

How to Power an Automatic Gate Opener



GTO, or **gates that open automatically**, come with gate opener batteries that need to be charged either by an electrical supply or a solar panel, depending on how close your gate opener is to your power supply. It may be more economical to purchase a solar panel if you find that running an electric wire to your gate is not cost-effective.

There are two ways the **Mighty Mule's** battery can be charged.

- Transformer (18V included with kit): All Mighty Mule E-Z Gate Openers come with a transformer for maintaining the battery charge. You can run up to 1000 ft. of low voltage wire (RB509 not included) from the opener control box to the 110 V AC outlet where the transformer is plugged. If your gate is more than 1000 ft. from an AC power source, or you just prefer to use solar power, you can use the optional Mighty Mule solar panel(s) to maintain the Mighty Mule battery backup.
- Optional Solar Power Kits: The solar option will have some limits. The table and map illustrate the maximum number of gate cycles to expect per day in a particular area when using 5 to 30 Watts of Mighty Mule solar panels. The figures shown are for winter (minimum sunlight) and do not account for the use of any accessory items. Accessories connected to your system will draw additional power from the battery.

Solar panel power application chart

Use the following chart to determine whether your automatic gate opener should be powered by solar energy or by "grid" power, or electric lines.

Model #	Watts Zone 1 Zone 2 Zone 3			
FM350/500 - Single Swing Gates 5	4	8	13	
FM350/500 - Single Swing Gates 10	8	16	26	
FM350/500 - Single Swing Gates 15	11	20	30	
FM350/500 - Single Swing Gates 20	14	28	38	
FM350/500 - Single Swing Gates 25	17	36	46	
FM350/500 - Single Swing Gates 30	20	44	54	
FM502 - Dual Swing Gate	10	4	8	13
FM502 - Dual Swing Gate	15	7	13	20
FM502 - Dual Swing Gate	20	10	18	27
FM502 - Dual Swing Gate	25	13	23	34
FM502 - Dual Swing Gate	30	16	28	41

Other considerations when purchasing an automatic gate opener

For single gates, it is recommended that you purchase an optional second battery (FM150) for back up cycles during overcast days. The control boxes are prewired for the optional second battery.

Dual gates require 10 Watts of solar charging power. Use two 5 watt panels (FM121) or one 10 Watt solar panel (FM123).