

## Leading the Industry in Solar Microinverter Technology



# DS3D

Doubling the Performance of the Most Powerful Dual Microinverter series

- 2 input channels with independent MPPT and monitoring function
- Single unit connects to 4 modules
- Maximum continuous output power up to 2000W
- Engineered to match the highest power modules available (Max input current 20A)
- Encrypted ZigBee Communication
- Safety protection relay integrated

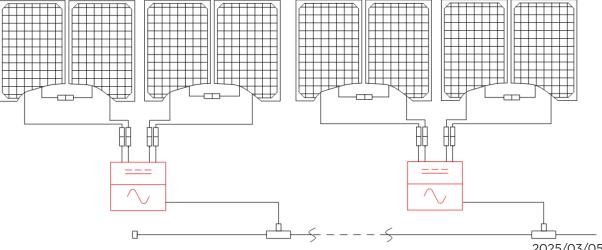
## **PRODUCT FEATURES**

APsystems expands its 3<sup>rd</sup> generation of dual microinverter series with the DS3D. With unprecedented power outputs of 2000W, the DS3D connects to 4 high power modules (2 by 2 in series). With 2 independent MPPTs, encrypted ZigBee signal, the DS3D benefits from an entirely new architecture.

The innovative design makes the product unique while maximizing power production. The components are encapsulated with silicone to reduce stress on the electronics, facilitate thermal dissipation, enhance waterproof properties and ensure maximum reliability of the system via rigorous testing methods including accelerated life testing. A 24/7 energy access through apps or web-based portal facilitate remote diagnosis and maintenance.

With an excellent performance and high converstion efficiency, a unique integration with less components, APsystems DS3D is a game changer for multi residential and commercial PV rooftops.

### WIRING SCHEMATIC



Datasheet   DS3D Microinverter		
Model	DS3D	
Region	APAC	
Input Data (DC)		
Recommended PV Module Power (STC) Range	315Wp-670Wp+	
Peak Power Tracking Voltage	56V-90V	
Operating Voltage Range	52V-118V	
Maximum Input Voltage	118V	
Maximum Input Current	20A x 2	
Isc PV	25A x 2	
Output Data (AC)		
Maximum Continuous Output Power	2000W	
Nominal Output Voltage/Range <sup>(1)</sup>	230V/184-253V	
Nominal Output Current	8.7A	
Nominal Output Frequency/Range <sup>(1)</sup>	50Hz/48-51Hz or 60Hz/59.3-60.5Hz	
Maximum Units per 2.5mm <sup>2</sup> Branch <sup>(2)</sup>	2	
Maximum Units per 4mm <sup>2</sup> Branch <sup>(2)</sup>	3	
Efficiency		
Peak Efficiency	97%	
CEC Efficiency	96.7%	
Nominal MPPT Efficiency	99.5%	
Night Power Consumption	20mW	
ZigBee Antenna		
Transmission Frequency (MHz)	2405~2480MHz	
Output Power of the Transmitter(dBm)	<20dBm	
Antenna Gain	<2.5dBi	
Mechanical Data		
Operating Ambient Temperature Range <sup>(3)</sup>	-40 °C to +65 °C	
Storage Temperature Range	- 40 °C to + 85 °C	
Dimensions (W x H x D)	284mm X 234mm X 50.2mm	
Weight	4.3kg	
AC Bus Cable	2.5mm²(23A)/4mm²(28A)	
DC Connector Type	Stäubli MC4 PV-ADBP4-S2&ADSP4-S2	
Cooling	Natural Convection - No Fans	
Enclosure Environmental Rating	IP67	
Features		
Communication (Inverter To ECU) <sup>(4)</sup>	Encrypted ZigBee	
Isolation Design	High Frequency Transformers, Galvanically Isolated	
Energy Management	Energy Management Analysis (EMA) system	
Warranty <sup>(5)</sup>	12 Years Standard	
Compliance		

#### Compliance

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Compliance	IEC 62109-1; IEC 62109-2; IEC 61000-6-1,-2,-3,-4; IEC 61727;
	IEC 62116; AS 4777.3; MEA; PEA; EN 62109-1; EN 62109-2;
	EN 61000-6-1; EN 61000-6-3; EN 50549-1;
(1) Nominal voltage/frequency range can be extended beyond nominal if required by the © All Rights Reserved	
utility. (2) Limits may vary. Refer to local requirements to define the number of microinverters p leavest his may says.	Specifications subject to change without notice please ensure you are using the most recent update found at web : <u>global.APsystems.com</u>

branch in your area.

(3) The inverter may enter to power de-grade mode under poor ventilation and heat dissipation installation environment.
(4) Recommend no more than 80 inverters register to one ECU for stable communication.
(5) To be eligible for the warranty, APsystems microinverters need to be monitored via the EMA portal. Please refer to our warranty T&Cs available on <u>global.APsystems.com</u>.

#### **APsystems Shanghai:**