



Mars-Eco

Double Conversion Online UPS

The MARS ECO Tower UPS System features unitary Power Factor in all ratings, providing 13% more active power than similar systems for the same kVA. With capacity of placing 3 units in parallel, redundancy and scalability is very easy.



CRITICAL
LOADS



INDUSTRIAL



HEALTH
CARE



GOVERNMENT



EDUCATION

Rear View



Front View



Highlights:

- Double conversion design with the highest adaptability to extreme network conditions.
- $PF=1(VA=W)$.
- High efficiency results in energy savings by offering an ECO mode of operation.
- Built-in DC Over Voltage protection, fan lock and overheat detection.
- Overload detection and warning to improve product reliability.
- USB HID allows UPS monitoring without software installation.
- Intelligent communication slot allows remote monitoring.
- Capacity for growth and redundancy with Optional Parallel card (maximum 3 units).
- Adjustable battery strings, 192~240 VDC.
- LCD display with up to 100 historical events.
- CE certification.

Specification

MODEL			AB-MS-ECO6002	AB-MS-ECO10002
Input	Voltage Range		176 - 276VAC @ 100% load	
	Frequency Range		40Hz - 70Hz @ ≤60% load; 45Hz - 66Hz @ >60% load	
	Phase Configuration		Single-Phase, 2W + G (L + N + G) or (L + L + G)	
	Harmonic Distortion THDi		≤3.5% with linear loads; <5% with non-linear loads	
	Power Factor		≤0.99 @ Full Load	
Output	Capacity		6,000VA / 6,000W	10,000VA / 10,000W
	Voltage		220/230/240 VCA	
	Power Factor		1	
	Harmonic Distortion THD		≤1% with linear loads; ≤5% with non-linear loads	
	Voltage Regulation		±1%	
	Frequency		50/60Hz	
	Crest Factor		3:1	
	Waveform		Pure Sinewave	
Efficiency	Online Mode		>95%	
	High Efficiency Mode		>98%	
Battery	Type		Sealed lead acid (VRLAAGM)	
	Quantity		16 x 12V / 7AH batteries (settable to 20 pcs)	16 x 12V / 9AH batteries (settable to 20 pcs)
	Recharge Time		3 Hours to 90%	
	Charger Capacity		0 - 4A (1.4A Default)	0 - 4A (2A Default)
Display	LED + LCD		Line Mode, Battery Mode, ECO Mode, Bypass Supply, Low Battery, Defective / Disconnected Battery, Overload, Interrupted Transfer, UPS Failure	
	LCD Readings		Input Voltage, Input Frequency, Output Voltage, Output Current, Output Frequency, Charge Percentage, Battery Voltage, Internal Temperature, Estimated Runtime, Event Log (100 events)	
	Self Diagnostics		After Power-on, manual control through panel and communication, routine check	
Alarms	Audible & Visual		Line Failure, Low Battery , Transfer to Bypass, System Failure	
Protection	Events		Overload, Over Temperature, Short Circuit, Charging Failure, Battery Disconnected	
Features	Operation Modes		Normal Mode, ECO, CVCF (Constant Voltage / Constant Frequency)	
	Cold Start		Yes	
	Parallel Capacity		Up to 3 units	
	Parallel Redundancy		2 + 1	
Physical	Tower model	Dimensions (WxHxD, mm/in)	220 x 589 x 492 / 8.66 x 23.19 x 19.37	
		Net Weight (kg/lbs)	53 / 116.85	61 / 134.48
Environmental	Temperature		0 - 40°C / 32 - 104°F	
	Humidity		0 - 95% No condensation	
	Elevation		≤1000m; capacity derates 1% every 100m above 1000m	
	Audible Noise		45 dBA @ 1m	50 dBA @ 1m
Interface	Built-In		USB, EPO, RPO, RS-232, 2 communication card slots	
	Additional Protocols		J-Bus, Modbus, SEC	
	Comm Card Options		RS-232, RS-485, Dry Contact, SNMP/Web	
	Compatible Platforms		Microsoft Windows Series, Linux, Mac, etc.	
Standards & Certifications	Safety		CE, EN62040-1	
	EMI		IEC / EN62040-2: 2006 Category C3	
	EMC		IEC / EN61000-4-2 & 3 Level 3: IEC / EN61000-4-4 & 5: 2006 Level 4	
	Marks		CE	

*Specifications are subject to change without prior notice.