

Meet the Microinverter with Record Power Density Designed for Today's 500Wp+ High-performing PV Panels

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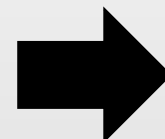
Who We Are

Huayu New Energy

A MPLE(Module-level Power Electronics)Specialist



2012

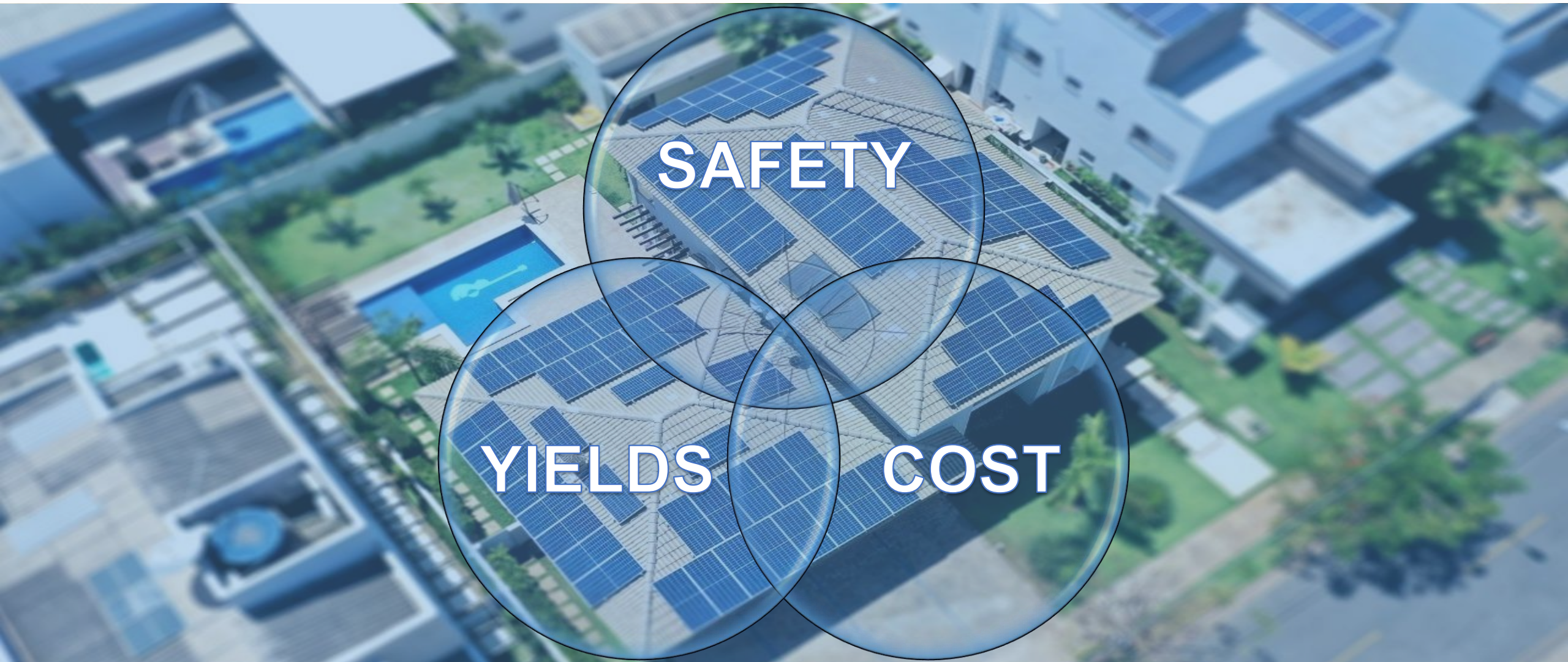


2014

First Single Unit
250W

First “4 in 1” Unit
1000W

