# QUICKLY FIELD REPLACEMENT AND UPGRADE

## LONG STRINGS









Inverter optimization

Lower wire-losses





• String length increased by up to 30%

- Fewer BOS components
- Faster installation

# **OPTIMIZATION**









Maximized roof usage

Plus all the benefits of Safety



Plus all the benefits of Optimization





• Shade and age tolerance

- Enhanced energy yield
- Greater design flexibility

## **SAFETY**









CRM integration

Warranty tracking

Fleet management

Over-temperature protection

Plus all the benefits of Monitoring

• NEC 2014 690.12 rapid shutdown compliant

- Module-level deactivation
- Automatic or manual shutdown

# MONITORING







Reduced O&M costs

- PV-2.0 data synchronization
- Module bar code tracking

DIODES



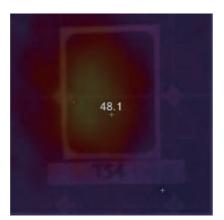


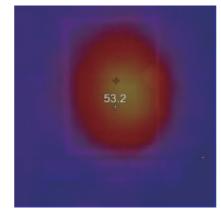
- Similar to a standard junction box
- Standardization on basic TS4 baseplate
- Applicable to conventional and smart modules
- Field replaceable and upgradeable
- Heat dissipation away from the module

This innovative module provides five levels of functionalities. Based on a universal platform, you can select the right functionality for each solar project, which is best for budget and performance.

# **ENHANCED J-BOX HEAT DISSIPATION CAPABILITY**

By incorporating the diodes onto the removable covers of Junction Box, the reliability of module is greatly improved, dissipates less heat on the back sheet.



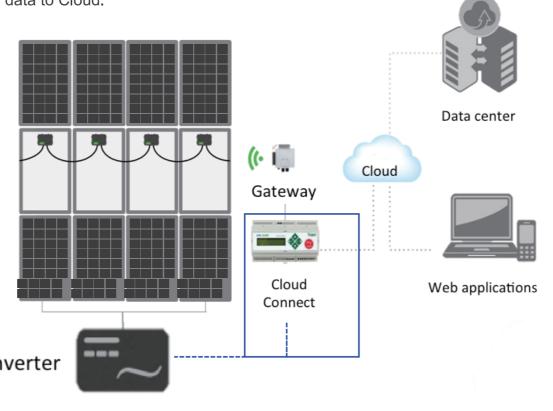


**SMART J-BOX** 

STANDARD J-BOX

# **FULL COMPATIBILITY AND MULTIFUNCTIONAL SYSTEM**

This innovative module is fully compatible with any inverter. The modules are wired together just like standard modules, if you select the modules with monitoring function or higher level functions, they will communicate wirelessly with the gateway. Then, the gateway transmits data wirelessly to the cloud connect which controls the array with the gateway and uploads data to Cloud.



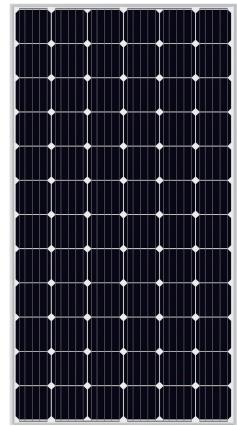


SRP-6MA(-HV) SRP-6MA(-HV)





# 365-380w

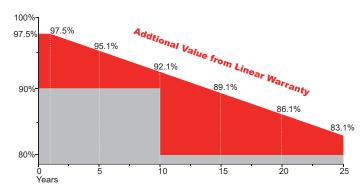


# **MANAGEMENT SYSTEM**

**ISO 9001:** Quality management system

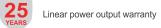
**ISO 14001:** Standard for environmental management system OHSAS 18001: International standard for occupational health and safety assessment system

# **WARRANTY**











Advanced smart platform





Rapid shutdown



Quickly field replacement and upgrade



Triple 100% Electrolumines\_ cence (EL) tests minimize breakage rate



Advanced

Enhanced J-Box heat dissipation capacity

Outstanding power output

capability at low irradiance

# SRP-XXX-6MA: Maximum System Voltage 1000 VDC. SRP-XXX-6MA-HV: Maximum System Voltage 1500 VDC.

#### **Electrical Characteristics(STC)**

Module Type	SRP-365-6MA SRP-365-6MA-HV	SRP-370-6MA SRP-370-6MA-HV	SRP-375-6MA SRP-375-6MA-HV	SRP-380-6MA SRP-380-6MA-HV
Maximum Power at STC -P <sub>mp</sub> (W)	365	370	375	380
Open Circuit Voltage -V <sub>oc</sub> (V)	47.6	47.8	48.0	48.3
Short Circuit Current -I <sub>sc</sub> (A)	9.78	9.88	9.96	10.02
Maximum Power Voltage -V <sub>mp</sub> (V)	38.7	38.9	39.1	39.4
Maximum Power Current -I <sub>mp</sub> (A)	9.44	9.52	9.60	9.65
Module Efficiency STC- $\eta_{_m}(\%)$	18.81/18.68	19.07/18.93	19.33/19.19	19.58/19.44
Power Tolerance (W)	(0,+4.99)			
Maximum System Voltage (V)	1000VDC / 1500VDC			
Maximum Series Fuse Rating (A)	15A			

