



# Solar Panel

Efficient Conversion  
Size Customizable  
High Precision Output



- Solar cell: Monocrystalline silicon solar cell 6.14\*3.07in
- No. of cells and connections: 3\*12=36 PCS
- Dimension of module: 77\*20\*1.2in

Model	Power(W)	Voltage (VDC)	Maximum System Voltage	Current (A)	Max. series fuse rating	Operating Temp
G2G Solar Panel	120	17.4-18.0V	1000 VDC	10	15A	-40°C to + 85°C



**ANPRO STICK**  
The Perfect Solution for  
Solar Sign

## G2G ANPRO 180 Plus DF Stick

LED SIGN Module	Voltage	Power	Lm (Per Stick)
Anpro 180 DF Stick 2FT	24VDC	9.6W	1680
Anpro 180 DF Stick 30IN	24VDC	12W	2100
Anpro 180 DF Stick 3FT	24VDC	14.4W	2520
Anpro 180 DF Stick 42IN	24VDC	16.8W	2940
Anpro 180 DF Stick 4FT	24VDC	19.2W	3360
Anpro 180 DF Stick 5FT	24VDC	24W	4200
Anpro 180 DF Stick 64IN	24VDC	24W	4200
Anpro 180 DF Stick 6FT	24VDC	28.8W	5040
Anpro 180 DF Stick 7FT	24VDC	33.6W	5880
Anpro 180 DF Stick 8FT	24VDC	38.4W	6720
Anpro 180 DF Stick 9FT	24VDC	43.2W	7560
Anpro 180 DF Stick 117IN	24VDC	38.4W	6720
Anpro 180 DF Stick 10FT	24VDC	48W	8400

## G2G ANPRO 180 Plus SF Stick

LED SIGN Module	Voltage	Power	Lm (Per Stick)
Anpro 180 SF Stick 2FT	24VDC	4.8W	840
Anpro 180 SF Stick 30IN	24VDC	6W	1050
Anpro 180 SF Stick 3FT	24VDC	7.2W	1260
Anpro 180 SF Stick 42IN	24VDC	8.4W	1470
Anpro 180 SF Stick 4FT	24VDC	9.6W	1680
Anpro 180 SF Stick 5FT	24VDC	12W	2100
Anpro 180 SF Stick 64IN	24VDC	12W	2100
Anpro 180 SF Stick 6FT	24VDC	14.4W	2520
Anpro 180 SF Stick 7FT	24VDC	16.8W	2940
Anpro 180 SF Stick 8FT	24VDC	19.2W	3360
Anpro 180 SF Stick 9FT	24VDC	21.6W	3780
Anpro 180 SF Stick 117IN	24VDC	19.2W	3360
Anpro 180 SF Stick 10FT	24VDC	24W	4200



# Solar Controller

- Intelligently adjusts output power, efficiently controls the brightness of fixtures
- Figure out the lighting time of sign cabinet through calculation
- Intelligent battery storage sensor and discharge status

## Master Control

Items	Values
Controller Type	PWM
System Voltage	Automatic recognition 12V/24V
Max. Current	35A
Max. Power	12V/450W
Over Voltag Protection	16V
Max.Solar Energy Input Voltage	< 55V
Operating Temperaturee	-20°C ~ +50°C
IP Protection Degree	IP30
Battery Type	Flooded FLD/Sealed SLD GEL /Lithium LI
Light Control Voltage	Light Control on 5V, Light Control off 6V(Light Control on plus 1V)

## Master Control



## Sub Control



## Sub Control

Items	Values
Controller Type	MPPT
System Voltage	12VDC/24VDC
Load Current	150mA ~ 4160mA
Max. Load Power	12V/100W 24V/200W
Over Voltag Protection	16V
Operating Temperaturee	-35°C ~ +65°C
Protections	Battery polarity reverse protection, solar panel polarity reverse protection, solar panel overvoltage protection, lithium battery overcharge and over discharge protection, lithium battery BMS overcharge detection protection, over temperature protection, load open circuit and short circuit protection, load overcurrent protection, etc.