Three Key Concerns for Solar Investment

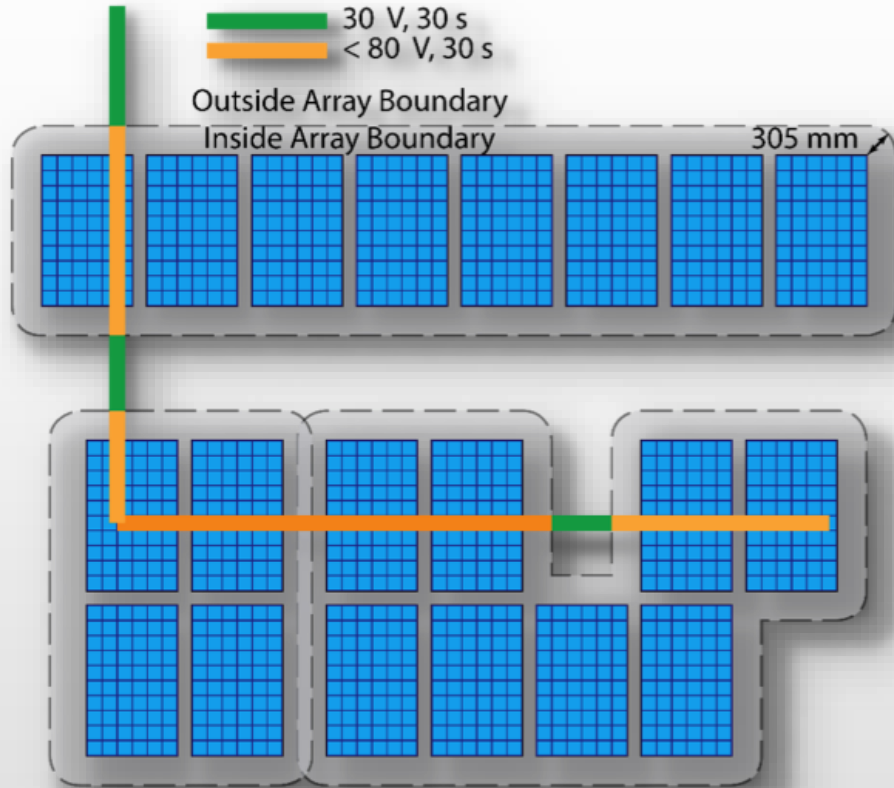


How to Prevent Solar Fire Risks during 25+ Years?



Since 2010, firefighting authorities around **Australia** have attended **400+ Fires** that have been caused by faults in solar power systems.

How to Prevent Solar Fire Risks during 25+ Years?



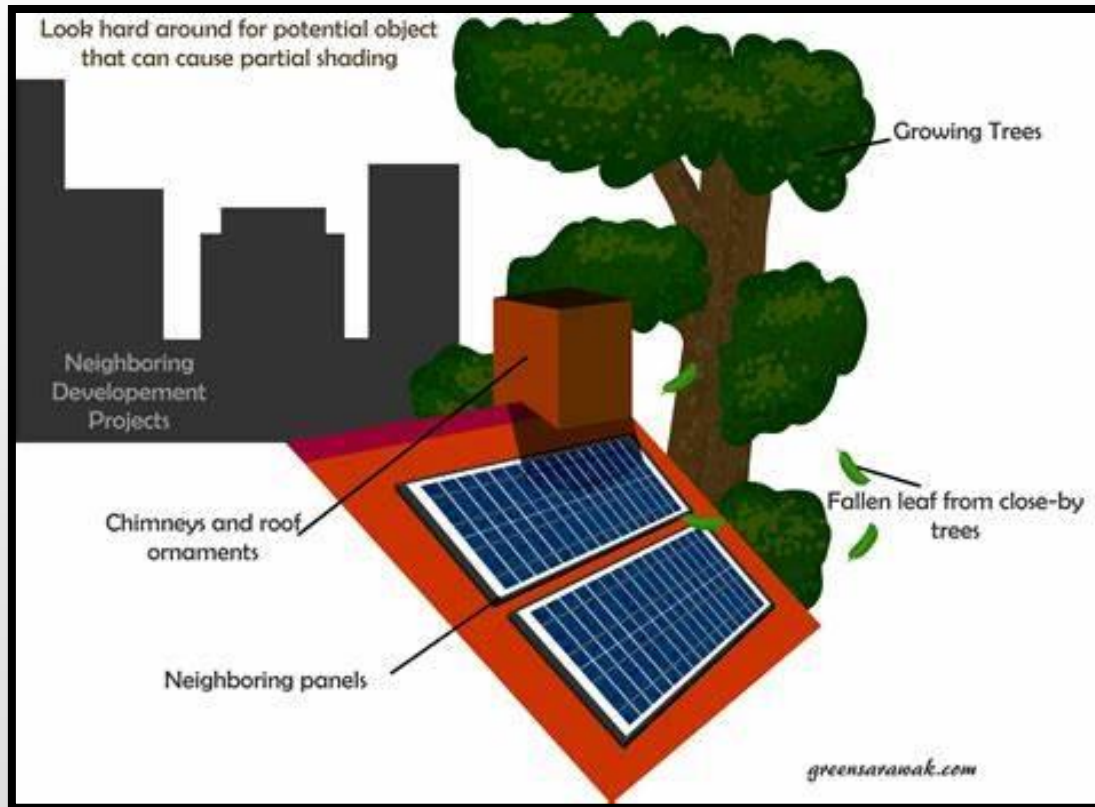
High Solar Fire Risks: **DC Arc Faults**



