

# THE KID

## MIDNITE MPPT CHARGE CONTROLLERS



### **The finest 30 amp MPPT charge controller for Solar, \*Wind or \*Hydro!**

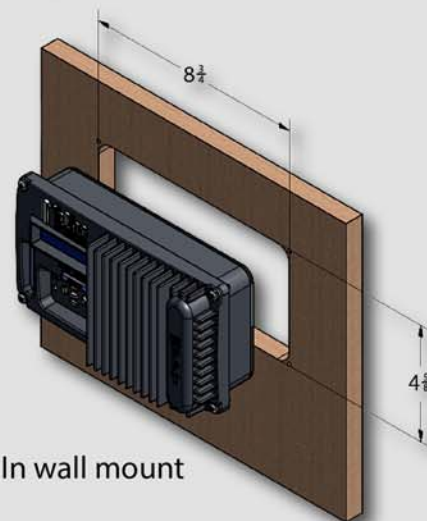
The KID is the most versatile medium sized charge controller on the market. Ideal for small renewable energy systems. The KID allows for true input paralleling. As your power needs grow, add more modules to the array and a second KID. This will give twice the power from a single array.

#### PRODUCT FEATURES

- Solar, \*Wind or \*Hydro modes
- MPPT Tracking
- True paralleling - Inputs and Outputs for two KIDs
- Up to 150V input
- MidNite's exclusive HyperVOC extends the input voltage beyond 150 VOC for cold climates
- 12V, 24V, 36V, 48V battery output
- Load/Clipper function user selectable. Clipper function is used on \*wind and \*hydro and requires an additional MidNite KID C lipper
- Lighting Controller: dusk-dawn, hourly, day, night settings
- Up to 30 amps battery output with low input voltage based off of PV configuration.
- No fan
- Reverse polarity protected
- Battery Temp Sensor standard with marine version
- Front panel exchangeable fuses for battery, input and load/clipper. Marine version supplied with circuit breaker load circuit
- 3 LED bar graph for battery status at a glance
- Keypad for access to extensive menu items and set points
- Includes wall mount adapter (Boat mount bracket included on marine versions)
- Sealed for harsh environments
- Built in Arlington, WA USA



View with wall mount



In wall mount



Optional marine version is available in black or white.

The KID's HyperVOC feature allows up to 162VOC. (The KID will not be harmed by voltages between 150 and 162VDC (this is the HyperVOC range). However the KID will remain in standby until the voltage is 150v or below.)

\* Wind & Hydro available second quarter of 2014 with firmware updates

[www.midnitesolar.com](http://www.midnitesolar.com)

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## MIDNITE MPPT CHARGE CONTROLLERS



### PRODUCT SPECIFICATIONS

|   |  |
|---|--|
| Operating Input Voltage   | 150VDC   |
| Nominal Battery Voltage   | 12V through 48V  |
| Maximum Output Current  | 30A  |
| PV Open Circuit Voltage VOC   | 150VDC + HyperVOC (162VOC)   |
| HyperVOC (See page bottom)  | Extended VOC range for cold climates   |
| Charging Regulation   | Bulk, Absorb, Float as well as Equalization                                      |
| Battery Voltage Range   | 9V TO 64V  |
| Equalization Charging   | Adjustable Voltage and Duration, Manual or Auto                                  |
| Battery Temp Compensation<br>(Standard marine version - optional otherwise) | Automatic when BTS is installed, Adjustable mV per degree C per 2 volt cell      |
| Programmable Auxiliary Control Output                                       | 1 - I/O Aux communication or with Wizbang Jr.                                    |
| Status Display  | LCD plus status LED  |
| Networking Cabling  | Standard 4 conductor phone cable, no hub needed                                  |
| Communications  | RS232 openly published protocols and USB   |
| Load Terminal   | 30A configurable as battery load or wind clipper                                 |
| Solar, Wind And Hydro Applications  | Standard   |
| Operating Temperature   | Min. of -40C to 50C - Controller will auto derate as temperature rises above 25C |
| Environmental Rating  | Indoor IP64 type 1   |
| Conduit knock Outs  | 2  |
| Warranty  | 2 Year   |
| Lighting Controller   | Highly customizable via keypad (dusk-dawn, hourly, day, night, etc).             |
| Weight  | 6 Lbs.   |
| Dimensions  | 9 1/4"L x 5"H x 3 5/16"W (23.5CM x 12.7CM x 8.4CM)                               |
| Shipping Dimensions   | 12"L x 8"H x 6"W (30.48CM x 20.32CM x 15.24CM)                                   |
| Options   | 3ft. network cable, external load, boat mount bracket                            |
| Certifications  | ETL for US & Canada, CE Certified, FCC Class B                                   |
| True Paralleling  | Inputs and Outputs between 2 units with smart active current sharing             |
| Battery Types   | Flooded, AGM, Gel, Calcium SMF, Lithium BMS, Custom                              |

*HyperVOC: A non-operative VOC safety zone over and above the maximum input voltage for cold climates.*