

# PV Power Optimizer

## Introduction to PV Power Optimizer



Honeybee400 (~PLC)

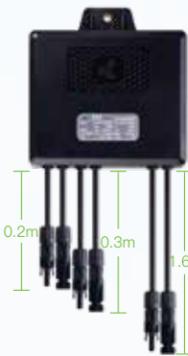


Honeybee650 (~PLC)

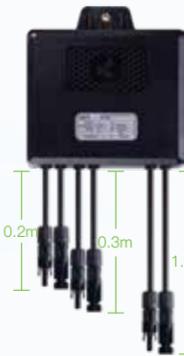


Honeybee850 (~PLC)

-----Sole Power Optimizer-----



Honeybee800



Honeybee1300



honeybee1600 (~PLC)

-----Dual Power Optimizer-----



Swarm  
Data Acquisition Unit



Beehive  
Data Aggregation Device



Beebox-H  
Optimizer Initiator

## Wireless Optimizer System Diagram



- Optimize power generation: Optimizer tracking maximum power point in input of each module and adjust maximum output to boost energy yield. Perfectly solve the power loss caused by module shading, module variances and modules mismatch.
- Real-time module-level monitoring: Optimizer collects current, voltage and temperature of each module in real-time and displays in monitoring system.
- Remote shutdown: Entire system can be remotely switch off by APP or web monitoring portal to prevent shock hazard. With data processing device(Beehive) sending "shutdown commands" to each optimizer to cut off power generation.

# Honeybee400/650/850

## Sole Power Optimizer



### Product Features

- ⚙️ Module-level Maximum Power Point Tracking(MPPT), 5~25% more power yield
- ⚙️ Real-time module level monitoring, timely warning and positioning the problem
- ⚙️ Secure solar system,remote shutdown, elimination of high voltage danger
- ⚙️ Module add-on, compatible with third party inverter, available for the new or the existing solar power station
- ⚙️ 25 years lifespan, perfectly matching solar modules

Sole Power Optimizer	Honeybee400	Honeybee650	Honeybee850
<b>INPUT</b>			
Support Modules	450W	650W	850W
Max.Input Power	75VDC	75VDC	60VDC
Operating Voltage Range	12~75VDC	12~75VDC	14~60VDC
MPPT Voltage Range	12~75VDC	12~75VDC	14~60VDC
Isc	15A	16A	23A
Max.Input Current	13A	15A	21A
<b>OUTPUT</b>			
Max.Output Power	450W	650W	850W
Voltage Range	0 ~ 75VDC	0 ~ 75VDC	0 ~ 60VDC
Max.Output Current	13A	15A	21A
Max.Efficiency	99.50%	99.50%	99.50%
<b>OTHERS</b>			
Max.System Voltage	1500VDC	1500VDC	1500VDC
Operating Temperature Range	-40~+85 °C	-40~+85 °C	-40~+85 °C
Relative Humidity	0~100%	0~100%	0~100%
Ingress Protection	IP68	IP68	IP68
Protective Class	II	II	II
Communication	868M/915M/2.4G/PLC	868M/915M/2.4G/PLC	868M/915M/2.4G/PLC
<b>INSTALLATION SPECIFICATION</b>			
Size	130.3x109.6x25mm	130.3x109.6x25mm	130.3x109.6x25mm
Weight	520g	520g	520g
Connector(Input/Output)	Compatible with MC4	Compatible with MC4	Compatible with MC4
<b>STANDARD/ CERTIFICATION</b>			
Safety	IEC/EN 62109-1:2010 the Low Voltage Directive(2014/35/EU)		
EMC	EN 61000-6-1:2007 EN 61000-6-3:2007/+A1:2011 EN 61000-6-2:2005 EN 61000-6-4:2007/+A1:2011 the EMC Directive(2014/30/EU)		
Certification	CE		
COMM	EN 50663: 2017, EN 62479: 2010 EN 301 489-1 V2.2.3, EN 301 489-3 V2.1.1, EN 300 220-2 V3.1.1		

\*Honeybee650-PLC and Honeybee850-PLC Working status can be customized (Default on or off)