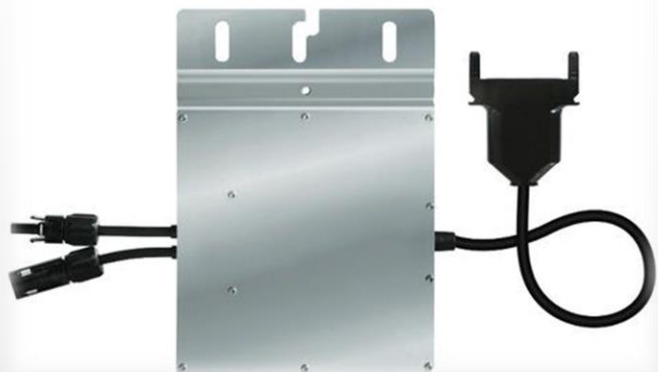
Rule by NEC 2017 in **USA** - inside the Array Boundary:

Voltage should not be more than **80 Volts**
within 30 seconds of rapid shutdown initiation

How to Get Higher Yields from Shading or Low Light Condition?



How to Lower Hardware Cost?



VS.



Which one is the Best **“All in One”** Solar Solution?

Concerns	Conventional String Inverter	Conventional Microinverter	String Inverter with Optimizer	New Innovation?
Safety	★	★ ★ ★	★ ★	★ ★ ★
Yields	★	★ ★ ★	★ ★	★ ★ ★
Cost	★ ★ ★	★	★	★ ★ ★

Safety + Higher Yields + Lower Cost

Changing the Microinverter Landscape



HY-2000-Plus

Max. Continuous Output Power: **2050W**

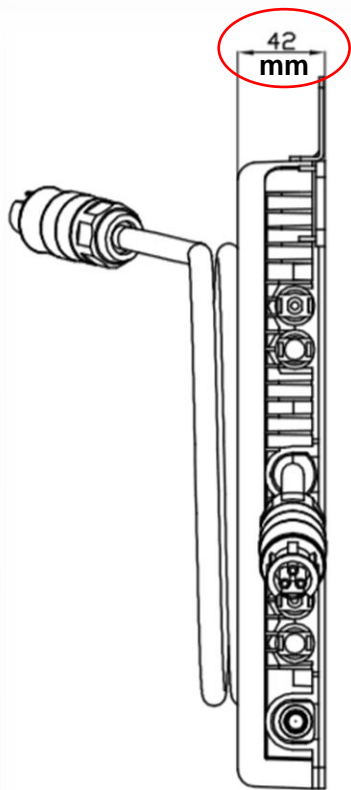
Max. DC Input Voltage: **60V**

Start-up Voltage: **22Vdc**

Module-level MPPT: **4 MPPT**

Module-level Monitoring: **Modular Data**

Changing the Microinverter Landscape

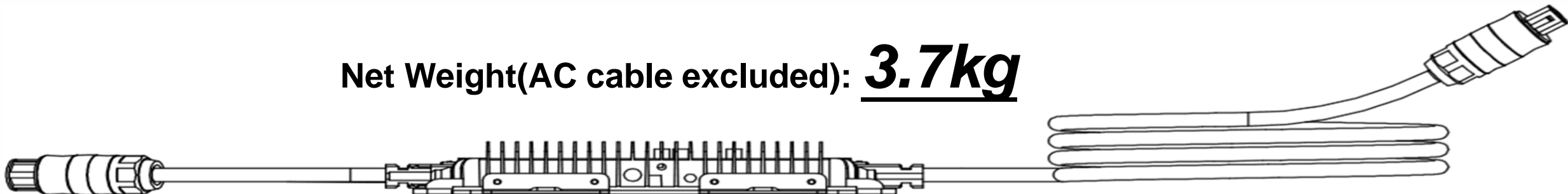


HY-2000-Plus

**“All
in
One”**

**Just
Like
an
iPad**

Net Weight(AC cable excluded): **3.7kg**



HY-2000-Plus
Power Density: 554.05W/kg

A New World Record of Power Density for Microinverter Industry



Safer



VS.