# Solar Battery

12V stable output,  
multiple combination of capacity  
different capacity option



## CHARGE

	For Floating Charge	For Cycle Use
Usage	12V battery	12V battery
Charging Voltage	13.6-13.7V	14.6-15.0V

### Note:

- 1) C: means Ah value of battery's rated capacity.
- 2) When ambient temperature is below 15°C or above 35°C, the recommended compensation factor is -3mV/°C/cell(Floating Charge) or -4mV/°C/cell(Cycle) starting from the standard center point -25°C.
- 3) Battery temperature in charging should be in the range of -15°C~50°C.

## DISCHARGE

Relationship between Discharge Current and Final Discharge Voltage

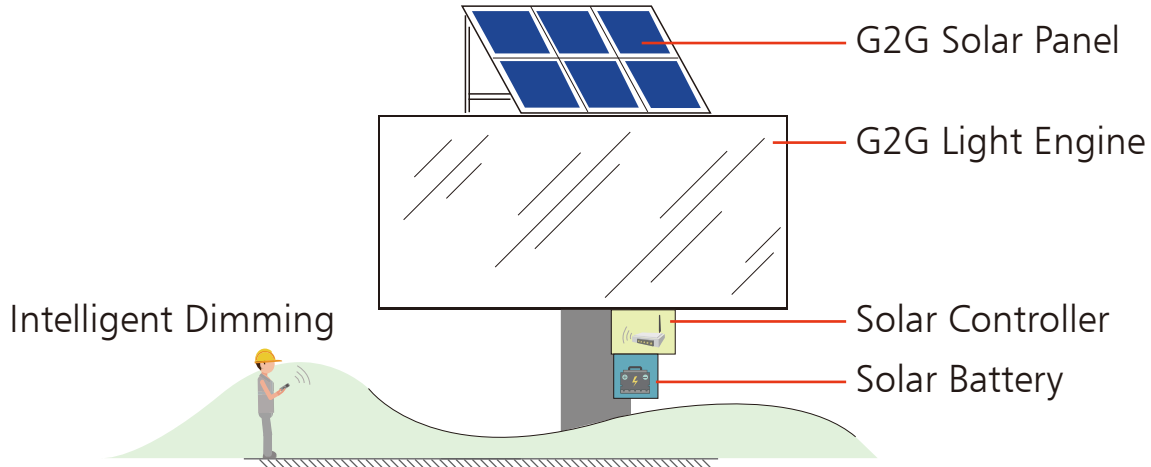
Discharge Current	Floating Discharge Voltage(12V Series)
0.2C or below	1.75V/Cell
From 0.2C to 0.5C	1.70V/Cell
From 0.5C to 1.0C	1.55V/Cell
Above 1.0C	1.30V/Cell

### Note:

- 1) See above table, Final Discharge Voltage should vary with the change of Discharge Current. Attention: When discharge, voltage must not be lower than its corresponding Final Discharge Voltage.
- 2) Immediate charge after discharge or over discharge for retaining battery life.
- 3) Battery temperature in discharge should be in the range of -15°C~50°C.

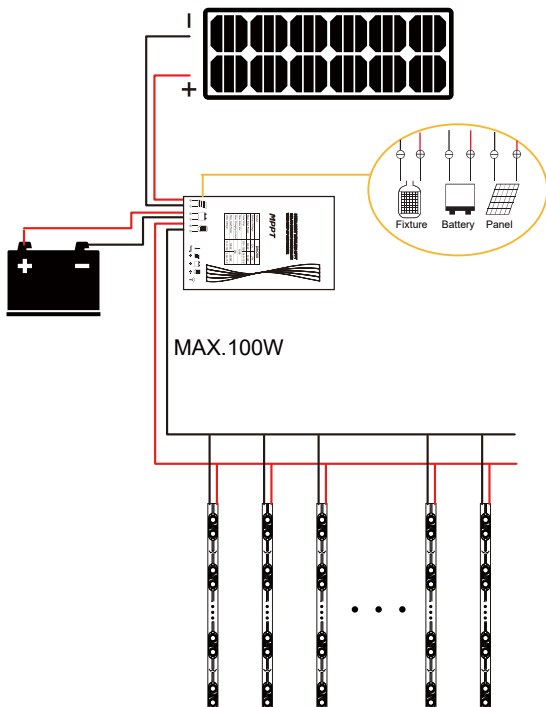


# Solar Application



# Connection Diagram

Below 100W



Over 100W

