



Traffic Volume and Solar Power Estimates

Radar sign using 40 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											
Avg. # of Vehicles/Day	1000 ◦ ◦ ◦	INDEF	<i>Batteries should provide continuous supply of backup power</i>								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	<i>Not recommended, 40 watt not sufficient to support 24/7 operation</i>								NR

Radar 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											
Avg. # of Vehicles/Day	2000 ◦ ◦ ◦	INDEF	<i>(Batteries should provide continuous supply of backup power)</i>								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	<i>Not recommended, 65 watt not sufficient to support 24/7 operation</i>								NR

The traffic volumes listed above, and the associated battery life assume that the radar sign display will **only** be activated by vehicles **exceeding** the posted speed limit. These table are 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%.