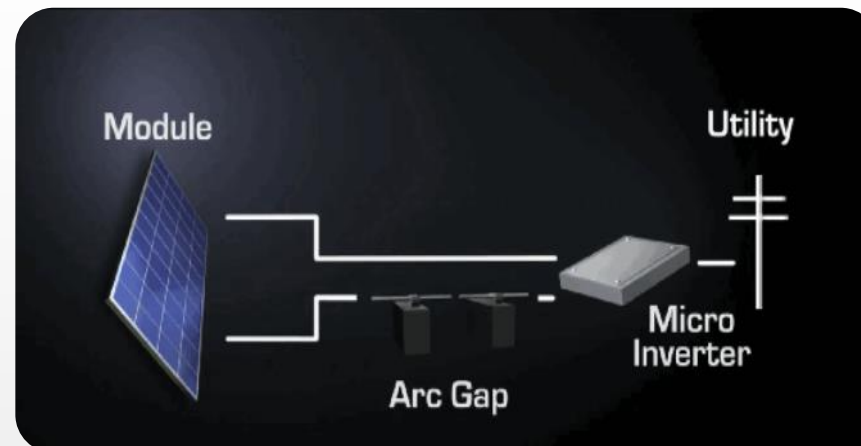
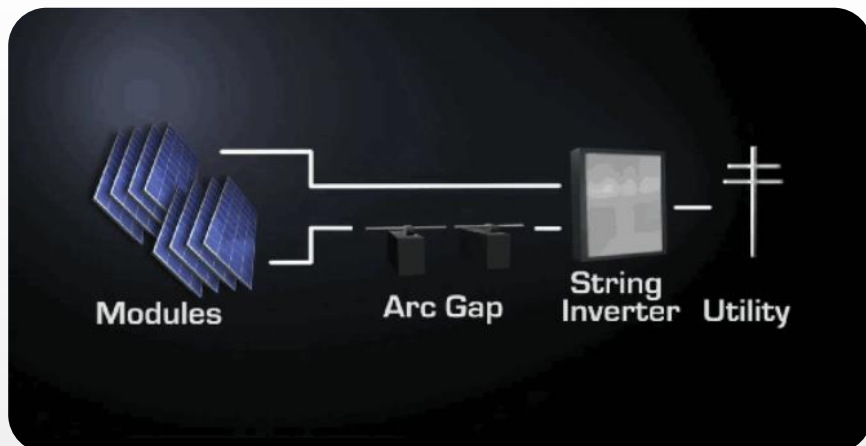
Rated DC Input Voltage: **200**Vdc+

