

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 1800VA
- Engineered to match the highest power modules available (Max input current 20A)
- Encrypted ZigBee Communication
- Safety protection relay integrated

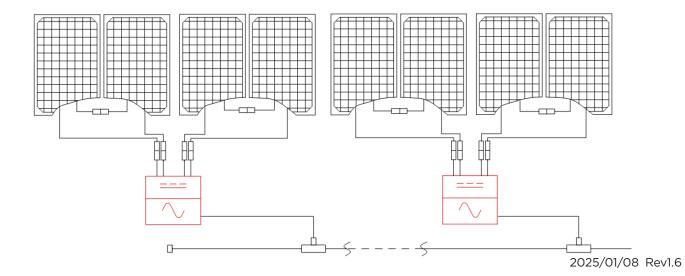
PRODUCT FEATURES

APsystems expands its 3rd generation of dual microinverter series with the DS3D. With unprecedented power outputs of 1800VA, 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 | EMEA |

Input Data (DC)

| Recommended PV Module Power (STC) Range | 315Wp-660Wp+ |
|---|--------------|
| 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 | 1800VA |
|--|-----------------------------|
| Nominal Output Voltage/Range ⁽¹⁾ | 230V/184V-253V |
| Nominal Output Current | 7.8A |
| Nominal Output Frequency/ Range ⁽¹⁾ | 50Hz/48Hz-51Hz |
| Power Factor(Default/Adjustable) | 0.99/0.9 leading0.9 lagging |
| Maximum Units per 2.5mm² Branch ⁽²⁾ | 2 |
| Maximum Units per 4mm² Branch ⁽²⁾ | 3 |

Efficiency

| Peak Efficiency | 97% |
|-------------------------|-------|
| Nominal MPPT Efficiency | 99.5% |
| Night Power Consumption | 20mW |

Mechanical Data

| Operating Ambient Temperature Range ⁽³⁾ | -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) ⁽⁴⁾ | Encrypted ZigBee |
|--|--|
| Isolation Design | High Frequency Transformers, Galvanically Isolated |
| Energy Management | Energy Management Analysis (EMA) system |
| Warranty ⁽⁵⁾ | 12 Years Standard ; 25 Years Optional |

Compliance

| | EN/IEC 62109-1; EN/IEC 62109-2; EN 62920; EN 55011; EN IEC 61000-6-3; EN IEC 61000-6-4; |
|------------|--|
| Compliance | EN IEC 61000-6-1; EN IEC 61000-6-2; EN IEC 61000-3-2; EN 61000-3-3; EN 50549-1; |
| | PN-EN 50549-1; IRiESD; IEC 61727; IEC 62116; VDE-AR-N 4105; G98; G99; G98/NI; G99/NI; G100 |

⁽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 povirement.

portal. Please refer to our warranty T&Cs available on <u>emea.APsystems.com</u>.



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Specifications subject to change without notice please ensure you are using the most recent update found at web: emea.APsystems.com

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⁽a) The invertee may chief in a substantial 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