



Traffic Volume and Solar Power Estimates for Radar Speed Signs

Radar speed sign using 50 watt solar panel for recharging											
Avg. Solar Hours/ Day	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
Estimated Number of Battery Backup Days											
Average Number of Vehicles per Day	1000	INDEF	Batteries should provide continuous supply of backup power								INDEF
	2000	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF
	5000	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF
	7500	7.6	7.6	7.6	7.6	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF
	10000	NR	6.3	6.3	6.3	6.3	6.3	INDEF	INDEF	INDEF	INDEF
	12500	NR	NR	NR	5.2	5.2	5.2	5.2	5.2	INDEF	INDEF
	15000	NR	NR	NR	NR	4.2	4.2	4.2	4.2	4.2	4.2
	17500	NR	NR	NR	NR	3.6	3.6	3.6	3.6	3.6	3.6
	20000	NR	NR	NR	NR	NR	3.1	3.1	3.1	3.1	3.1
	25000	NR	NR	NR	NR	NR	NR	NR	2.5	2.5	2.5
	30000	NR	Not recommended 50 watt solar panel not sufficient to support 24/7 operation								NR

Radar speed sign using 65 watt solar panel for recharging											
Avg. Solar Hours/ Day	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	
Estimated Number of Battery Backup Days											
Average Number of Vehicles per Day	2000	INDEF	(Batteries should provide continuous supply of backup power)								INDEF
	5000	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF
	7500	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF
	10000	6.5	6.5	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF
	12500	5.4	5.4	5.4	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF	INDEF
	15000	NR	4.2	4.2	4.2	4.2	INDEF	INDEF	INDEF	INDEF	INDEF
	17500	NR	3.6	3.6	3.6	3.6	3.6	3.6	INDEF	INDEF	INDEF
	20000	NR	NR	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	25000	NR	NR	NR	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	30000	NR	NR	NR	NR	2	2	2	2	2	2
	35000	NR	NR	NR	NR	NR	1.7	1.7	1.7	1.7	1.7
	40000	NR	NR	NR	NR	NR	NR	1.5	1.5	1.5	1.5
45000	NR	Not recommended 65 watt solar panel not sufficient to support 24/7 operation								NR	

The traffic volumes listed above, and the associated battery life, assume that the radar speed sign display will **only be activated by vehicles exceeding the posted speed limit**. These tables indicate estimates. These values are based on temperature ranges of 30-100° F. Temperatures between 0-30° F will decrease these numbers by at least 50%.