Enclosure Protection: **IP65**

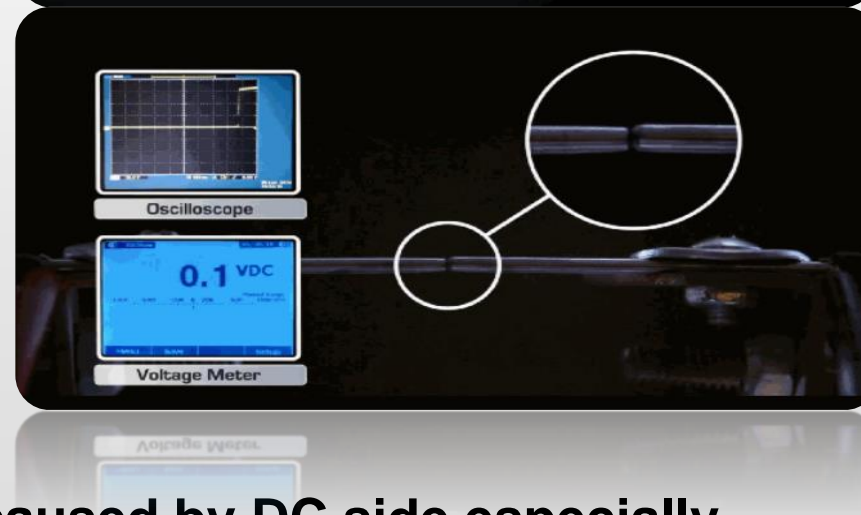
Max. DC Input Voltage: **60**Vdc

Enclosure Protection: **IP67**

Safer

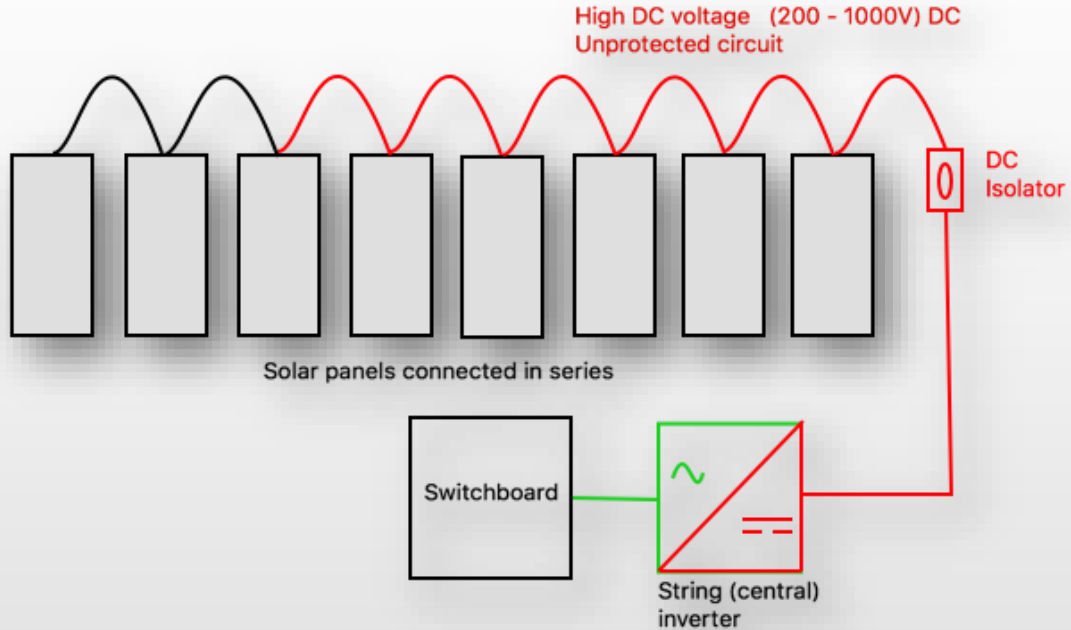


VS.

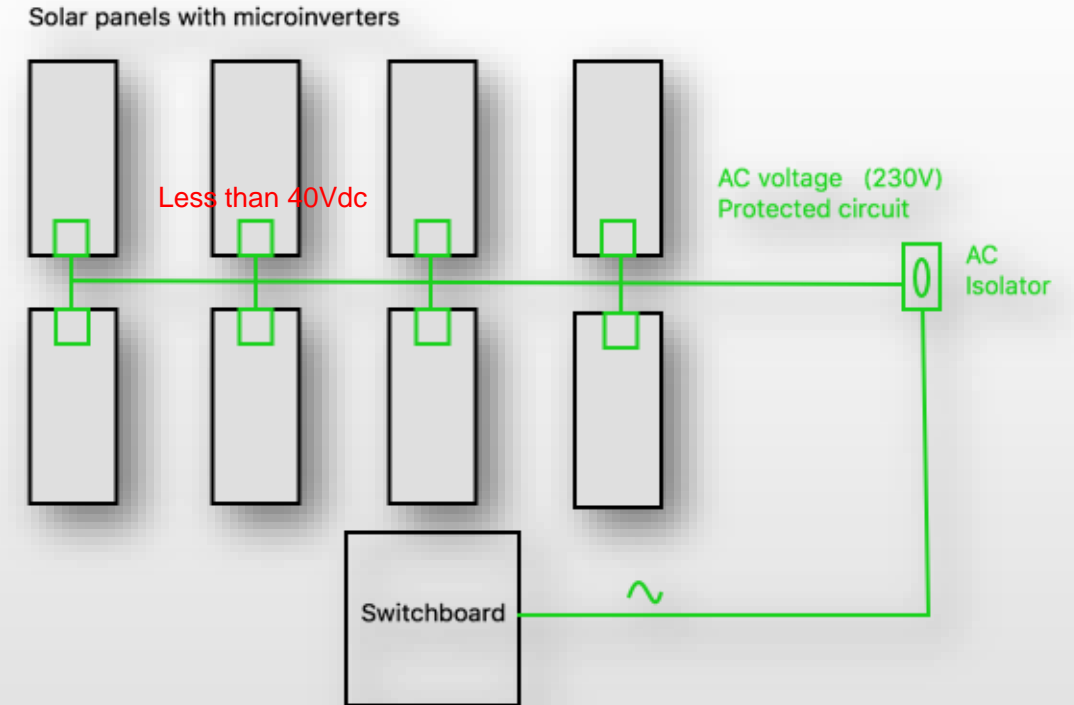


Most fire accidents of PV plants were caused by DC side especially

DC Drawing Arc



VS.

