	Manufacturer 1 XXX-1500-120	Manufacturer 2 YYY-2000-120	Manufacturer 3 ZZZ-2200-120	Manufacturer 4 111-1500-120
General Characteristics				
Manufacturer	Manufacturer 1	Manufacturer 2	Manufacturer 3	Manufacturer 4
Model Name	XXX-1500-120	YYY-2000-120	ZZZ-2200-120	111-1500-120
Model Number	XXX-1500-120	YYY-2000-120	ZZZ-2200-120	111-1500-120
Electrical Characteristics				
Energy Conversion Mechanism	Static	Static	Static	Static
Topology	Double-conversion	Double-conversion	Double-conversion	Double-conversion
Model Meets Definition of Modular UPS (Y/N)	N	N	N	N
Modular UPS Module Model Number				
Single-normal-mode UPS or Multiple-normal-mode UPS?	Single-normal-mode	Single-normal-mode	Single-normal-mode	Single-normal-mode
Total Number of Outlets	6	6	6	4
Number of Backup Outlets	6	6	6	4
Number of Surge Outlets	0	0	0	0
Input Voltage — Minimum	110 V rms	90 V rms	90 V rms	89 V rms
— Maximum	130 V rms	150 V rms	150 V rms	142 V rms
Output Voltage — Minimum	110 V rms	110 V rms	110 V rms	100 V rms
— Maximum	127 V rms	127 V rms	127 V rms	127 V rms
Output Frequency — Minimum	60 Hz	50 Hz	50 Hz	50 Hz
— Maximum	60 Hz	60 Hz	60 Hz	60 Hz
ENERGY STAR Efficiency Values[1]				
Test Input Voltage Insert Test Input Voltage	120 V rms	120 V rms	120 V rms	120 V rms
Test Input Frequency	60 V rms	60 V rms	60 V rms	60 V rms
Test Output Voltage	120 Hz	120 Hz	120 Hz	120 Hz
Test Output Frequency	60 Hz	60 Hz	60 Hz	60 Hz
Representative Models Under Test[2]				
Single-Configuration UPS/ UPS Product Family Minimum Configuration				
Model Number of Representative Model Tested	111-1500-120	YYY-2000-120	ZZZ-2200-120	111-1500-120
Active Power	1350	1400	1400	1350
Apparent Power	1500	2000	2000	1500
Redundancy as Tested (N, N+1, N+N, etc.)	N+0	N+0	N+0	N+0
ENERGY STAR Weighted Calculation of Average Efficiency for Multiple-normal-mode UPS				
ENERGY STAR Minimum Average Efficiency (EffAVG_MIN) Requirement for Given Output Power and Lowest Available Input Dependency				
If Multiple-normal-mode UPS, efficiency values for each Normal-mode are reported[3]				
Input Dependency of Normal Mode(s) Tested (VFI, VI, or VFD)[4]				
Normal mode — Highest input dependency	VFI	VFI	VFI	VFI
— Lowest input dependency				
ENERGY STAR Weighted Calculation of Average Efficiency for Each Tested Normal Mode				
Normal mode — Highest input dependency	0.881	0.878	0.888	0.881
— Lowest input dependency				

ENERGY STAR Minimum Average Efficiency (EffAVG_MIN) Requirement for Given Output Power and Input Dependency					
Normal mode	Highest input dependency	0.876	0.877	0.878	0.876
	Lowest input dependency				
Input Power Factor at 100% Load					
Normal mode	Highest input dependency	0.99	0.99	0.99	0.99
	Lowest input dependency				
Reported Efficiency at 100% Load					
Normal mode	Highest input dependency	0.908	0.891	0.891	0.908
	Lowest input dependency				
Reported Efficiency at 75% Load					
Normal mode	Highest input dependency	0.907	0.891	0.891	0.907
	Lowest input dependency				
Reported Efficiency at 50% Load					
Normal mode	Highest input dependency	0.880	0.881	0.881	0.880
	Lowest input dependency				
Reported Efficiency at 25% Load					
Normal mode	Highest input dependency	0.800	0.836	0.836	0.800
	Lowest input dependency				
Total Input Power at 0% Load					
Normal mode	Highest input dependency	0.03	0.0508	0.0581	0.03
	Lowest input dependency				
UPS Product Family Maximum Configuration					
Model Number of Representative Model Tested					
Active Power					
Apparent Power					
Redundancy as Tested (N, N+1, N+N, etc.)					
ENERGY STAR Weighted Calculation of Average Efficiency for Multiple-normal-mode UPS					
ENERGY STAR Minimum Average Efficiency (EffAVG_MIN) Requirement for Given Output Power and Lowest Available Input Dependency					
If Multiple-normal-mode UPS, efficiency values for each Normal-mode are reported[3]					
Input Dependency of Normal Mode(s) Tested (VFI, VI, or VFD)[4]					
Normal mode	Highest input dependency				
	Lowest input dependency				
ENERGY STAR Weighted Calculation of Average Efficiency for Each Tested Normal Mode					
Normal mode	Highest input dependency				
	Lowest input dependency				
ENERGY STAR Minimum Average Efficiency (EffAVG_MIN) Requirement for Given Output Power and Input Dependency					
Normal mode	Highest input dependency				
	Lowest input dependency				
Input Power Factor at 100% Load					
Normal mode	Highest input dependency				
	Lowest input dependency				

