oscillation	Damage to components
	Oscillation up to 100% with amplitude from 0.4 to 50HZ	Loss of data

**ALARMS AND SIGNALS**

An acoustic signal and high-visibility flashing on the backlit front panel ensure that any alarm signal is noticed immediately.

The signals are coded into various categories based on their severity (semaphore code):

**Green & Not Flashing – Normal Operation**

- Normal operation, no anomaly.

**Yellow & Flashing – Battery Mode**

- Battery operation, accompanied by a slow, intermittent acoustic alarm signal, which can be silenced.

**Red & Not Flashing – Severe alarm**

(together with an acoustic alarm signal)

- Operation blocked
- Output voltage anomaly

**Red & Flashing – Warning**

(together with an acoustic alarm signal)

- Failure of one or more power modules
- Incorrect connection of neutral on input
- Overload