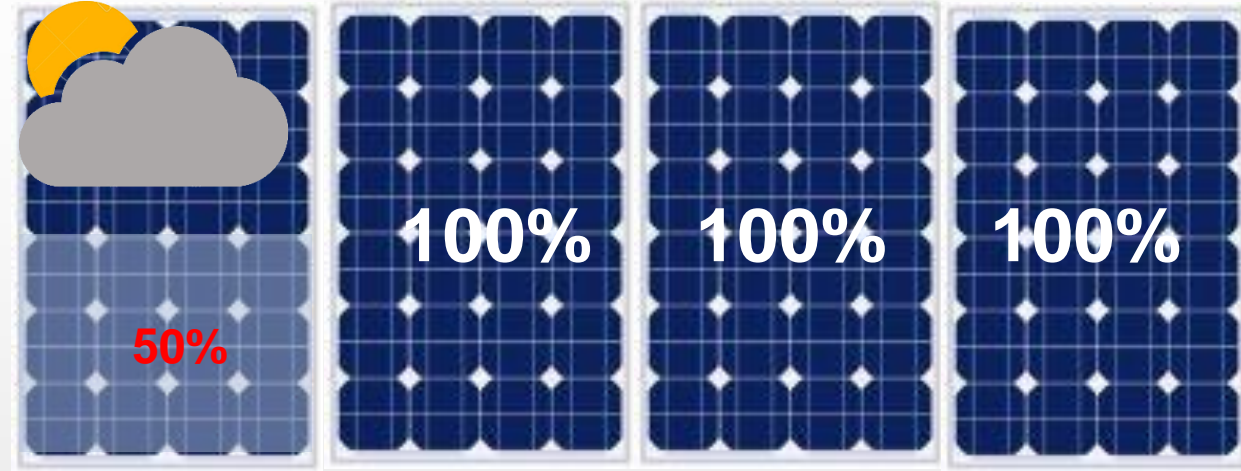


DC arc fault only occurs on a solar system that has unprotected DC voltage circuits above approximately

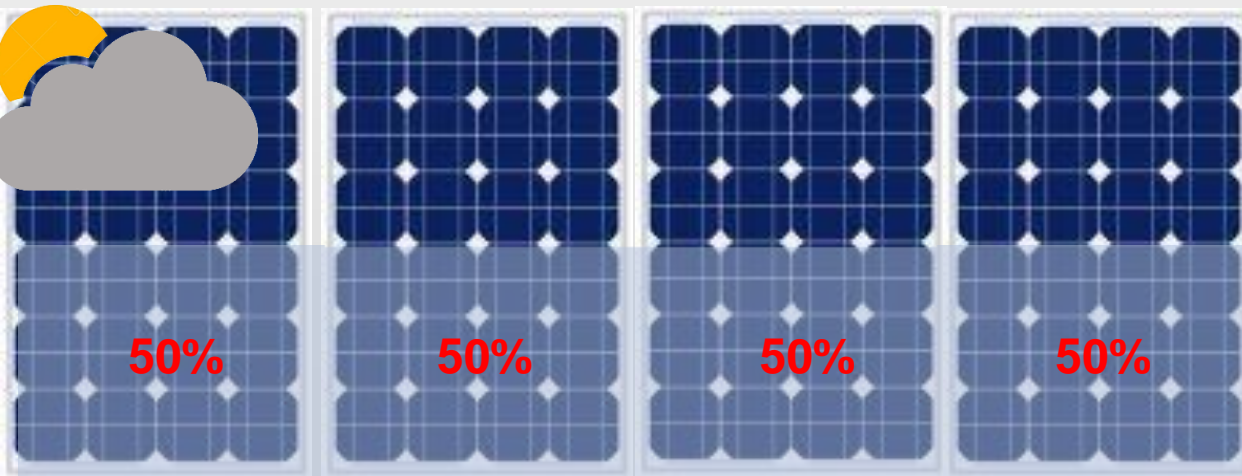
80 Volts_{dc}



Higher Yields



Module-level MPPT
(5-30%+ more yields)



