# **UPS Pre-Sale Checklist**

2:1 2 1 1					
Site Contact	Company Contact				
Site Address 1	Company Address 1				
Site Address 2	Company Address 2				
Site Phone	Company Phone				
Site Email	Company Email				
Type of Project: ☐ New Construction ☐ Existing Construction / Retrofit					
Expected Delivery Date:	<del></del>				
Incoming Electrical Service Type: ☐ Single Phase	□ Dual (Split) Phase □ Three Phase				
Incoming Electrical Service Size (amps):					
Required UPS Load: VoltAmps: Watts:					
Desired Battery Backup Time:					
Desired UPS Installation Type: ☐ Wall Mount ☐ F	Rack Mount ☐ Free-Standing Cabinet ☐ Undecided				
<b>Desired UPS Installation Location:</b> □ Main Panel □ Secondary Panel □ Remote Point-of-Service					
Installation Location Floor Type: ☐ Unfinished ☐	Finished Type if Finished:				
Installation Location Door Dimensions: Height:	Width:				
Will the installation location be temperature and humidity controlled: ☐ Yes ☐ No ☐ Unsure					
Is remote network connectivity and monitoring req	uired? ☐ Yes ☐ No ☐ Unsure				
Will a solar system be installed onsite? ☐ Yes ☐	No □ Unsure				
Will a backup generator be installed onsite? ☐ Yes ☐ No ☐ Unsure					
Is future expansion expected? ☐ Yes ☐ No ☐ Unsure					
	Blackouts □ Brownouts □ Power Sags □ Power Surges Overvoltage □ Normal Mode Noise □ Common Mode Noise Frequency Variation □ Switching Transients Harmonic Distortion □ Unsure □ Other:				
Other system notes, requirements and considerations:					





### **Load Calculation Worksheet: Sizing a UPS**

### Circuit

#### Instructions:

- List the equipment to be protected by the UPS. Include everything that will be connected to the circuit, including electronics and appliances.
- 2) List the amps, volts and watts for each device. This information is typically found on device and power supply labels and/or manuals and specification sheets. If the watt information isn't available, we'll be able to calculate it from the VoltAmp information as noted below.
- 3) Multiply the amps by the volts to determine the VoltAmps (VA).
- 4) If needed, convert VoltAmps to watts (W) by multiplying the VoltAmp total by 0.9. (1 VA = 0.9 W for most devices)
- 5) Add the total VoltAmps and watts.
- 6) Multiply the total VoltAmps and watts by 1.2 to accommodate for future system expansion and protection.
- 7) Use the grand total located on the bottom line to select a UPS. Ensure that the total VA and watt rating of the connected equipment does not exceed the VoltAmp and watt rating on the UPS.

Step 1	Step 2	Step 2	Step 3	Step 4	Step 2
Device	Amps	Volts	VoltAmps		Watts
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
	X	=		x 0.9 =	
Step 5	Step 5 Total VoltAmps & Watts:				
Step 6	Future Expansion:		x 1.2		x 1.2
Step 7 Recommended UPS Power:					





# **UPS Maintenance Log**

Client	UPS systems optimize power flow while protecting against
Service Date	damaging power loss and fluctuations. Annual maintenance
UPS Model	helps identify any potential
UPS Location	problems and ensures your devices remain protected.
Environment	
Room Temperature	UPS batteries are very sensitive
Humidity	to temperature and anything that will restrict airflow, including dust
Airflow	grime and clutter. A proper environment is 68° - 77°F and
Dust & Obstructions	dry (less than 60% humidity).
Diagnostics	
Communications	If equipped, does your UPS
Software Version	system have internet access and is the software up-to-date?
Battery Health (1)	
Model / Serial #	Batteries are the primary cause
Age	of UPS failure and, just like all devices, they have an expected
% of Useful Life	lifecycle. IEEE standards consider a UPS battery at the
Swelling / Damage	"end of its useful life" when it can no longer supply 80% of its rated
Battery Self-Test	capacity in ampere-hours.
Battery Health (2)	<u>Typical Battery Life by Type</u> Lead Acid
Model / Serial #	(SLA / VRLA) 2 – 3 years
Age	Lithium Iron Phosphate
% of Useful Life	(LIFEPO4)
Swelling / Damage	8 – 10 years
Battery Self-Test	Sodium-Ion (NA-ION / SIB)
	10 – 15 years
Battery Health (3)	
Model / Serial #	
Age	
% of Useful Life	
Swelling / Damage	
Battery Self-Test	





Battery Health (4)	
Model / Serial #	Batteries are the primary cause
Age	of UPS failure and, just like all devices, they have an expected
% of Useful Life	lifecycle. IEEE standards consider a UPS battery at the
Swelling / Damage	"end of its useful life" when it can
Battery Self-Test	no longer supply 80% of its rated capacity in ampere-hours.
Battery Health (5)	Typical Battery Life by Type Lead Acid
Model / Serial #	(SLA / VRLA) 2 – 3 years
Age	
% of Useful Life	Lithium Iron Phosphate (LIFEPO4)
Swelling / Damage	8 – 10 years
Battery Self-Test	Sodium-lon
<b>,</b>	 (NA-ION / SIB) 10 – 15 years
Battery Health (6)	
Model / Serial #	
Age	
% of Useful Life	
Swelling / Damage	
Battery Self-Test	
Battery Health (7)	
Model / Serial #	
Age	
% of Useful Life	
Swelling / Damage	
Battery Self-Test	
Battery Health (8)	
Model / Serial #	
Age	
% of Useful Life	
Swelling / Damage	
Battery Self-Test	