#### **Electrical Characteristics(NOCT)**

	SRP-365-6MA SRP-365-6MA-HV	SRP-370-6MA SRP-370-6MA-HV	SRP-375-6MA SRP-375-6MA-HV	SRP-380-6MA SRP-380-6MA-HV
Maximum Power at NOCT -P <sub>mp</sub> (W)	271	274	278	282
Open Circuit Voltage -V <sub>∞</sub> (V)	44.0	44.1	44.3	44.6
Short Circuit Current -I <sub>sc</sub> (A)	7.90	7.97	8.05	8.11
Maximum Power Voltage -V <sub>mp</sub> (V)	36.3	36.4	36.6	36.9
Maximum Power Current -I <sub>mp</sub> (A)	7.47	7.53	7.60	7.65

#### **Temperature Characteristics**

Pmax Temperature Coefficient	-0.36 %/°C
Voc Temperature Coefficient	-0.28 %/°C
Isc Temperature Coefficient	+0.05 %/°C
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature (NOCT)	45±2 °C

#### **Packing Configuration**

	1956 x 992 x 40mm/1970 x 992 x 40mm			
Container	20'GP	40'GP	40'HQ	
Pieces per Pallet	27	27	27+2*	
Pallets per Container	10	22	22	
Pieces per Container	270	594	638	

<sup>\* 27+2</sup> pieces per pallet is the special package which only suits for container transport.For details, please consult SERAPHIM.

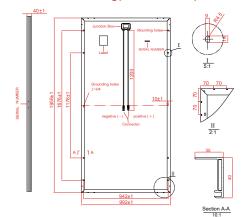
#### Mechanical Specifications

External Dimensions	1956 x 992 x 40 mm/1970 x 992 x 40 mm
Weight	21.5kg/22.0kg
Solar Cells	PERC Mono crystalline 156.75 x 156.75 mm (72pcs)
Front Glass	3.2 mm AR coating tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68
Output Cables	4.0 mm <sup>2</sup> ,cable length:1200 mm
Connector	MC4 Compatible
Mechanical Load	5400Pa

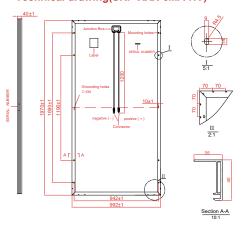
STC: Irradiance 1000 W/m², module temperature 25°C, AM=1.5 NOCT: Irradiance 800 W/m², ambient temperature 20°C, wind speed :1m/s Specifications are subject to change without further notification.

# DIODES

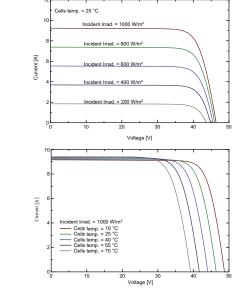
#### Technical drawing(SRP-XXX-6MA)



### Technical drawing(SRP-XXX-6MA-HV)



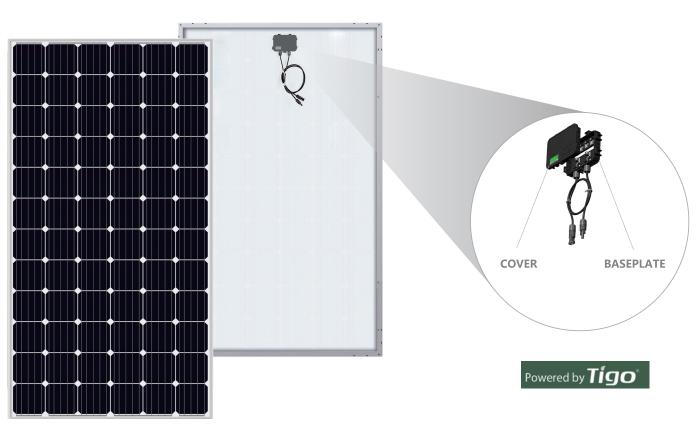
#### I-V Curve



Seraphim delivers your smart energy needs, optimizes your project and ROI. This innovative module integrates a smart platform, which five different covers of Junction Box can fit onto.

**ADVANCED SMART PLATFORM** 

# **DIODES**



This smart solution gives you perfect user experience and customization, your solar projects can be optimized, monitored or safely protected, etc. Please enjoy Seraphim Smart Solutions!