

Colorado State University Extension – Home/Business Electrical Load Analysis

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This worksheet can be used to conduct an energy usage assessment by evaluating electrical loads (lights, appliances, etc.) around the home or business. Electrical loads are classified as AC (Alternating Current) or DC (Direct Current). When sizing an off-grid alternative energy system, this analysis can help the designer size your system correctly. Every attempt should be made to be as energy efficient as possible prior to investing in an alternative energy system (Solar, Wind, etc.).

Location _____

Load Analysis AC or DC (Circle One...use additional sheet for DC load analysis)

Load	Volts		Amps		Watts		Quantity		Total Watts		Hours/Day Used		Days/Week Used		Days/ week		Avg. Daily Watt Hours		
Example -- Bulbs		X		=	60	X	8	=	480	X	3.5	X	6	/	7	=	1,440		
Ex. -- Water Heater	115	X	39.13	=	4500	X	1	=	4500	X	6	X	7	/	7	=	27,000		
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
		X		=		X		=		X		X		/	7	=			
Total Connected Watts										Total Daily Watt-Hours									