



## 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

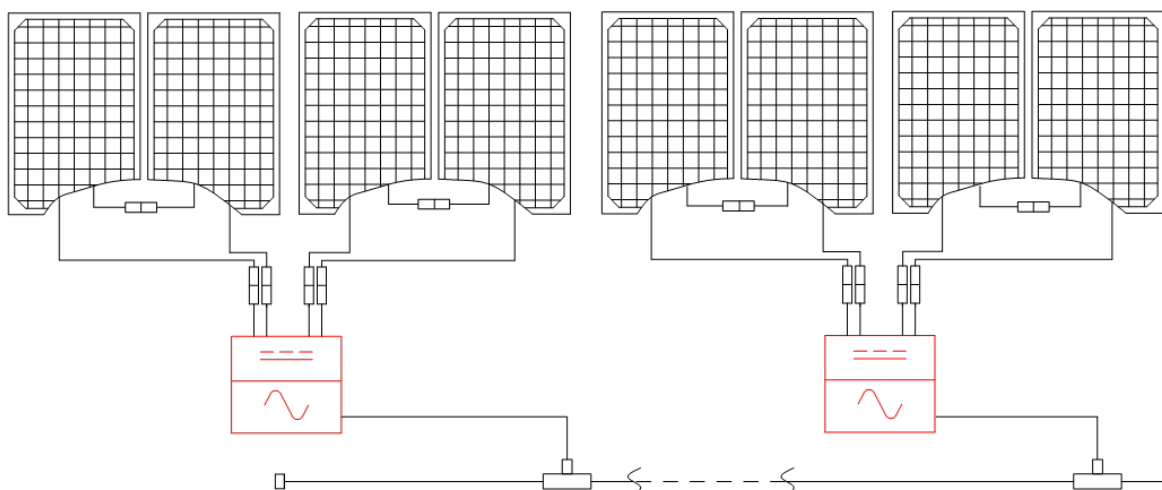
## PRODUCT FEATURES

**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.

In addition, it provides 97% peak efficiency. 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
Adjustable Output Voltage Range	180V-270V
Nominal Output Current	8.7A
Nominal Output Frequency/Range <sup>(1)</sup>	50Hz/48-51Hz or 60Hz/59.3-60.5Hz
Adjustable Output Frequency Range	45Hz-65Hz
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	2.5mm <sup>2</sup> (23A)/4mm <sup>2</sup> (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>	10 Years Standard ; Extended Warranty Optional

## Compliance

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;
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(1) Nominal voltage/frequency range can be extended beyond nominal if required by the utility.

(2) Limits may vary. Refer to local requirements to define the number of microinverters per 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 [global.APsystems.com](http://global.APsystems.com).

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Specifications subject to change without notice please ensure you are using the most recent update found at web : [global.APsystems.com](http://global.APsystems.com)

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