Reported Efficiency at 100% Load				
Normal mode	Highest input dependency			
	Lowest input dependency			
Reported Efficiency at 75% Load				
Normal mode	Highest input dependency			
	Lowest input dependency			
Reported Efficiency at 50% Load				
Normal mode	Highest input dependency			
	Lowest input dependency			
Reported Efficiency at 25% Load				
Normal mode	Highest input dependency			
	Lowest input dependency			
Total Input Power at 0% Load				
Normal mode	Highest input dependency			
	Lowest input dependency			

Metering and Communications[5]

Meets ENERGY STAR optional metering requirements (Y/N)	N	N	N	N
Meets Efficiency Requirements without the Metering Incentive (Y/N)	Y	Y	Y	Y
Energy Measurement Accuracy Class				
Energy Measurement Meter-only Accuracy				
Energy Measurement Metering System Accuracy				
Data Visually Displayed on Meter				
Output Power (Y/N)	N	N	N	N
Output Accumulated Energy (Y/N)	N	N	N	N
Output Voltage (Y/N)	N	N	N	N
Output Current (Y/N)	N	N	N	N
Output Power Factor (Y/N)	N	N	N	N
Data Provided via Network Communication				
Output Power (Y/N)	N	N	N	N
Output Accumulated Energy (Y/N)	N	N	N	N
Output Voltage (Y/N)	N	N	N	N
Output Current (Y/N)	N	N	N	N
Output Power Factor (Y/N)	N	N	N	N
Communication Capability				
Modbus RTU (Y/N)	N	N	N	N
Modbus TCP (Y/N)	N			
SNMP (v1, 2 or 3) (Y/N)	N			
Other				
User Meter-interface Software				
Data Available via Web Browser (Y/N)				
Web Browser Application URL				

Energy Storage Device

Energy storage technology/chemistry	Lead-acid	Lead-acid	Lead-acid	Lead-acid
Internal energy storage system? (Y/N)	Y	Y	Y	Y
Internal Energy Storage System Physical Separability (Y/N)	N	N	N	N
Internal energy storage system warranty		2 Yr	2 Yr	
Internal Energy Storage System Runtime at 100% Load				
Internal Energy Storage System Runtime at 50% Load				
Energy Storage System Test Procedure Additional Instructions				
Energy Storage System Information URL	http://www.mfrbatteryurl.com	http://www.mfrbatteryurl.com	http://www.mfrbatteryurl.com	http://www.mfrbatteryurl.com

UPS Configuration

Dimensions - height	242 mm	432 mm	85 mm	242 mm
Dimensions - width	152 mm	85 mm	432 mm	152 mm
Dimensions - depth	490 mm	559 mm	559 mm	490 mm

Recycling and Environmental Information

Manufacturer Take Back Program (Y/N)	N	N	N	N
Manufacturer Take Back Program URL (Optional)				
Life Cycle Assessment URL (Optional)				
Battery Recycling URL (Optional)				

[1] Manufacturer declared values. Actual test values must be at least as efficient as the ENERGY STAR requirements.

[2] For Modular UPSs, the minimum and maximum configurations are tested. All intermediate configurations qualifying for ENERGY STAR are listed in a later section. All other UPSs report data for a single configuration.

[3] The unit is tested in the highest efficiency sub-mode of each tested normal mode. For Single-normal-mode UPS, the highest input dependency reported is the input dependency of the single and only normal mode tested. UPSs report data for a single configuration.

[4] VFD: Voltage and Frequency Dependent; VI: Voltage Independent; VFI: Voltage and Frequency Independent.

[5] Measuring and tracking the energy consumption of the data center is an important means for effective management. ENERGY STAR's free Portfolio Manager Tool, www.energystar.gov/benchmark, enables data center operators to assess their energy performance relative to peers using a 1-100 scoring system, as well as track changes in energy use over time. ENERGY STAR encourages the installation of energy (kWh) meters at the output of the UPS.