String-level MPPT



Start-up Voltage: **40**Vdc+

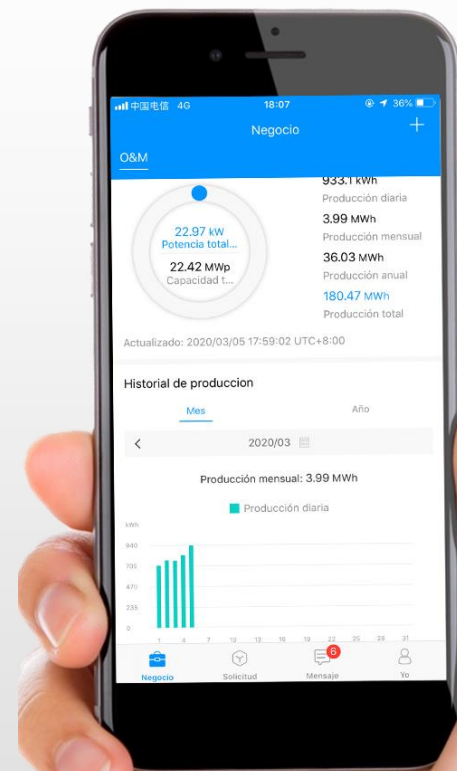
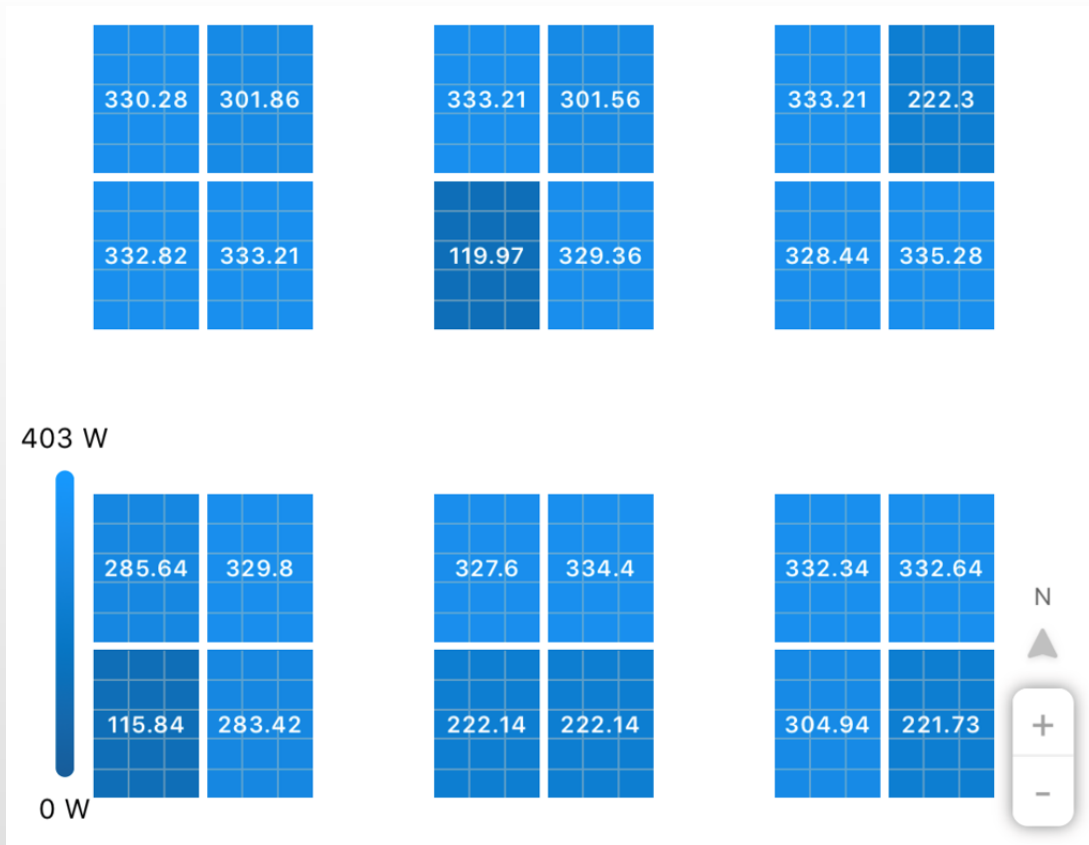
VS.



Start-up Voltage: **22**Vdc

Higher Yields

Module-level Monitoring



“**Module-level**” instead of
“**Plant-level**”

Module-level Monitoring

World's First Data Logger(DTU)Integrated Microinverter

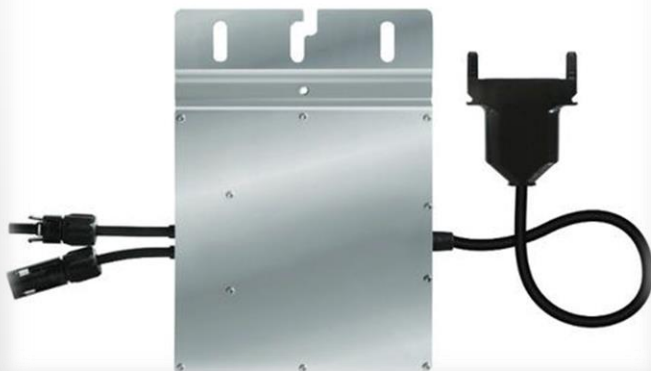


- Stable data collection with WiFi/PLC/Zigbee solution
- Compliant with EU GDPR (the General Data Protection Regulation)
- Available for PC, Pad & Smartphone

Huayu Module-level
Monitoring System



More Cost-effective



VS.



VS.



