

# MESTA Series I & II UPS set standards others can't possibly meet.

□ Universally Compatible with all loads, all equipment and all applications...phase-locks with any generator.

□ Long-lasting, reliable systems that provide in excess

of 200,000 hours MTBF -that's almost 23 years.

□ Outstanding electronic short circuit and overload protection that continually guards your critical equipment.

## Powerful microcontroller is the heart of every Mesta UPS ever built.

The first truly on-line-interactive UPS. The output of the Mesta UPS co-exists with the utility, continuously responding to any changes in the line or load characteristics and complementing or assuming the load as necessary. The result is outstanding protection for your critical equipment as well as superior performance, power conditioning and high efficiency.

Every Mesta UPS provides an RS232 Communications/
Diagnostics interface. This twoway link allows users to collect
detailed information on power
usage and other load characteristics and to remotely control
either the UPS or the load.

Any computer or terminal equipped with an RS232 serial port can be used to communicate with the Mesta UPS, without any additional software. The microcontroller can be programmed to continuously monitor and report the status of the following: 

frequency range allowed I minimum output voltage and □ slew rate (how fast you allow the input to change frequency). The UPS is also able to automatically test its internal batteries under load. Those test results are either displayed via the system's LED or the software interface.

These features are standard with every MESTA UPS unit.

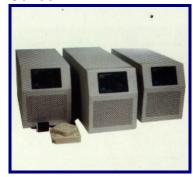
### MESTA ELECTRONICS, INC. TERMINAL PROGRAM ver. 2.00

>S \*\*\*MESTA UPS STATUS\*\*\* LINE VOLTS = 119.9 LOAD VOLTS = 119.8 BATT VOLTS = 109.8 LINE AMPS = 4.86 LOAD AMPS = 4.13 BATT AMPS LINE POWER = 578 LOAD POWER = 491 BATT POWER -33LINE V-AMPS = 585 LOAD V-AMPS = 494 BATT CHARGE% = LINE FREO = 60.01 LOAD FREQ = 60.00 TEMPERATURE = 46.49C LINE STATUS = GOOD UPSMODE AC FAULT STATUS = --

A typical RS232 video display for a Mesta unit. (These figures are for a 1.25 KVA UPS with a 500-watt load.)

### Small UPS units provide BIG system protection. Overload protection as high as 400% can handle any high in-rush requirement.

#### Series I



#### Series II



# MESTA .5 KVA unit available configured for medical/hospital applications.

The Series I Mesta UPS (Model #500-43 BHI) can be modified to meet the unique requirements of today's electronics-dependent hospitals.



Mesta Medical Unit provides a fourreceptacle outlet to facilitate connection of monitoring equipment. A separate built-in transformer isolates your critical load from electrical leakage. Its special "Fail safe" design maintains utility power to the critical load, even if the UPS is accidentally shut down or damaged.

It continuously responds to line spikes and drops as well as to the load-enhancing the power factor and minimizing demand. The result: continuous protection, power conditioning and high efficiency.

The Mesta Medical UPS is ULlisted (UL 544 and 1778 and CSA C22.2 nos. 107.1 and 125).

### A CASE HISTORY

#### Mesta UPS protects computers even when "lightning strikes twice."

A Mesta UPS was installed to protect the computers in a facility that used digital-equipped scales to weigh heavy loads. During a storm, lightning struck and destroyed the scales, then ran along the ground and wiped out the digital readout equipment. However; the lightning was stopped by the Mesta UPS before it reached the firm's computers.

Six months later, another electrical storm scored a **second** direct hit on the building. Again, the Mesta UPS stopped the destructive surge. But this time the spike was so powerful that it blew the UPS surge protection devices...yet the UPS remained on-line. Once again the computer system was completely protected from damage.

After the storm, the surge protectors were replaced, the unit was tested and returned to service.

Who was it that said, "Lightning never strikes twice in the same place"?

## **Specifications**

Series	s I									Series	i II		
UPS Model Number		400-23	500-23	500-43	500-43*	750-43	750-83	1000-83	1250-84	2000	3000	3500	5000
Rating	VA	400	500	500	500	750	750	1000	1250	2000	3000	3500	5000
	W	400	400	500	500	750	750	1000	1250	2000	3000	3500	5000
Peak Watts		1200	1200	1500	1500	2250	2250	3000	5000	6000	9000	10500	15000
Crest Factor		3.0 4.0								3.0			
Input		120 VAC (-15% +10%)							120 VAC (-15% +10%)		208, 240 VAC (-15% +10%)		
Output	Inverter	120 VAC (±1%)								120 VAC (± 1% inverter, ± 5% on AC line)		208/120, 224/120,	
	AC Line	120 VAC (±5%)										240/120 VAC (± 1% inverter, ± 5% on AC line)	
Input Connection			detach. co NEMA 5-1		NEMA 5-15P Hosp. Grade	6' detach. cord w/NEMA 5-15P				NEMA 5-30P	NEMA 5-50P	NEMA L-6-30P	
Output Connection		4 N	NEMA 5-1	5R	4 NEMA 5-15R Hosp. Grade	4 NEMA 5-15R				4 NEMA 5-20R		4 NEMA 5-20R, 1 NEMA L-6-30R	
Overload Protection		300% 400%							275% 225%			225%	
Backup	@0.7 PF	13	8	23	23	13.5	30	23	17	11	20	18	10
minutes	@1.0 PF	10	6	17	17	10	23	17	12	8	15	12	7
Dimensions		10 ¼ x			10 ¼ x	10 ¼ x 10 ¼ x			18x10 ½	21 x 12 x 26			
H x W x D (inches)		8 x 16			8 x 17	8 x 16				x21 ½			
Weight (lbs.)		43 53		65	53	77	77 80		150	30	00 325		
Audible Noise		<35 dBA								<35	5 dBA <45 dBA		dBA

<sup>\*</sup> MESTA Medical UPS model has automatic bypass, meets hospital standards and isolates critical load from electrical leakage.

### Many special features are standard on Mesta UPS units.

The Mesta Series I and II models are supplied with the following standard features:

☐ Lightning and Surge Protection - meets IEEE C62.41 (latest) standards.

☐ Electronically Current Limited Output - 300%, with circuit breakers or fuses for backup protection.

☐ Programmable Input Voltage, Frequency Range and Slew Rate-via RS232 port.

☐ Total Harmonic Distortion - <1%.

☐ Overall Efficiency- >92% at full load.

**☐** Over-temperature Protection.

☐ Read-outs, indicators and Controls - LEDs: UPS on, online, on-battery, battery status and overload status. Audible Alarm: loss of AC line, low battery or overload. Reset Switch: silences alarm, resets overloads and is used to initiate in-service battery test.

□ RS232 Interface - for remote communications, unit status and diagnostics.

☐ Battery - sealed, maintenancefree, five-year expected life. □ Temperatures-

Operating: 0" to 40°C. Storage: -20" to 40°C.

☐ Thermal – cooling fan operates only as required.

□ UL Listings - UL 544 (Med.) and 1778 and CSA C22.2, nos. 107.1 and 125 (Med.).

### Options Available.

**Power Configurations -** all units can be configured for 50 Hz, 230 volt or 60 Hz, 208/240 volt capacity.

SNMP Hardware interface universal hardware agent that can be configured to turn any Mesta UPS into a Simple Network Management Protocol-managed device on a network.

Special Hospital/Medical Packages-automatic bypass (B), hospital grade (H), isolation (I)-critical load isolated from electrical leakage, and remote receptacles (R)-hospital-grade pad.

**Software -** various packages are available for UPS management.

All Mesta units are listed by







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