

PicoCell™ 3500 Solar A/C Motor Controller

Product Highlights:

- Run your standard AC motor using solar power
- Universal solar controller for single/three-phase, 50/60Hz, 115/230V AC motors
- Rugged IP65/NEMA3R enclosure for remote applications
- Modular design for ease of installation and maintenance
- Solar VFD allows motors to run longer on solar
- Lower installation costs versus DC solar pumps
- Solar projects can qualify for Tax Credits, Grants or other Local Rebates
- WiFi communication/control modules available as optional accessories
- Patented, Engineered and Manufactured in the USA



SunTech offers you the ability to upgrade a hard starting DOL single- or three-phase AC motor system to a soft start Variable Frequency Drive technology running on solar power. The PicoCell 3500 universal controller can power motors, pumps, compressors or other inductive loads regardless of whether it is single- or three-phase, 50HZ or 60HZ, 115 or 230Vac. Designed for remote off-grid installations, the weather proof all aluminum chassis/heat sink is IP65 rated for harsh outdoor environments and can operate in high temperatures, humidity and corrosive environments.

SunTech Drive engineers have improved on the function of previous solar controllers to run traditional inductive loads (motors) by replacing old electromagnetic designs with high voltage silicon components and our patented adaptive firmware. One small device now integrates the functions of an inverter, VFD, and MPPT controller. No need to use costly and proprietary DC motors, when you can use off-the-shelf components.



ELECTRICAL

Solar PV open circuit voltage:	400V*
Max PV panel current in series:	9A
Max single phase AC motor current:	13A
Max three phase AC motor current:	10.5A
Remote sensor inputs:	2
Analog sensor inputs:	2 (4-20mA)

Dual Solar Array Input
Over current, overvoltage and over temperature protections
Optional: WiFi communication module, GFCI protections

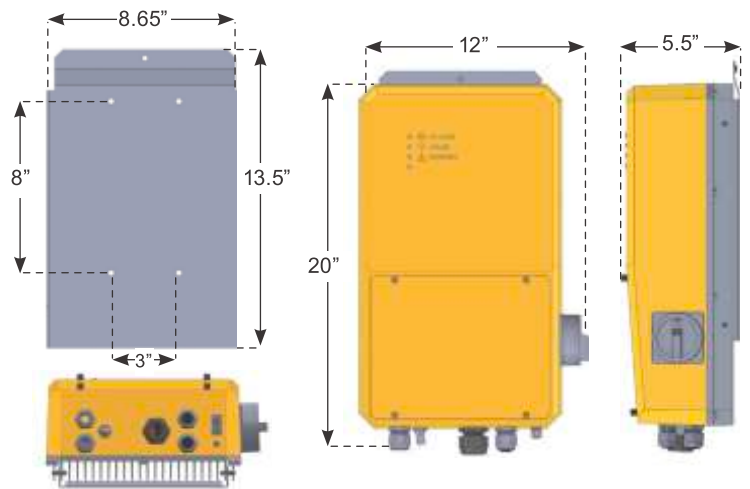
MECHANICAL

Degree of protection:	NEMA3R
Enclosure material:	Aluminum
Operating temperature:	-40—F to 122—F
Dimensions:	18"x10"x5"
Solar terminals:	AWG #10-16
Motor terminal:	AWG #8-16
Float sensor terminals:	AWG #14-20
Cooling:	Passive/no fan

*Per solar array

New and Improved Features

- Integrated DC disconnect so no additional disconnect is required
- 2 digital and 2 analog inputs
- Multiple DIP switches for feature selection in the field
- Integrated load filters
- Integrated junction connections for parallel solar arrays
- Optional GFCI protection



Optional Accessories

- Float switches for well pumps and tank overflow
- Analog sensors adapter board
- WiFi communications module with web services
- Pumps
- Solar PV panels and racks
- DC rated disconnects

Typical Applications

- Crop Irrigation
- Livestock Watering
- Pool Pumping & Recirculation Systems
- Lake and Pond Aeration & Fountains
- Aquaculture
- Solar Hot Water Heating & Recirculation
- Salt Water/Residual H₂O Evaporation
- Village & Residential Drinking Water

**2 Wire surface motors with starting capacitors require Accessory Power Cable retrofit.