Distribution Price(FOB)

USD **0.20+**/W

Distribution Price(FOB)

USD **0.10**/W

Distribution Price(FOB)

USD **0.10+**/W

More Cost-effective

25-year Warranty included

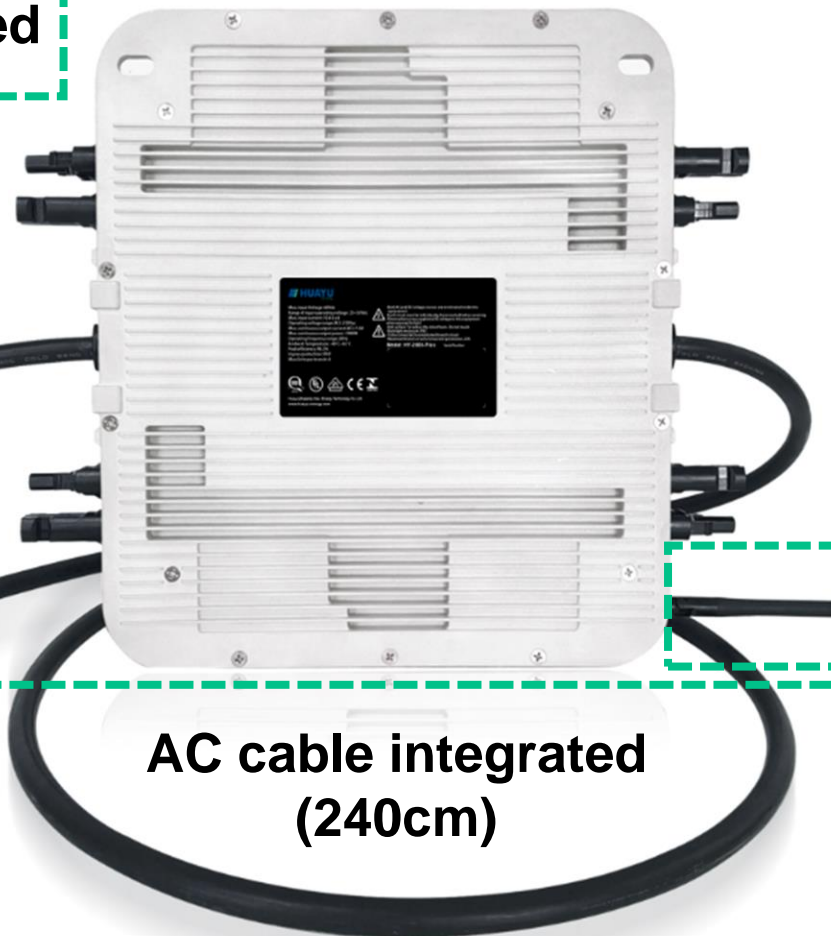
Distribution Price(FOB)

USD 0.10/W

AC Connectors integrated

Built in Wi-Fi monitoring

**AC cable integrated
(240cm)**



Compatible with 500W+ PV Modules



Based on the company's leading multi-busbar technology, the Vertex module adopts an innovative 1/3-cut design, which together allow it to exceed 500W power output and 21% module efficiency.



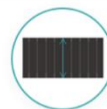
Hi-MO4
Bifacial modules

LONGI Propelling the transformation

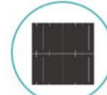


Tiger Pro Module Type

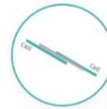
JinKO Solar



Half-Cell Technology

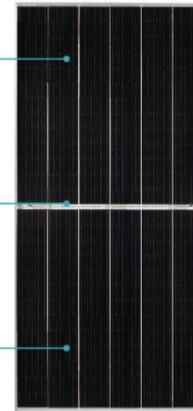


9BB with circular ribbon

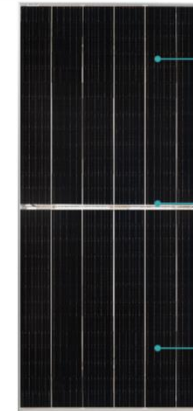


TR technology to eliminate the cell gap

Tiger Pro Monofacial



Tiger Pro Bifacial TB



Rear side energy gain to increase IRR



Same weight with monofacial module



Use Dopont Tedlar film with high reliability and self-cleaning features

New Huayu “4 in 1” Family



**HY-1200/1300-Plus & HY-1600/1800/2000-Plus
(4 × 315Wp~580Wp)**

Mass Production

Available for

- Europe
- North America
- South America
- South East Asia
- Australia

From July 1st, 2020

Target Sales Volume

150MW

July 1st, 2020 - June 30th, 2021

300MW

July 1st, 2021 - June 30th, 2022

600MW

July 1st, 2022 - June 30th, 2023

Bigger Size & Higher Power Density?



Will High Power Density Microinverter Dominate Rooftop Solar Market?

Safer

**Max. DC Input Voltage
60Vdc**

IP67

25-year Warranty

Higher Yields

Module-level MPPT

Start-up Voltage 22V

**Low Failure Rate
< 0.1%**

Smarter

Module-level Monitoring

Data Logger Built-in

Plug & Play



Q & A

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