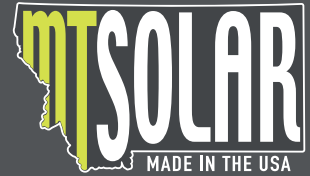


GROUND CLEARANCE

HOW MUCH DOES IT MATTER?



EASIER MAINTENANCE

Higher ground clearance keeps arrays clear of tall grass and other plants that are allowed to grow freely below the mount. There's no need to use harsh vegetation control methods or any special measures outside of standard ground maintenance. Snow and leaves will slide off the array and can be allowed to accumulate on the ground without obstructing modules.

DUAL USE OF LAND

Higher ground clearance lets you use your land as you choose. You can keep the original function of your space and change it as you please without your mount being an obstruction. Your solar mount can even enhance the way you use your property by adding shade and cover.

SAFETY AND SECURITY

Higher ground clearance can bypass the need for fences, barriers, and other requirements affecting systems with exposed wiring below eight feet. This keeps installations simpler and less expensive. Keeping the array out of reach also prevents vandalism, theft, and accidental damage. Even stray rocks that might be kicked up when using lawn equipment won't be likely to dent or crack modules that are far off the ground.

BROADER ADJUSTABILITY

Higher ground clearance allows for a broader range of adjustability. The array can be positioned 90 degrees, making it easier to clean the modules or move them out of the way as needed for ground maintenance.

BETTER MODULE EFFICIENCY

When more air can circulate below the mount, module temperatures are reduced, which improves their efficiency and energy output. Heat can be reduced even more if plants are allowed to grow below the mount, as they reduce ground temperatures and add a natural evaporative cooling effect. Arrays are also more productive when they are above shadows cast by surrounding objects. Even shade cast by tall trees can be bypassed by raising arrays.



SNOW SLIDES OFF



DUAL USE OF SPACE



NO FENCING REQUIRED



LESS MAINTENANCE (LOW O&M)

How High?

MT Solar recommends a minimum of ground clearance of five feet. Leaving more space between the array and the ground adds up to a lot of benefits.

THE HIGH COST OF LOW CLEARANCE MOUNTS

Mounts that keep arrays low to the ground carry some vulnerabilities. If you are planning to install a solar mount with limited ground clearance, you may want to account for the following:



Unsustainable, Limited Land Use - Low clearance mounts limit land usability. Space that's solely dedicated to solar mounts can't be used for much else. If the ground is kept natural, vegetation will need to be controlled by frequent mowing or with herbicides that harm the environment. Alternatively, the natural ground will need to be permanently sterilized using chemicals.

Smaller Return on Investment - Because low ground clearance mounts don't allow for dual use of the land, the returns you can get from your property are also limited. Conversely, high ground clearance mounts can add energy generation to spaces that are already in use, like driveways, sidewalks, gardens, and crop fields.

Greater Potential for Theft and Damage - Even security fences can be breached by thieves. Accidental damage caused by animals, people, or vehicles is also harder to prevent when modules are closer to the ground.



Higher Maintenance - In general, solar mounts that are closer to the ground mean more frequent maintenance and increased O&M costs. Any grass below the mount needs to be consistently controlled so it doesn't interfere with output. If snow and leaves build up around the mount, they must be consistently cleared away. Mounts will also demand more frequent cleaning when they're closer to the ground, otherwise, dust, dirt, and pollen will accumulate, which can hinder output and potentially damage system components.

Limited Output Potential - Unlike higher clearance mounts, which can be positioned above shadows by cast surroundings, lower clearance mounts can lose energy output if taller objects shade modules. Lower clearance mounts may limit or lock the adjustability of your array, which can curb your ability to position it to an optimal angle for the season or to make adjustments for maintenance. If air cannot freely circulate between the modules and the ground, efficiency and output will be hindered.

