AMERICAN SENTINEL

TECHNICAL PRODUCT SHEET

TDSB80

(2) 60W SOLAR PANEL PROVIDES A CHARGE FOR THE 80AH BATTERIES

Peak power (Pmax):	60W
Crest voltage (Vmp):	18(V)
Short-circuit current:	1.83(A)
Glass:	3.2mm (Ultra-white textured tempered glass)
Test criteria:	Irradiance 1000W/M2
Max system voltage:	600V
Solar Cell Quantity:	36 (4*9)
Frame:	Aluminum alloy frame Strong impact resistance
Operating current:	1.66(A)
Open-circuit voltage:	21.4(V)
Dimension:	26 3/8" L x 21" H x 1" W per panel
Weight:	8.3lb per panel

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1. MCU control, standby ultra-low power consumption;

2. The charging principle adopts a three-stage charging algorithm to charge the battery once a week, which can effectively prevent the battery from being unbalanced and vulcanized, and increase the battery life;

3. The power MOSFET is used as an electronic switch without any mechanical switch and without any protective action delay;

4. Charge and discharge green and red LED indicator, discharge light control + timing, pure light control, normally open mode can be manually adjusted

Charging Mode:	PWM mode
System Current:	3A
System Voltage:	7.4V, 11.1V, 14.8V
Power Input:	≤18W, ≤18W, ≤36W
Input withstand voltage:	≤25V
Overload protection/ Short circuit:	1.5 times rated current delay for 5 minutes off,
Protection:	Automatic recovery after 5 minutes; ≥3 times rated current short circuit protection action
Charge loop drop:	≤0.7V
Discharge circuit voltage drop:	≤0.1V
Overvoltage protection voltage:	5.5 (3.7V), 9.4 (7.4V), 13.6 (11.1V), 17.8 (14.8V)
Overvoltage recovery voltage:	5.0 (3.7V), 8.9(7.4V). 13.1 (11.1V), 17.3 (14.8V)
Charge cut-off Voltage:	4.2 (3.7V), 8.4(7.4V), 12.6 (11.1V), 16.8 (14.8V)
Over-discharge protection Voltage:	3.2 (3.7V), 6.0(7.4V), 9.0 (11.1V), 12.0 (14.8V)
Over-Discharge Recovery Voltage:	3.7 (3.7V), 7.4(7.4V), 11.1 (11.1V), 14.8 (14.8V)
Charging Return Voltage:	3.7 (3.7V), 7.4(7.4V), 11.1 (11.1V), 14.8 (14.8V)
Daytime identification voltage:	3.0 (3.7V), 3.5 (7.4V), 7 (11.1V/14.8V)
Night identifying voltage:	1.0 (3.7 V), 1.5 (7.4V), 3 (11.1V/14.8V)

Operation Temperature:	-86°F~+131°F
Storage Temperature:	-113°F~+158°F
Operating Relative Humidity:	≤90%RH, no condensation
IP Grade:	IP30
External Dimensions:	2.1*2.7*.86 inch
Installation Cabling:	AWG22~14/2mm^2
Weight:	70.54 lb